



The 33rd World Congress on
Controversies in Obstetrics,
Gynecology & Infertility (COGI)
All About Women's Health

November 27-29, 2025
Rome, Italy

*Congress Program
and Abstracts*



www.cogi-congress.org

Halls

Hall Name	Level	Track
Hall A • Leptis Magna 2	Level - 2	Infertility/ ART/IVF
Hall B • Tarragona	Level - 1	Infertility/ ART/IVF (Friday) Oral Presentations (Saturday)
Hall C • Leptis Magna 4	Level - 2	Gynecology
Hall D • Leptis Magna 1	Level - 2	Fetomaternal Medicine
Hall E • Cesarea	Level - 1	Oral Presentations
Gerassa	Level - 2	Speakers' Preview Room
Office Magna	Level - 2	Secretariat Office
Area Cir	Hotel foyer level	e-Poster screens • Photo wall

Notes

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Timetable

Thursday, November 27, 2025

HALL A Leptis Magna 2	HALL C Leptis Magna 4	HALL D Leptis Magna 1
09:30-10:30		
10:30-11:30	Oral Presentation 1	
11:30-13:00	11:30-13:25 Oral Presentation 2	09:00-13:45 Practical workshop of Intrapartum Ultrasound Course 1
13:00-14:30	Obesity and infertility "pandemics"	13:45-14:00 – Short Break
14:30-16:10	Integrity in science, law quality publication, and fabrication	
16:10-16:30	Coffee Break	
16:30-17:15	Industry supported session See page 183	14:00-18:30 Practical workshop of Intrapartum Ultrasound Course 2
17:15-18:40	AI in medicine and clinical care – Quo Vadis	
18:40-19:40	OPENING SESSION: Keynote lecture in honor of Nobel Prize Laureate Robert G. Edwards Young Scientist Best Abstract Award	
19:40-20:30	Networking Reception (drinks and snacks)	

Friday, November 28, 2025

HALL A Leptis Magna 2 ART/IVF/Infertility	HALL B Tarragona ART/IVF/Infertility II	HALL C Leptis Magna 4 Gynecology	HALL D Leptis Magna 1 Fetomaternal Medicine	HALL E Cesarea Oral presentations
08:30-09:00	Good Morning Rome Plenary Session	Please note: Good Morning Rome Plenary Session will be live streamed to all the halls		
09:00-10:00	Ovarian stimulation practices	Fast oocyte cryopreservation: Is it worth it?	The gut, vaginal and bladder microbiome in women's lifespan	Pregnancy impact is more than 9 months
10:00-10:30	Coffee break, visit the exhibition and e-poster viewing			
10:30-12:00	Preparation for IVF	Low sperm counts and infertility	Novel global guidance on POI: Towards personalized medicine	Preterm delivery
12:00-12:05	Short break			
12:05-13:05	Industry supported session See page 183	Oral Presentation 5		Oral Presentation 6
13:05-14:00	Lunch break, visit the exhibition, and moderated e-posters			
14:00-15:00	Industry supported session See page 183	Oral Presentation 7		Oral Presentation 8
15:00-15:05	Short break			
15:05-16:35	Luteal phase support	Mechanobiology, the new frontier of the ovary	Treating menopause	Labor and delivery
16:35-17:00	Coffee break, visit the exhibition and moderated e-posters			
17:00-18:30	PGT under crossfire	All that is frozen: From elective embryo freezing to sperm vitrification	Menopause: Beyond the minimisation of hot flushes	Obesity, Diabesity

Saturday, November 29, 2025

HALL A Leptis Magna 2 ART/IVF/Infertility	HALL B Tarragona Oral presentations	HALL C Leptis Magna 4 Gynecology	HALL D Leptis Magna 1 Fetomaternal Medicine	HALL E Cesarea Oral presentations
08:30-09:00	Good Morning Rome Plenary Session	Please note: Good Morning Rome Plenary Session will be live streamed to all the halls		
09:00-10:30	Hi-Tech IVF	Oral Presentation 11	Adenomyosis and endometriosis	Advanced maternal age
10:30-11:00	Coffee break, visit the exhibition and moderated e-posters			
11:00-12:30	Q&A	Oral Presentation 13	Fertility preservation	Genetics and prenatal diagnosis
12:30-13:30	Lunch break, visit the exhibition and moderated e-posters			
13:30-15:00	Personalized medicine	Oral Presentation 15	PCOS	Multiple pregnancy
15:00-16:30	High and low responders	Oral Presentation 17	Managing sexual issues	Ultrasound & Doppler



Welcome from the Chairpersons

COGI 2025

Dear Colleagues,

The COGI chairpersons are delighted to welcome you to the **33rd World Congress on Controversies in Obstetrics, Gynecology and Infertility**, taking place at the **Ergife Palace Hotel, Rome, Italy** from November 27-29, 2025.

Together with our esteemed local committees, the COGI Congress Chairpersons are proud to once again bring together some of the most respected voices in the fields of **OBGYN and infertility**. This year's program is designed to spark meaningful debate, share groundbreaking insights, and offer **clinically practical solutions** to some of the most challenging and controversial topics in our profession.

We've developed a dynamic and stimulating agenda with you in mind. In every session, you'll find opportunities not just to learn, but to engage: ample time has been set aside for **interactive discussions** and **direct dialogue with speakers**, ensuring a truly collaborative and thought-provoking experience.

Welcome to Italy and to yet another unforgettable COGI experience.

With warm regards,

COGI Congress Co-Chairpersons



Zion Ben Rafael
Israel



Bart Fauser
Netherlands



Pierluigi Benedetti Panici
Italy
(Local chairperson)



Anja Pinborg
Denmark



Rita Vassena
Spain

2025 COGI COMMITTEES

Honorary President



Rene Frydman
France

SCIENTIFIC COMMITTEES

IVF/ART/Infertility

Luca Gianaroli, Italy
Edgardo Somigliana, Italy
Laura Rienzi, Italy
Filippo Maria Ubaldi, Italy

Gynecology

Rossella Nappi, Italy
Nick Panay, UK
Giorgia Perniola, Italy
Francesco Plotti, Italy
Paolo Vercellini, Italy

Fetomaternal Medicine

Yariv Yogev, Israel
Asma Khalil, UK
Gian Carlo Di Renzo, Italy
Giuseppe Rizzo, Italy
Tullio Ghi, Italy



General Information

VENUE

Ergife Palace Hotel

p.iva 00999281009, Largo Lorenzo Mossa, 8 – 00165 Rome, Italy

LANGUAGE

The official language of the congress in English.

CONGRESS HOURS

Thursday, November 27	Courses and Oral Presentations: 09:00 onwards Scientific Program: 13:00-19:40 (<i>Networking Reception - 19:40-20:30</i>)
Friday, November 28	08:30-18:30
Saturday, November 29	08:30-16:30

CONGRESS ADMISSION – NAME BADGE

Admission to the scientific sessions, exhibition area and e-Posters is available to registered delegates only.

EXHIBITION OPENING HOURS

Thursday, November 27	19:30-20:30 (<i>Networking Reception: 19:40-20:30</i>)
Friday, November 28	09:30-17:05
Saturday, November 29	09:30-13:30

POSTERS

All the posters are presented in electronic format. The e-posters are situated in Area Cir on the hotel foyer level.

WIFI

Open wi-fi available in all areas of the hotel and congress venue

CERTIFICATE OF ATTENDANCE (NON-CME/CPD)

Certificates of attendance will be sent by email after the congress to all registered delegates.

CME ACCREDITATION

The 33rd COGI Congress has been accredited by the European Accreditation Council for Continued Medical Education (EACCME®) for a maximum of **18 CME credits** (ECMEC®s).

After the congress, you will receive a link by email, to complete an online survey. Your certificate will be sent to you approximately 60 days after completion of the survey.

EACCME® requires that all participation to accredited sessions be tracked. Please make sure to have your badge scanned at the entrance of the hall prior to each session.

Please note that you are not able to claim credits for sessions taking place at the same time in different halls.

Industry sessions and Oral presentation sessions do not form part of the CME program.

Deadline to complete the survey: **December 15, 2025**. This is an absolute deadline, and no surveys can be submitted after this date.

LIABILITY AND INSURANCE

The COGI Congress secretariat and the organizers cannot accept liability for personal accidents, or loss or damage to private property of participants, either during or directly arising from the 33rd COGI Congress.

RECORDING POLICY

Recording (photographic, video and audio) of the session is strictly prohibited. A recorded version of the congress will be available on a password protected website for 3 months after the congress. The link and password will be sent to registered delegates after the congress.

SOCIAL MEDIA

Follow COGI social media pages for the latest updates, key date reminders, and discussions with colleagues and experts from around the world.

LinkedIn Page: [linkedin.com/in/cogi-congress-4470415](https://www.linkedin.com/in/cogi-congress-4470415)

LinkedIn Group: [linkedin.com/groups/4229161](https://www.linkedin.com/groups/4229161)

X.com: x.com/cogicongress/#COGI

Instagram: www.instagram.com/cogi_congress

Youtube: youtube.com/cogicongress





Scientific Program



Course 1: 09:00-13:45 Course 2: 14:00-18:30		PRACTICAL WORKSHOP OF INTRAPARTUM ULTRASOUND <i>Pre-registration is required</i>	HALL D
Background	Intrapartum complications require a prompt and efficient intervention by the labor ward multiprofessional team. Ultrasound have been recently suggested as a valuable and objective tool which may assist the clinician in the diagnosis and the management of the labor complications and lead eventually to an improved outcome. The main aim of this course is to present the role of ultrasound in the management of abnormal labor providing the labor ward team with all the basic theoretical and practical knowledge which are complimentary to the clinical skills and may optimise the final outcome. This course is performed with the use of a dedicated mannequin which has been developed for the sonographic training in transperineal ultrasound		
Course facilitators	Giuseppe Rizzo, Italy Ilenia Mappa, Italy Valentina Tsibizova, Italy		
09:00-09:30 14:00-14:30	Intrapartum ultrasound: What and how? Giuseppe Rizzo, Italy		
09:30-10:00 14:30-15:00	Intrapartum ultrasound in the diagnosis and management of labor arrest Elvira di Pasquo, Italy		
10:00-10:30 15:00-15:30	Intrapartum ultrasound and operative delivery Ilenia Mappa, Italy		
10:30-11:00 15:30-16:00	Role of intrapartum ultrasound in the diagnosis of malposition/malpresentation/asynclitism Tullio Ghi, Italy		
11:00-11:15 16:00-16:15	<i>Coffee Break</i>		
11:15-11:45 16:15-16:45	Combined role of CTG and Ultrasound in labour Giuseppe Rizzo, Italy		
11:45-13:15 16:45-18:00	Hands-on simulation LaborSIM-OpusLab with the mannequin Supervised by the faculty		
13:15-13:45 18:00-18:30	Interactive clinical cases Valentina Tsibizova, Italy		
13:00-14:00		OBESITY AND INFERTILITY "PANDEMICS"	HALL A
Capsule	Obesity can negatively impact both fertility and pregnancy outcomes. It can reduce ovulation, lead to hormonal imbalances, and increase comorbidities and the risk of complications like miscarriage and gestational diabetes.		
Chairpersons	Zion Ben Rafael, Israel Anja Pinborg, Denmark		
13:00-13:15	Body Mass Index (BMI) out; Body Roundness Index (BRI) in Joop Laven, Netherlands		
13:15-13:20	Discussion		
13:20-13:40	Risks of obesity during pregnancy Yariv Yogev, Israel		
13:40-13:45	Discussion		
13:45-14:05	Does obesity reduce fertility and ART success rates? Milan Perovic, Serbia		
14:05-14:10	Discussion		
14:10-14:25	GLP1 antagonist or simple diet: What to prefer Signe Sørensen Torekov, Denmark		
14:25-14:30	Discussion		

Notes



14:30-16:10	INTEGRITY IN SCIENCE, LAW QUALITY PUBLICATION, AND FABRICATION	HALL A
Capsule	Editors of several OBGYN journals have formed an OBGYN Editors' Integrity Group (OGEIG), intending to collaborate to improve trustworthiness in published papers. The article aims to expand the list of RCT quality criteria for authors of meta-analyses so that low-quality and fabricated RCTs are excluded from meta-analyses: F&S 2024 "Research waste" and "Paper mills"	
Chairpersons	Bart Fauser , <i>Netherlands</i> Zion Ben Rafael , <i>Israel</i>	
14:30-14:50	Paper Mills? NIMBY! The magnitude of the problem? Lex Bouter , <i>Netherlands</i>	
14:50-14:55	Discussion	
14:55-15:10	Trustworthiness: Editors point of view Christopher Barratt , <i>UK (virtual)</i>	
15:10-15:15	Discussion	
15:15-15:30	How to prevent research waste? Bart Fauser , <i>Netherlands</i>	
15:30-15:35	Discussion	
15:35-15:50	What went wrong with the research on DOR. An example of research waste Zion Ben Rafael , <i>Israel</i>	
15:50-15:55	Discussion	
15:55-16:05	What can funders of research do to foster responsible research practices? Lex Bouter , <i>Netherlands</i>	
16:05-16:10	Discussion	
14:30-17:30	INDUSTRY SUPPORTED SESSION <i>Pre-registration is required. See page 181</i>	HALL C
16:10-16:30	<i>Coffee break</i>	
16:30-17:15	INDUSTRY SUPPORTED SESSION <i>See page 183</i>	HALL A
17:15-18:40	AI IN MEDICINE AND CLINICAL CARE - QUO VADIS	HALL A
Capsule	AI-powered healthcare tools can help reduce medical errors, improve efficiency, and save lives. In certain diagnostic tasks, it can efficiently replace humans. Where are we going?	
Chairpersons	Rene Frydman , <i>France</i> Pierluigi Benedetti Panici , <i>Italy</i>	
17:15-17:35	The future of human-AI collaboration in ART Ula Sankowska , <i>Poland</i>	
17:35-17:40	Discussion	
17:40-17:55	AI in obstetrics and gynecology Jessica Ybanez Morano , <i>USA</i>	
17:55-18:00	Discussion	
18:00-18:15	AI in clinical care Danilo Cimadomo , <i>Italy</i>	
18:15-18:20	Discussion	
18:20-18:35	Artificial Intelligence will decide the future of embryo selection? Laura Rienzi , <i>Italy</i>	
18:35-18:40	Discussion	
18:40-19:40	OPENING SESSION	HALL A
Chairpersons	Zion Ben Rafael , <i>Israel</i> Bart Fauser , <i>Netherlands</i>	
18:40-19:25	Introduction Zion Ben Rafael , <i>Israel</i> Keynote lecture in honor of Nobel Prize Laureate Robert G. Edwards Endometriosis: From pathogenesis to symptoms. An urgent need to decode the mechanisms Jacques Donnez , <i>Belgium</i>	
19:25-19:40	Young Scientist Best Abstract Award Award presentation by: Rene Frydman , <i>France</i> Pierluigi Benedetti Panici , <i>Italy</i> Rita Vassena , <i>Spain</i>	
19:40-20:30	<i>Networking Reception</i>	



08:30-09:00	GOOD MORNING ROME PLENARY LECTURE	<i>Live stream to all halls</i>	HALL A
Capsule	A decade ago, a pioneering procedure was successfully launched		
Chairpersons	Zion Ben Rafael , <i>Israel</i> Rene Frydman , <i>France</i>		
08:30-08:55	Pioneering uterus transplantation: Reflections on breakthroughs and deliveries Mats Brännström , <i>Sweden</i>		
08:55-09:00	Discussion		
09:00-10:00	OVARIAN STIMULATION PRACTICES		HALL A
Capsule	Treatment of low and high responders		
Chairpersons	Rene Frydman , <i>France</i> Zion Ben Rafael , <i>Israel</i>		
09:00-09:30	DEBATE: Double trigger: When? Why? Does it work?		
09:00	Yes: Edgardo Somigliana , <i>Italy</i>		
09:10	No: Anja Pinborg , <i>Denmark</i>		
09:20	Discussion		
09:30-10:00	DEBATE: Should we go straight to IVF in women with anovulation due to PCOS?		
09:30	Yes: Norbert Gleicher , <i>USA</i>		
09:40	No: Stefano Palomba , <i>Italy</i>		
09:50	Discussion		
10:00-10:30	<i>Coffee break, visit the exhibition, and e-poster viewing</i>		
10:30-12:00	PREPARATION FOR IVF		HALL A
Capsule	What is the effect of endometritis screening and use of PRP		
Chairpersons	Bart Fauser , <i>Netherlands</i> Edgardo Somigliana , <i>Italy</i>		
10:30-11:05	DEBATE: Should we screen for chronic endometritis before ART?		
10:30	Yes: Ettore Cicinelli , <i>Italy</i>		
10:40	No: Paul Pirtea , <i>France</i>		
10:50	Discussion		
11:05-11:40	DEBATE: The debate goes on: PRP for rejuvenation to improve ovarian response		
11:05	Yes: Safety and efficacy based on a single center experience Mattheos Fraidakis , <i>Greece</i>		
11:15	No: Results of the PROVA RCT Norbert Gleicher , <i>USA</i>		
11:25	Discussion		
11:40-11:55	Ovulation trigger: How should we personalize? Michaël Grynberg , <i>France</i>		
11:55-12:00	Discussion		
12:00-12:05	<i>Short break</i>		
12:05-13:05	INDUSTRY SUPPORTED SESSION		HALL A
	<i>See page 183</i>		
13:05-14:00	<i>Lunch break, visit the exhibition, e-poster viewing, and moderated e-poster sessions</i>		
14:00-15:00	INDUSTRY SUPPORTED SESSION		HALL A
	<i>See page 183</i>		
15:00-15:05	<i>Short break</i>		
15:05-16:35	LUTEAL PHASE SUPPORT		HALL A
Capsule	How far should we support the luteal phase?		
Chairpersons	Basil Tarlatzis , <i>Greece</i> Frank Broekmans , <i>Netherlands</i>		
15:05-15:25	Oral, intravaginal, injectable progesterone Dominique de Ziegler , <i>Cambodia</i>		
15:25-15:30	Discussion		
15:30-16:10	DEBATE: Are we losing embryos when applying day 5 culture for IVF?		
15:30	Yes: Frank Broekmans , <i>Netherlands</i>		
15:40	Opposition: Paul Pirtea , <i>France</i>		
15:50	Discussion		
16:10-16:30	Progesterone supplementation, what else? Stratis Kolibianakis , <i>Greece</i>		
16:30-16:35	Discussion		
16:35-17:00	<i>Coffee break, visit the exhibition, e-poster viewing, and moderated e-poster sessions</i>		



17:00-18:30	PGT UNDER CROSSFIRE?	HALL A
Capsule	A class action lawsuit against genetic testing companies for misleading consumers about PGT - during IVF treatment was presented in the USA	
Chairpersons	Bart Fauser , <i>Netherlands</i> Luca Gianaroli , <i>Italy</i>	
17:00-17:30	DEBATE: Clinical perspective	
17:00	Non-based ground: Antonio Capalbo , <i>Italy</i>	
17:10	Based ground: Norbert Gleicher , <i>USA</i>	
17:20	Discussion	
17:30-18:30	SPECIAL LECTURES	HALL A
17:30-17:55	From life span to life health Pasquale Patrizio , <i>USA</i>	
17:55-18:00	Discussion	
18:00-18:25	The challenges of defining success in ART Luca Gianaroli , <i>Italy</i>	
18:25-18:30	Discussion	

Saturday, November 29, 2025

ART/IVF/INFERTILITY

08:30-09:00	GOOD MORNING ROME PLENARY LECTURE	<i>Live stream to all halls</i> HALL A
Capsule	Endometriosis is a chronic disease that affects all phases of reproductive life	
Chairpersons	Bart Fauser , <i>Netherlands</i> Jacques Donnez , <i>Belgium</i>	
08:30-08:55	Endometriosis before and during pregnancy Paolo Vercellini , <i>Italy</i>	
08:55-09:00	Discussion	
09:00-10:30	HI-TECH IVF	HALL A
Capsule	New technologies keep on emerging in IVF. The difficulty remains to assess the true added value. And finding the right balance between premature introduction into the clinic, versus being over cautious and denying patients interventions which does improve outcomes.	
Chairpersons	Bart Fauser , <i>Netherlands</i> Jacques Donnez , <i>Belgium</i>	
09:00-09:25	Automation in IVF: Where are we heading Laura Rienzi , <i>Italy</i>	
09:25-09:30	Discussion	
09:30-09:55	Imaging of early embryos using a light-sheet on-a-chip device: A proof-of-concept Fabrizio Horta , <i>Australia</i>	
09:55-10:00	Discussion	
10:05-10:25	Prospects for use of bioengineered tissue from stem cells in gynecology Mats Brännström , <i>Sweden</i>	
10:25-10:30	Discussion	
10:30-11:00	<i>Coffee break, visit the exhibition, e-poster viewing, and moderated e-poster sessions</i>	

Notes



11:00-12:30	Q&A	HALL A
Capsule	Expert views on hot controversial issues	
Chairpersons	Bart Fauser , <i>Netherlands</i> Zion Ben Rafael , <i>Israel</i>	
Discussants	Laura Rienzi , <i>Italy</i> Anja Pinborg , <i>Denmark</i> Rita Vassena , <i>Spain</i> Edgardo Somigliana , <i>Italy</i> Norbert Gleicher , <i>USA</i> Pasquale Patrizio , <i>USA</i> Joop Laven , <i>Netherlands</i>	
	Q&A 1. The uterine microbiome: Are the studies credible. Can it predict implantation? 2. Are we settled on the best protocol for FET? 3. What are the indications for day 3 versus day 5 embryo transfer? 4. AI – replacement or assist to the medical professional? 5. Timings and strategies in the IVF lab vs. outcomes? Time from OPU to IVF / ICSI, should ICSI be used for every case? 6. What sperm selection method is best? Calcium ionophore? 7. PRP: for ovarian rejuvenation? For improving implantation? Any real proof of its efficacy? 8. Add-ons which one works? 9. What to do when a high percentage of eggs are consistently immature? 10. What to do when the fertilization rate is low. When blastulation rates are low? 11. Should PGT-A be part of every IVF cycle?	
12:30-13:30	Lunch break, visit the exhibition, e-poster viewing, and moderated e-poster sessions	
13:30-15:00	PERSONALIZED MEDICINE	HALL A
Capsule	How do we personalize when we have only a few parameters to take care of?	
Chairpersons	Dominique de Ziegler , <i>Cambodia</i> Rene Frydman , <i>France</i>	
13:30-13:50	Prediction models Bart Fauser , <i>Netherlands</i>	
13:50-14:00	Discussion	
14:00-14:30	DEBATE: Ovarian stimulation	
14:00	Proposition: Personalization of ovarian stimulation Enrico Papaleo , <i>Italy</i>	
14:10	Opposition: Edgardo Somigliana , <i>Italy</i>	
14:20	Discussion	
14:30-15:00	DEBATE: Should we treat istmocele in infertile women, and how?	
14:30	Yes: Amerigo Vitagliano , <i>Italy</i>	
14:40	No: Mauro Cozzolino , <i>Italy</i>	
14:50	Discussion	
15:00-16:30	HIGH AND LOW RESPONDERS	HALL A
Capsule	Ovarian stimulation represents a topic of ongoing concern and progress. How many follicles/ oocytes should we aim for securing optimal success rates; and when is response too low (indicating poor outcomes), or too high associated with increased complication chances and patient burden. And how should this be handled, both in terms of prevention and treatment	
Chairpersons	Zion Ben Rafael , <i>Israel</i> Edgardo Somigliana , <i>Italy</i>	
15:00-15:15	Infertility treatment in women with PCOS - what does the evidence say? Basil Tarlatzis , <i>Greece</i>	
15:15-15:20	Discussion	
15:20-15:35	Ovarian stimulation protocols from ultra-long to short: What works best? Alberto Vaiairelli , <i>Italy</i>	
15:35-15:40	Discussion	
15:40-15:55	Stimulation of DOR patient Stratis Kolibianakis , <i>Greece</i>	
15:55-16:00	Discussion	
16:00-16:30	DEBATE: LH activity in Ovarian Stimulation: Is it still necessary?	
16:00	Yes: Paul Pirtea , <i>France</i>	
16:10	No: Carlo Alvigi , <i>Italy</i>	
16:20	Discussion	



08:30-09:00	GOOD MORNING ROME PLENARY LECTURE	<i>Live stream from HALL A</i>
Capsule	A decade ago, a pioneering procedure was successfully launched	
Chairpersons	Zion Ben Rafael , <i>Israel</i> Rene Frydman , <i>France</i>	
08:30-08:55	Pioneering uterus transplantation: Reflections on breakthroughs and deliveries Mats Brännström , <i>Sweden</i>	
08:55-09:00	Discussion	
09:00-10:00	FAST OOCYTE CRYOPRESERVATION: IS IT WORTH IT?	HALL B
Capsule	Oocyte vitrification is one of the most delicate and challenging steps in ART, with established protocols that have held solidly for more than a decade. New, faster protocols are emerging, promising operational improvements. It is still unclear, however, whether these advancements result in better clinical outcomes. Should we change how we cryopreserve oocytes?	
Chairpersons	Rita Vassena , <i>Spain</i> Michaël Grynberg , <i>France</i>	
09:00-09:20	Yes: Rapid vitrification and warming should be adopted by all Miguel Gallardo , <i>Portugal</i>	
09:20-09:40	No: Oocyte vitrification works well as it is, no need to change it! Lucia de Santis , <i>Italy</i>	
09:40-10:00	Discussion	
10:00-10:30	<i>Coffee break, visit the exhibition, and e-poster viewing</i>	
10:30-12:00	LOW SPERM COUNTS AND INFERTILITY	HALL B
Capsule	Several studies have confirmed that sperm counts are trending downward over the next decades in all tested countries. Is this cause for concern? Do we need to set up strategies to mitigate the male factor effect (current and future) or reproductive outcomes? What are the long-term effects?	
Chairpersons	Juan Alvarez , <i>Spain</i> Giovanni Coticchio , <i>Italy</i>	
10:30-10:55	Screening the male for infertility: From classical test to advanced analysis Christopher Barratt , <i>UK (virtual)</i>	
10:55-11:00	Discussion	
11:00-11:25	Reproductive outcomes with fresh vs. frozen semen Mauro Cozzolino , <i>Italy</i>	
11:25-11:30	Discussion	
11:30-11:55	The sperm contribution to embryo development and clinical outcomes Rossella Mazzilli , <i>Italy</i>	
11:55-12:00	Discussion	
12:00-12:05	<i>Short break</i>	
12:05-13:05	INDUSTRY SUPPORTED SESSION <i>See page 183</i>	HALL A
13:05-14:00	<i>Lunch break, visit the exhibition, e-poster viewing, and moderated e-poster sessions</i>	
14:00-15:00	INDUSTRY SUPPORTED SESSION <i>See page 183</i>	HALL A
15:00-15:05	<i>Short break</i>	
15:05-16:35	MECHANOBIOLOGY, THE NEW FRONTIER OF THE OVARY	HALL B
Capsule	Mechanobiology is emerging as a critical factor from follicular development to ovarian ageing to oocyte quality, with new therapeutic options being designed to ease the mechanical constraints of ovarian function	
Chairpersons	Rita Vassena , <i>Spain</i> Alessandro Bartolacci , <i>Italy</i>	
15:05-15:30	Mechanical regulation of folliculogenesis and oocyte quality Farners Amargant Riera , <i>USA</i>	
15:30-15:35	Discussion	
15:35-16:00	Ovarian stiffness and advanced maternal age: Implications for ART Christiani Amorim , <i>Belgium</i>	
16:00-16:05	Discussion	
16:05-16:35	THE EMBRYO LEGACY	HALL B
16:05-16:30	The first 24h of life: Implications for development and pregnancy Giovanni Coticchio , <i>Italy</i>	
16:30-16:35	Discussion	



16:35-17:00 Coffee break, visit the exhibition, e-poster viewing, and moderated e-poster sessions

17:00-18:30	ALL THAT IS FROZEN: FROM ELECTIVE EMBRYO FREEZING TO SPERM VITRIFICATION	HALL B
Capsule	Cryobiology in its many variations is taking center stage in ART, from sperm vitrification to the continued rise of elective frozen embryo transfer	
Chairpersons	Rita Vassena , <i>Spain</i> Danilo Cimadomo , <i>Italy</i>	
17:00-17:25	Revitrification and rebiopsy for PGT: The good, the bad and the ugly Alessandro Bartolacci , <i>Italy</i>	
17:25-17:30	Discussion	
17:30-17:55	Sperm vitrification: The future of sperm cryopreservation and cryobanking Juan Alvarez , <i>Spain</i>	
17:55-18:00	Discussion	
18:00-18:25	The perfect endometrium for vitrified embryos Alberto Vaiaelli , <i>Italy</i>	
18:25-18:30	Discussion	

Saturday, November 29, 2025

ORAL PRESENTATIONS

Oral presentations will take place in **Hall B** on **Saturday, November 29** (see Oral presentation page 21 for more information)

Friday, November 28, 2025

GYNECOLOGY

08:30-09:00	GOOD MORNING ROME PLENARY LECTURE	Live stream from HALL A
Capsule	A decade ago, a pioneering procedure was successfully launched	
Chairpersons	Zion Ben Rafael , <i>Israel</i> Rene Frydman , <i>France</i>	
08:30-08:55	Pioneering uterus transplantation: Reflections on breakthroughs and deliveries Mats Brännström , <i>Sweden</i>	
08:55-09:00	Discussion	
09:00-10:00	THE GUT, VAGINAL AND BLADDER MICROBIOME IN WOMEN'S LIFESPAN	HALL C
Capsule	Microbiome, so much information, yet so little clinical conclusion	
Chairpersons	Andrea Genazzani , <i>Italy</i> Mark Brincat , <i>Malta</i>	
09:00-09:15	The gut microbiome. The great director of women's health Vincenzo Stanghellini , <i>Italy</i>	
09:15-09:20	Discussion	
09:20-09:35	The vaginal and bladder microbiome: The secret dialogue, in the lifespan Alessandra Graziottin , <i>Italy</i>	
09:35-09:40	Discussion	
09:40-09:55	The vaginal microbiome as a marker of female infertility Gemma Fabozzi , <i>Italy</i>	
09:55-10:00	Discussion	
10:00-10:30	Coffee break, visit the exhibition, and e-poster viewing	
10:30-12:00	NOVEL GLOBAL GUIDANCE ON POI: TOWARDS PERSONALIZED MEDICINE	HALL C
Chairpersons	Nick Panay , <i>UK</i> Micheline Misrahi , <i>France</i>	
10:00-10:50	Genetics of POI: A leap for diagnosis and personalized medicine in novel 2024 guidelines Micheline Misrahi , <i>France</i>	



10:50-11:15	Autoimmunity in POI Johannes Ott , Austria	
11:15-11:35	GSM and sexual health in POI women Rossella Nappi , Italy	
11:35-12:00	Update of POI guidelines (from ESHRE and our latest searches of literature for IMS POI recommendations) Nick Panay , UK	
12:00-12:05	Short break	
12:05-13:05	INDUSTRY SUPPORTED SESSION See page 183	HALL A
13:05-14:00	Lunch break, visit the exhibition, e-poster viewing, and moderated e-poster sessions	
14:00-15:00	INDUSTRY SUPPORTED SESSION See page 183	HALL A
15:00-15:05	Short break	
15:05-16:35	TREATING MENOPAUSE	HALL C
Capsule	All aging women deal with menopause, and associated symptoms. The extent of discomfort associated with menopause varies greatly. In addition, menopause is associated with long-term health risks. When should women be treated, what are preferred regimens, and for how long	
Chairpersons	Andrea Genazzani , Italy Alessandra Graziottin , Italy Eileen Manalo , Philippines	
15:05-15:35	DEBATE: Patients with early menopause should be treated continuously to prevent chronic diseases	
15:05	For: Nick Panay , UK	
15:15	Against: Mark Brincat , Malta	
15:25	Discussion	
15:35-16:05	DEBATE: Menopause symptoms and diseases can be managed without menopausal hormone treatment?	
15:35	For: Santiago Palacios , Spain	
15:45	Against: Rossella Nappi , Italy	
15:55	Discussion	
16:05-16:35	DEBATE: Lichen Sclerosus or Vulvodynia	
16:05	Lichen Sclerosus: Zdenko Vizintin , Slovenia	
16:15	Vulvodynia: Mark Brincat , Malta	
16:25	Discussion	
16:35-17:00	Coffee break, visit the exhibition, e-poster viewing, and moderated e-poster sessions	
17:00-18:30	MENOPAUSE: BEYOND THE MINIMISATION OF HOT FLUSHES	HALL C
Capsule	HRT can positively affect most almost every system in the body	
Chairpersons	Rossella Nappi , Italy Santiago Palacios , Spain Eileen Manalo , Philippines	
17:00-17:15	Have we gone a full circle and should offer HT for all? Mark Brincat , Malta	
17:15-17:20	Discussion	
17:20-17:40	Predicting, preventing and optimising cardiometabolic menopause outcomes in "at risk" women Tommaso Simoncini , Italy	
17:40-17:45	Discussion	
17:45-18:00	The bladder after the menopause: A call for action Andrea Genazzani , Italy	
18:00-18:05	Discussion	
18:05-18:25	Osteoarthritis: Why estrogens have a specific role Alessandra Graziottin , Italy	
18:25-18:30	Discussion	



08:30-09:00	GOOD MORNING ROME PLENARY LECTURE	<i>Live stream from HALL A</i>
Capsule	Endometriosis is a chronic disease that affects all phases of reproductive life	
Chairpersons	Bart Fauser , <i>Netherlands</i> Jacques Donnez , <i>Belgium</i>	
08:30-08:55	Endometriosis before and during pregnancy Paolo Vercellini , <i>Italy</i>	
08:55-09:00	Discussion	
09:00-10:30	ADENOMYOSIS AND ENDOMETRIOSIS	HALL C
Capsule	Adenomyosis hard to diagnose, difficult to manage	
Chairpersons	Jessica Ybanez Morano , <i>USA</i> Pierluigi Benedetti Panici , <i>Italy</i>	
09:00-09:20	Adenomyosis: Are we ready for personalized treatment? Ludovico Muzii , <i>Italy</i>	
09:20-09:25	Discussion	
09:25-09:45	Adenomyosis: Developing organoids for personalized treatment Marie-Madeline Dolmans , <i>Belgium</i>	
09:45-09:50	Discussion	
09:50-10:15	Management and treatment options: What are the future directions? Jessica Ybanez Morano , <i>USA</i>	
10:15-10:20	Discussion	
10:20-10:30	General Discussion	
10:30-11:00	<i>Coffee break, visit the exhibition, e-poster viewing, and moderated e-poster sessions</i>	
11:00-12:30	FERTILITY PRESERVATION	HALL C
Capsule	With improved long-term prognosis of cancer treatment in young women, the preservation of future fertility has become of greater significance. For which patients should fertility preservation be offered, and what are best ways to do so.	
Chairpersons	Jacques Donnez , <i>Belgium</i> Marie-Madeline Dolmans , <i>Belgium</i>	
11:00-11:15	Fertility - sparing management in recurrent gynecological cancer Pierluigi Benedetti Panici , <i>Italy</i>	
11:15-11:20	Discussion	
11:20-11:35	Fertility preservation in borderline and malignant ovarian tumors Michaël Grynberg , <i>France</i>	
11:35-11:40	Discussion	
11:40-12:10	DEBATE: Is there room for ovarian tissue cryopreservation for breast cancer patients? What is the risk?	
11:40	Yes: Michaël Grynberg , <i>France</i>	
11:50	No: Michael Von Wolff , <i>Switzerland</i>	
12:00	Discussion	
12:10-12:25	What are the differences between fertility preservation for benign diseases and malignancy? Stratis Kolibianakis , <i>Greece</i>	
12:25-12:30	Discussion	
12:30-13:30	<i>Lunch break, visit the exhibition, e-poster viewing, and moderated e-poster sessions</i>	
13:30-15:00	PCOS	HALL C
Capsule	The diagnostic criteria of the notoriously heterogeneous condition PCOS is a matter of continued debate. Women may visit the clinic at different ages, and with different complaints. The impact of different diagnostic criteria may vary accordingly. Recently, modified criteria have been suggested for adolescent women and ultrasound may be replaced by AMH.	
Chairpersons	Anja Pinborg , <i>Denmark</i> Stefano Palomba , <i>Italy</i>	
13:30-14:00	DEBATE: Is the diagnostic criteria for PCOS adequate for effective management?	
13:30	Yes: Stefano Palomba , <i>Italy</i>	
13:40	No: Joop Laven , <i>Netherlands</i>	
13:50	Discussion	
14:00-14:25	SEMaglutides (GLP1 antagonist) and PCO Signe Sørensen Torekov , <i>Denmark</i>	
14:25-14:30	Discussion	
14:30-14:50	Challenges in diagnosing PCOS in adolescents Elene Asanidze , <i>Georgia</i>	
14:50-15:00	Discussion	



15:00-16:30	MANAGING SEXUAL ISSUES	HALL C
Capsule	Regarding sexual issues with menopause, we should replace the “don’t ask, don’t tell” strategy with “Ask, diagnose and offer treatment”	
Chairpersons	Nick Panay , <i>UK</i> Tommaso Simoncini , <i>Italy</i>	
15:00-15:15	There is a need for androgen therapy after menopause Andrea Genazzani , <i>Italy</i>	
15:15-15:20	Discussion	
15:20-15:40	Neurokinin-3 receptor antagonists: A novel approach to treating menopausal vasomotor symptoms Santiago Palacios , <i>Spain</i>	
15:40-15:45	Discussion	
15:45-16:05	Sexual arousal: The winning strategy Alessandra Graziottin , <i>Italy</i>	
16:05-16:10	Discussion	
16:10-16:25	Managing sexuality issues in patients contraindicated to or unresponsive to estrogens and androgens Rossella Nappi , <i>Italy</i>	
16:25-16:30	Discussion	

Friday, November 28, 2025

FETOMATERNAL MEDICINE

08:30-09:00	GOOD MORNING ROME PLENARY LECTURE	Live stream from HALL A
Capsule	A decade ago, a pioneering procedure was successfully launched	
Chairpersons	Zion Ben Rafael , <i>Israel</i> Rene Frydman , <i>France</i>	
08:30-08:55	Pioneering uterus transplantation: Reflections on breakthroughs and deliveries Mats Brännström , <i>Sweden</i>	
08:55-09:00	Discussion	
09:00-10:00	PREGNANCY IMPACT IS MORE THAN 9 MONTHS	HALL D
Chairpersons	Gian Carlo Di Renzo , <i>Italy</i> Gerard Visser , <i>Netherlands</i>	
09:00-09:20	Developmental origins of health and disease (DOHaD) hypothesis: Current state and implications for ART Gian Carlo Di Renzo , <i>Italy</i>	
09:20-09:40	Can we blame pregnancy complications in the development of Autism Spectrum Disorder (ASD)? Eyal Sheiner , <i>Israel</i>	
09:40-10:00	The health of children conceived by ART: The chicken or the egg? Anja Pinborg , <i>Denmark</i>	
10:00-10:30	Coffee break, visit the exhibition, and e-poster viewing	
10:30-12:00	PRETERM DELIVERY	HALL D
Chairpersons	Giuseppe Rizzo , <i>Italy</i> Gian Carlo Di Renzo , <i>Italy</i>	
10:30-10:50	DEBATE: The role of routine cervical length screening in low-risk pregnancies – should universal screening be standard, or should it be reserved for high-risk groups?	
10:30	To all: Rinat Gabbay-Benziv , <i>Israel</i>	
10:35	Only for HRP: Eran Ashwal , <i>Canada</i>	
10:40	Discussion	
10:50-11:10	DEBATE: Mg sulfate administration when preterm delivery is expected in less than 2 hours	
10:50	Yes: Liran Hiersch , <i>Israel</i>	
10:55	No: Emmanuel Attali , <i>Israel</i>	
11:00	Discussion	
11:10-11:25	Antenatal corticosteroids - what is the optimal timing? Nir Melamed , <i>Canada</i>	
11:25-11:40	Evidence based data - ultrasound based cerclage - to whom? Ilenia Mappa , <i>Italy</i>	
11:40-12:00	DEBATE: Should we provide corticosteroids for late preterm (35-37 weeks)?	
11:40	Yes: Howard Berger , <i>Canada</i>	
11:45	No: Gerard Visser , <i>Netherlands</i>	
11:50	Discussion	
12:00-12:05	Short break	



12:05-13:05	INDUSTRY SUPPORTED SESSION <i>See page 183</i>	HALL A
13:05-14:00	<i>Lunch break, visit the exhibition, e-poster viewing, and moderated e-poster sessions</i>	
14:00-15:00	INDUSTRY SUPPORTED SESSION <i>See page 183</i>	HALL A
15:00-15:05	<i>Short break</i>	
15:05-16:35	LABOR AND DELIVERY	HALL D
Chairpersons	Giuseppe Rizzo, Italy Eyal Sheiner, Israel	
15:05-15:25	New aspects of labor monitoring including US in labor Giuseppe Rizzo, Italy	
15:25-15:45	DEBATE: Should we provide antibiotics after operative vaginal delivery?	
15:25	Yes: Emmanuel Attali, Israel	
15:30	No: Amir Aviram, Canada	
15:35	Discussion	
15:45-16:00	Introduction of the US machine in the labor ward: Pros and cons Tullio Ghi, Italy	
16:00-16:20	DEBATE: Should women with previous 3rd degree tear undergo vaginal delivery	
16:00	Yes: Daniel Gabbai, Israel	
16:05	No: Eyal Sheiner, Israel	
16:10	Discussion	
16:20-16:35	Controversies in screening for fetal macrosomia at term Basky Thilaganathan, UK	
16:35-17:00	<i>Coffee break, visit the exhibition, e-poster viewing, and moderated e-poster sessions</i>	
17:00-18:30	OBESITY, DIABESITY	HALL D
Chairpersons	Yariv Yogev, Israel Gerard Visser, Netherlands	
17:00-17:20	DEBATE: Should we counsel overweight/obese patients to lose weight during pregnancy?	
17:00	Yes: Gerard Visser, Netherlands	
17:05	No: Yariv Yogev, Israel	
17:10	Discussion	
17:20-17:40	DEBATE: Should we screen and treat GDM prior to 24 weeks of gestation?	
17:20	Yes: Gerard Visser, Netherlands	
17:25	No: Eran Ashwal, Canada	
17:30	Discussion	
17:40-18:00	Myo Inositol preventing and treating GDM Fabio Facchinetti, Italy	
18:00-18:20	The management and attitude for the obese patient in the delivery ward Daniel Gabbai, Israel	
18:20-18:30	Discussion	

Notes



08:30-09:00	GOOD MORNING ROME PLENARY LECTURE	Live stream from HALL A
Capsule	Endometriosis is a chronic disease that affects all phases of reproductive life	
Chairpersons	Bart Fauser , <i>Netherlands</i> Jacques Donnez , <i>Belgium</i>	
08:30-08:55	Endometriosis before and during pregnancy Paolo Vercellini , <i>Italy</i>	
08:55-09:00	Discussion	
09:00-10:30	ADVANCED MATERNAL AGE	HALL D
Chairpersons	Fabio Facchinetti , <i>Italy</i> Anna David , <i>UK</i>	
09:00-09:20	When you are too old to rock the cradle? Is there a difference between singleton and twins? Yariv Yogev , <i>Israel</i>	
09:20-09:40	DEBATE: Should all women over the age of 40 undergo caesarean section?	
09:20	Yes: Amir Aviram , <i>Canada</i>	
09:25	No: Gerard Visser , <i>Netherlands</i>	
09:30	Discussion	
09:40-10:00	DEBATE: Should we induce all labor in advanced maternal age?	
09:40	Yes: Ilenia Mappa , <i>Italy</i>	
09:45	No: Fabio Facchinetti , <i>Italy</i>	
09:50	Discussion	
10:00-10:20	Long term health of women and neonates after delivery after the age of 40 Eyal Sheiner , <i>Israel</i>	
10:20-10:30	Discussion	
10:30-11:00	<i>Coffee break, visit the exhibition, e-poster viewing, and moderated e-poster sessions</i>	
11:00-12:30	GENETICS AND PRENATAL DIAGNOSIS	HALL D
Chairpersons	Antonio Novelli , <i>Italy</i> Antonio Pizzuti , <i>Italy</i>	
11:00-11:15	Non invasive prenatal testing- is it a good option for women after assisted reproduction and for which indications? Antonio Novelli , <i>Italy</i>	
11:35-11:40	In utero gene therapy - a new horizon? Anna David , <i>UK</i>	
11:40-12:00	DEBATE: Should we perform array-based comparative genomic hybridization and whole exome sequencing for all	
11:40	Yes: Amir Aviram , <i>Canada</i>	
11:45	No: Adi Reches , <i>Israel</i>	
11:50	Discussion	
12:00-12:20	What is the value of genetic testing in small babies Elisa Bevilacqua , <i>Italy</i>	
12:20-12:30	Discussion	
12:30-13:30	<i>Lunch break, visit the exhibition, e-poster viewing, and moderated e-poster sessions</i>	
13:30-15:00	MULTIPLE PREGNANCY: THE MONOCHORIONIC TWIN CHALLENGE	HALL D
Chairpersons	Nir Melamed , <i>Canada</i> Asma Khalil , <i>UK</i>	
13:30-13:45	New aspects in the diagnosis and management of MC twins Asma Khalil , <i>UK</i>	
13:45-14:00	Fetal growth restriction and significance of size discordance in twins Nir Melamed , <i>Canada</i>	
14:00-14:20	DEBATE: Should we use twin specific growth charts to diagnose IUGR in twins?	
14:00	Yes: Gerard Visser , <i>Netherlands</i>	
14:05	No: Francesco D'Antonio , <i>Italy</i>	
14:10	Discussion	
14:20-14:40	Optimal dating and timing of birth in twin pregnancy Basky Thilaganathan , <i>UK</i>	
14:40-15:00	Controversies in preterm birth in twins Asma Khalil , <i>UK</i>	



Oral Presentations

Thursday, November 27, 2025

10:15-11:30	ORAL PRESENTATION 1 ART/IVF/INFERTILITY: IVF OTHER / EMBRYOLOGY / ANDROLOGY	HALL C
Chairperson	Fabrizio Horta, Australia	
IVF OTHER		
10:15-10:22	CHANGES AT SINGLE CELL LEVEL OF THE ENDOMETRIUM POST LOCAL ENDOMETRIAL INJURY IN WOMEN WITH RECURRENT IMPLANTATION FAILURE Yiping Fan, Singapore	
10:22-10:29	AI-POWERED SYSTEM FOR AUTOMATED NORMAL SPERM MORPHOLOGY ANALYSIS Jee Hyun Kim, South Korea	
10:29-10:36	HOW AI IS REDEFINING FERTILITY FRONTIERS Rami Wakim, United Kingdom	
EMBRYOLOGY		
10:36-10:43	THE NEW VITRIFICATION AND WARMING PROTOCOLS: WHEN "RAPID" IS NOT REALLY RAPID – A CALL TO AUTHORS, RESEARCHERS, EDITORS, AND MANUFACTURERS Alessandro Bartolacci, Italy	
10:43-10:50	A COMPARISON OF SURVIVAL RATE BETWEEN BIOPSIED AND NON-BIOPSIED BLASTOCYSTS POST-VITRIFICATION: IS BLASTOCOEL COLLAPSE STILL RELEVANT? Yee Shen Chong, Singapore	
10:50-10:57	BACK TO THE ROOTS: STANDARD WARMING BETTER PRESERVES CYTOSKELETAL INTEGRITY AND MITOCHONDRIAL MASS THAN SHORTER PROTOCOLS IN OOCYTES CRYOPRESERVED WITH STANDARD VITRIFICATION Sofia De Girolamo, Italy	
10:57-11:04	LOW AMH DOES NOT PREDICT BLASTOCYST UTILIZATION IN WOMEN UNDER 35: A RETROSPECTIVE COHORT STUDY Rattanamon Koonthaweeelab, Thailand	
11:04-11:11	PREDICTIVE FACTORS OF EMBRYO EUPLOIDY IN OOCYTE PRESERVATION: INFLUENCE OF VITRIFICATION AGE, AMH, ANTRAL FOLLICLE COUNT, AND STORAGE DURATION Laura Garcia de Miguel, Spain	
ANDROLOGY		
11:11-11:18	SOCIAL SILENCE: PSYCHOLOGICAL BURDEN AND PERCEPTION OF MASCULINITY IN MALE INFERTILITY Sila Gul, Turkiye	
11:30-13:15	ORAL PRESENTATION 2 FETOMATERNAL MEDICINE: LABOR AND DELIVERY / FMM OTHER / HIGH RISK PREGNANCY	HALL C
Chairperson	Anja Pinborg, Denmark	
LABOR AND DELIVERY		
11:30-11:37	RELATIONSHIP BETWEEN FEAR OF BIRTH AND PRENATAL BREASTFEEDING SELF-EFFICACY Kamile Altuntug, Turkiye	
11:37-11:44	A CASE OF PLACENTA PREVIA PERCRETA LEFT IN SITU Arnolda Cani, Albania	
11:44-11:51	CROSS-SECTIONAL STUDY ON INDUCTION METHODS FOR THIRD-TRIMESTER STILLBIRTHS IN A HIGH-RISK REFERRAL CENTRE IN INDIA Shriya Dinakar, India	
11:51-11:58	ASSOCIATION BETWEEN MATERNAL DIETARY INFLAMMATORY INDEX TRAJECTORIES DURING PREGNANCY AND OFFSPRING ALLERGIC DISEASE RISK: THE MODIFYING ROLE OF ADVERSE PREGNANCY OUTCOMES Yajie Ding, China	
11:58-12:05	THE EFFECT OF BIRTH BELIEFS OF PRIMIPAROUS PREGNANT WOMEN ON PRENATAL BREASTFEEDING SELF-EFFICACY Betul Ekinci, Turkiye	
12:05-12:12	ADVANCEMENTS IN AUTOMATIC ASSESSMENT OF INSTRUMENTAL DELIVERY FEASIBILITY: EVALUATING THE ROLE OF MATERNAL PARITY Chiara Botrugno, Italy	
12:12-12:19	THE EFFECT OF MIDWIVES EMPATHIC APPROACH ON LABOR PAIN EXPERIENCED BY PREGNANT WOMEN AND POSTPARTUM COMFORT Serap Ejder Apay, Turkiye	
FMM OTHER		
12:19-12:26	CAN WE MOVE TOWARDS A UNIVERSAL TERMINOLOGY FOR GESTATIONAL AGE? Francis Abihanna, France	
12:26-12:33	A PREDICTIVE MODEL FOR EXTERNAL CEPHALIC VERSION IN A PORTUGUESE POPULATION Mafalda Florenciano, Portugal	



12:33-12:40	THE EFFECT OF THERAPEUTIC TOUCH BASED ON WATSON'S HUMAN CARE THEORY APPLIED TO INFANTS WITH INFANTILE COLIC FOR DIFFERENT DURATIONS ON COLIC SYMPTOMS: RANDOMIZED CONTROLLED STUDY Emine Geckil , <i>Turkiye</i>
12:40-12:47	GESTATIONAL WEIGHT GAIN AND ITS ASSOCIATION WITH PREECLAMPSIA, BLOOD PRESSURE TRENDS AND OBSTETRIC OUTCOMES: A RETROSPECTIVE COHORT STUDY Hillary Hu , <i>Australia</i>
12:47-12:54	PRENATAL DETECTION OF COMMON TRISOMIES BASED ON SECOND AND THIRD TRIMESTER ULTRASOUND SCAN Alya Khashoggi , <i>Saudi Arabia</i>
12:54-13:01	PERINATAL PALLIATIVE CARE AND NURSING Senay Topuz , <i>Turkiye</i>
13:01-13:08	THE RELATIONSHIP BETWEEN SELF-EFFICACY AND PREGNANCY-RELATED ANXIETY LEVELS IN WOMEN WITH GESTATIONAL DIABETES Gonul Kurt , <i>Turkiye</i>
HIGH RISK PREGNANCY	
13:08-13:15	APPLICATION OF SHARED MEDICAL APPOINTMENTS IN PREGNANT WOMEN WITH HYPERTENSIVE DISORDERS: THE POWER OF TEAMWORK Congshan Pu , <i>China</i>

Friday, November 28, 2025

09:00-10:00	ORAL PRESENTATION 3 ART/IVF/INFERTILITY: CLINICAL ART/IVF	HALL E
Chairpersons	Pasquale Patrizio , <i>USA</i> Rami Wakim , <i>UK</i>	

CLINICAL ART/IVF		
09:00-09:07	WORDS HAVE POWER IN SPERM AND EGG DONOR FAMILIES: A STUDY OF 551 DONOR-CONCEIVED PEOPLE Wendy Kramer , <i>USA</i>	
09:07-09:14	COMPARISON OF GOOD QUALITY EMBRYO NUMBER BETWEEN PROGESTIN-PRIMED OVARIAN STIMULATION AND GNRH ANTAGONIST PROTOCOLS: A RETROSPECTIVE COHORT ANALYSIS Jitsupa Kunaseth , <i>Thailand</i>	
09:14-09:21	THE CHALLENGES OF OBESITY IN A PUBLICLY FUNDED ASSISTED REPRODUCTION FACILITY Claire Mac Bride , <i>Ireland</i>	
09:21-09:28	NEONATAL OUTCOMES FOLLOWING ASSISTED REPRODUCTION TECHNIQUES: ANALYSIS OF 101,655 SINGLETON LIVE BIRTHS FROM 2019 TO 2022 IN SPAIN Rocio Nunez Calonge , <i>Spain</i>	
09:28-09:35	CLINICAL BENEFITS OF A PATENTED FOOD SUPPLEMENT WITH 3.6:1 MYO-INOSITOL/D-CHIRO-INOSITOL, ANTIOXIDANTS AND ESSENTIAL VITAMINS IN PCOS TREATMENT: EVIDENCE FROM A SPANISH COHORT Patricia Sanmartin , <i>Spain</i>	
09:35-09:42	MORE ULTRASOUND SCANS AND LONGER FOLLICULAR PHASE IN IMMEDIATE VERSUS POSTPONED MODIFIED NATURAL CYCLE (MNC) FROZEN EMBRYO TRANSFER (FET) Amalie Somuncu Johansen , <i>Denmark</i>	
09:42-09:49	SECOND TRIGGER IN INTRAUTERINE INSEMINATION (IUI) PROTOCOL: ENHANCING FERTILITY OUTCOMES Pyarilal Tripathy , <i>India</i>	
09:49-09:56	IN FROZEN EMBRYO TRANSFER (FET) CYCLES WITH PREIMPLANTATION GENETIC DIAGNOSIS (PGD), SHOULD NOT THE NATURAL CYCLE BE CHOSEN? Batuhan Turgay , <i>Turkiye</i>	

10:30-12:00	ORAL PRESENTATION 4 FETOMATERNAL MEDICINE: MEDICAL COMPLICATIONS IN PREGNANCY PRETERM DELIVERY PREVENTION AND TREATMENT / MULTIFETAL PREGNANCY / FETAL MEDICINE / FMM CASE REPORT (STUDY) / FMM OTHER	HALL E
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Chairpersons	Valentina Tsibizova , <i>Italy</i> Ilenia Mappa , <i>Italy</i>	
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MEDICAL COMPLICATIONS IN PREGNANCY PRETERM DELIVERY PREVENTION AND TREATMENT		
10:30-10:37	A RANDOMIZED STUDY TO COMPARE THE EFFICACY AND ACCEPTABILITY OF TWO MICRONIZED PROGESTERONE VAGINAL FORMULATIONS (GELATIN CAPSULE AND EFFERVESCENT VAGINAL TABLET) FOR PREVENTION OF PRETERM BIRTH Rashmi Bagga , <i>India</i>	
10:37-10:44	EXAMINING THE EFFECTIVENESS OF NURSING CARE GIVEN TO WOMEN WITH ECTOPIC PREGNANCY BASED ON THE ROY ADAPTATION MODEL Gul Ertem , <i>Turkiye</i>	
10:44-10:51	PERIVABILITY: WHERE DO WE DRAW THE LINE? A TWO-CASE REPORT FROM A TERTIARY CARE FACILITY Francisca Ribeiro , <i>Portugal</i>	
10:51-10:58	ABNORMAL SOLUBLE FMS-LIKE TYROSINE KINASE TO PLACENTAL GROWTH FACTOR RATIO DURING PREGNANCY AS A PREDICTOR OF SUBJECTIVE MEMORY IMPAIRMENT 3–6 YEARS POSTPARTUM Carmen Garrido Gimenez , <i>Spain</i>	



10:58-11:05	PREGNANCY OUTCOMES OF GESTATIONAL DIABETES MELLITUS TREATED BEFORE VS AFTER 24 WEEKS: A COMPARISON OF CARPENTER-COUSTAN AND IADPSG CRITERIA Santikorn Gorsagun , <i>Thailand</i>
11:05-11:12	TRANSIENT OSTEOPOROSIS OF PREGNANCY WITH SEVERE BILATERAL HIP INVOLVEMENT AND COMPLETE POSTPARTUM RECOVERY Necla Simay Okay , <i>Turkiye</i>
11:12-11:19	PRETERM PRELABOR RUPTURE OF MEMBRANES (<34 WEEKS): MATERNAL COMPLICATIONS, INPATIENT MANAGEMENT, AND NEONATAL OUTCOMES UP TO ONE MONTH POST-DISCHARGE Francisca Ribeiro , <i>Portugal</i>
11:19-11:26	THE EVOLUTION OF TREATMENT METHODS FOR ECTOPIC PREGNANCY IN THE SCAR ON THE UTERUS AFTER CESAREAN SECTION Roman Shmakov , <i>Russia</i>
11:26-11:33	OPHTHALMIC ARTERY DOPPLER AND CAROTID INTIMA-MEDIA THICKNESS 3 TO 6 YEARS POSTPARTUM IN WOMEN WITH AND WITHOUT A HISTORY OF PLACENTAL INSUFFICIENCY Cristina Trilla , <i>Spain</i>
MULTIFETAL PREGNANCY	
11:33-11:40	THE EFFECT OF COUNSELLATIVE INTERVENTIONS WITH MOTIVATIONAL INTERVIEW TECHNIQUES BASED ON THE HEALTH ACTION PROCESS APPROACH (HAPA) MODEL IN TWIN PREGNANCIES ON BREASTFEEDING DURATION Oya Kavlak , <i>Turkiye</i>
FETAL MEDICINE	
11:40-11:47	THE ESTIMATED FETAL WEIGHT BY ULTRASOUND: THE NEVERENDING DEBATE A. Cristina Rossi , <i>Italy</i>
FMM CASE REPORT / STUDY	
11:57-11:54	ACUTE SUBARACHNOID HEMORRHAGE FROM RUPTURED INTRACRANIAL ANEURYSM IN PREGNANCY: A CASE REPORT Louise Elinor Dulay , <i>Philippines</i>
FMM OTHER	
11:54-12:01	THE EFFECT OF GRAVIDITY ON MATERNAL HEALTH LITERACY LEVEL AND ANTENATAL CARE Tugce Sonmez , <i>Turkiye</i>

12:05-13:01	ORAL PRESENTATION 5 ART/IVF/INFERTILITY: CLINICAL ART/IVF	HALL B
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Chairpersons **Rita Vassena**, *Spain*
Rami Wakim, *UK*

CLINICAL ART/IVF		
12:05-12:12	COMPARATIVE ANALYSIS OF RECOMBINANT VS. BIOSIMILAR FSH IN CONTROLLED OVARIAN STIMULATION: A RETROSPECTIVE STUDY OF 12,952 OOCYTE DONATION AND AUTOLOGOUS CYCLES Andreas Abraham Zadeh , <i>Spain</i>	
12:12-12:19	COMPARISON OF DYDROGESTERONE AND GNRH ANTAGONISTS IN PREVENTING THE LH SURGE DURING IVF/ICSI CYCLES Ludmila Barbakadze , <i>Georgia</i>	
12:19-12:26	ASSOCIATION BETWEEN ENDOMETRIAL POLYPS AND CHRONIC ENDOMETRITIS: A META-ANALYSIS OF PREVALENCE AND CLINICAL SIGNIFICANCE Miguel Caballero , <i>Spain</i>	
12:26-12:33	ADVANCED ENDOMETRIOSIS AND ART RESULTS: A CASE-CONTROL STUDY INVOLVING 558 FIRST IVF CYCLES Maria Carrera , <i>Spain</i>	
12:33-12:40	HOW MANY OOCYTES FOR A BLASTOCYST? TOWARD A MORE EFFICIENT, SUSTAINABLE AND PATIENT-CENTERED EGG DONATION PROGRAM Antonio Forgiarini , <i>Spain</i>	
12:40-12:47	EFFECT OF DYDROGESTERONE SUPPLEMENTATION ON PREGNANCY OUTCOMES IN FROZEN-THAWED DAY-5 EMBRYO TRANSFERS WITH LOW SERUM PROGESTERONE: A RETROSPECTIVE COHORT STUDY Mariana Gaspar , <i>Portugal</i>	
12:47-12:54	EFFICIENCY OF DUAL TRIGGER WITH COMBINATION OF GNRH AGONIST AND HCG IN FRESH IVF CYCLES: A RETROSPECTIVE STUDY Margarit Grigoryan , <i>Armenia</i>	
12:54-13:01	MICROBIOTA AND INFERTILITY: THE IMPACT OF VAGINAL AND ENDOMETRIAL MICROBIOTA ON REPRODUCTIVE OUTCOMES Demet Guney , <i>Turkiye</i>	

12:05-13:05	ORAL PRESENTATION 6 ART/IVF/INFERTILITY: REPRODUCTIVE GENETICS / GENETICS & GENOMICS / CASE REPORT / INFERTILITY/ ENDOCRINOLOGY/ CLINICAL ART/IVF	HALL E
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Chairperson **Micheline Misrahi**, *France*

REPRODUCTIVE GENETICS		
12:05-12:12	AN UNUSUAL PRESENTATION OF UNICORNUATE UTERUS WITH A FUNCTIONAL RUDIMENTARY HORN COEXISTING WITH VACTERL ASSOCIATION Ana Jibladze , <i>Georgia</i>	
12:12-12:19	EXPOSURE TO NON-PERSISTENT ENDOCRINE DISRUPTING CHEMICALS (EDCS) AND ENDOMETRIOSIS: A SYSTEMATIC REVIEW Christine Eloise B. Pascua , <i>Philippines</i>	



GENETICS & GENOMICS

12:19-12:26 IMPACT OF PATERNAL AGE AND DIFFERENT SPERM VARIABLES ON ANEUPLOIDY AND MOSAICISM RATES
Laura Garcia de Miguel, Spain

IVF CASE REPORT / STUDY

12:26-12:33 EFFECT OF PRE-TREATMENT PRIOR TO ANTAGONIST REGIMEN ON CLINICAL OUTCOME OF EXPECTED POOR OVARIAN RESERVES PATIENTS USING POSEIDON CRITERIA
Anjali Chaudhary, India

INFERTILITY/ENDOCRINOLOGY

12:33-12:40 PREVALENCE OF SECONDARY INFERTILITY AND AFFECTING FACTORS IN WOMEN 18-49 AGE
Derya Yuksel Kocak, Turkiye

12:40-12:47 IMPACT OF ENDOMETRIAL THICKNESS ON PREGNANCY AND PERINATAL OUTCOMES: INSIGHTS FROM 16566 SINGLE BLASTOCYST FROZEN EMBRYO TRANSFER CYCLES
Yaxin Guo, China

CLINICAL ART/IVF

12:47-12:54 LIVE BIRTH AND EMBRYO EUPLOIDY OUTCOMES AFTER PROGESTIN-PRIMED OVARIAN STIMULATION (PPOS) VERSUS GNRH ANTAGONIST PROTOCOLS IN PGT-A CYCLES: A LARGE COHORT ANALYSIS
Marika Marino, Italy

12:54-13:01 IMPACT OF ANTIBIOTIC TREATMENT ON PREGNANCY OUTCOMES IN INFERTILE WOMEN WITH CHRONIC ENDOMETRITIS AND EXPLORATION OF DIAGNOSTIC PLASMA CELL THRESHOLDS
Yaxin Guo, China

14:00-14:50 ORAL PRESENTATION 7

GYNECOLOGY: OTHER / GSM/VVA / GYNECOLOGY

HALL B

Chairperson **Joop Laven**, Netherlands

GYN OTHER

14:00-14:07 KNOWLEDGE, ATTITUDE AND PRACTICES ON LONG-ACTING REVERSIBLE CONTRACEPTIVE METHODS AMONG HEALTH CARE WORKERS IN A TERTIARY GOVERNMENT HOSPITAL IN BAGUIO CITY, PHILIPPINES
Iwi Dancel, Philippines

14:07-14:14 THE EFFECT OF MODEL-BASED ANTENATAL AND POSTNATAL MOTIVATIONAL INTERVIEWING ON CONTRACEPTIVE SELF-EFFICACY, ATTITUDE AND METHOD USE: A RANDOMIZED CONTROLLED TRIAL
Aliye Dogan Gangal, Turkiye

14:14-14:21 EFFECTS OF EDUCATION GIVEN TO WOMEN ON THEIR CERVICAL CANCER KNOWLEDGE AND UNDERGOING PAP SMEAR TESTING: A SINGLE-GROUP QUASI-EXPERIMENTAL STUDY
Asli Karakus Selcuk, Turkiye

14:21-14:28 THE USE OF HORMONE THERAPY IN THE PREVENTION AND TREATMENT OF OSTEOPOROSIS: RISKS AND BENEFITS
Luana Matias Teixeira, Brazil

14:28-14:35 EVALUATION OF HEALTH PROFESSIONALS' KNOWLEDGE AND READINESS TO MANAGE VIOLENCE IN INTERVENTION TO WOMEN VICTIMS OF VIOLENCE: A QUALITATIVE RESEARCH
Rusen Ozturk, Turkiye

GSM/VVA

14:35-14:42 EFFECTS OF ESTRIOL-LACTOBACILLI COMBINATION VERSUS POLYCARBOPHIL-BASED VAGINAL MOISTURIZER ON POST-RADIATION VAGINITIS IN WOMEN WITH CERVICAL CANCER: A RANDOMIZED CONTROLLED TRIAL
Natcha Koohachaiskun, Thailand

GYNECOLOGY

14:42-14:49 SOMALI YOUNG WOMEN'S COPING METHODS WITH DYSMENORRHOEA: A PHENOMENOLOGICAL RESEARCH
Handan Ozcan, Turkiye

14:00-15:03 ORAL PRESENTATION 8

FETOMATERNAL MEDICINE: TECHNOLOGICAL INNOVATIONS / LABOR AND DELIVERY

HALL E

Chairpersons **Tullio Ghi**, Italy
Amir Aviram, Canada

FMM TECHNOLOGICAL INNOVATIONS

14:00-14:07 ARTIFICIAL INTELLIGENCE APPLICATIONS IN EARLY PREDICTION OF PREECLAMPSIA: A SCOPING REVIEW
Vera Correia, Portugal

14:07-14:14 THE EFFECT OF VIRTUAL REALITY INTERVENTION ON LABOR PAIN AND EXPERIENCE IN PREGNANT WOMEN: A RANDOMIZED CONTROLLED TRIAL
Nuray Egelioglu Cetisli, Turkiye

14:14-14:21 TRANSFORMING A BASIC BIRTH MODEL INTO A HIGH-FIDELITY, AI-POWERED SIMULATION: A NOVEL APPROACH FOR HEALTH EDUCATION
Sahika Simsek Cetinkaya, Turkiye

14:21-14:28 ARTIFICIAL INTELLIGENCE APPLICATIONS IN PREDICTING POSTPARTUM HAEMORRHAGE: A SCOPING REVIEW
Vera Correia, Portugal

LABOR AND DELIVERY

14:28-14:35 THE EFFECT OF BREASTFEEDING COUNSELING WITH SMART PHONE APP ON BREASTFEEDING SELF-EFFICACY, BREASTFEEDING DURATION AND PROBLEMS
Gul Ertem, Turkiye



14:35-14:42	INDUCTION OF LABOR IN TERM BREECH PRESENTATIONS: MATERNAL AND NEONATAL OUTCOMES IN A RETROSPECTIVE COHORT Carmen Garrido Gimenez, Spain
14:42-14:49	ELECTIVE INDUCTION OF LABOR AFTER CESAREAN DELIVERY: MATERNAL AND NEONATAL OUTCOMES Ana Rita Gaspar, Portugal
14:49-14:56	ANTIBIOTIC PROPHYLAXIS IN PRELABOR RUPTURE OF MEMBRANES AT TERM? ADDRESSING PREGNACIES WITH HIGHER RISK OF INFECTION Miguel Macedo, Portugal
14:56-15:03	WOMEN'S EMOTIONS, EXPECTATIONS AND COPING STRATEGIES DURING THE PERINATAL GRIEF PROCESS: A QUALITATIVE STUDY Handan Ozcan, Turkiye

15:05-16:36	ORAL PRESENTATION 9 GYNECOLOGY: HPV / PMS/PMDD / POI/ GYNECOLOGICAL ONCOLOGY	HALL E
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Chairpersons **Johannes Ott, Austria**
Igor Jeremic, Serbia

HPV

15:05-15:12	DILEMMAS ON THE DIRECT RELATIONSHIP BETWEEN UREAPLASMA AND HPV INFECTION IN NULLIPAROUS PATIENTS WITH UREAPLASMA-HPV POSITIVE - A CASE STUDY IN ALBANIA Ilta Bylykbashi, Albania
15:12-15:19	EFFICACY OF A MULTI-INGREDIENT CORIOLUS VERSICOLOR-BASED VAGINAL GEL FOR HIGH-RISK HPV CLEARANCE: 6-MONTH FINAL RESULTS FROM THE PALOMA 2 CLINICAL TRIAL Patricia Sanmartin, Spain
15:19-15:26	EFFICACY OF A MULTI-INGREDIENT CORIOLUS VERSICOLOR-BASED VAGINAL GEL ON HIGH-RISK HPV CLEARANCE AND REPAIR OF LOW-GRADE CERVICAL LESIONS: FINAL RESULTS FROM THE PALOMA 2 CLINICAL TRIAL Patricia Sanmartin, Spain
15:26-15:33	COLPOSCOPIC DIAGNOSTICS CERVICAL GLANDULAR INTRA-EPITHELIAL NEOPLASIA AND NEW THERAPY Igor Jeremic, Serbia
15:33-15:40	LESSONS FOR HPV VACCINE ADMINISTRATORS FROM A FOLLOW-UP CONSULTATION CLINIC—DO THE ATTITUDES OF PHYSICIANS IMPACT PATIENTS OUTCOMES? Ryo Konno, Japan
15:40-15:47	SUSTAINED EFFICACY OF A CORIOLUS VERSICOLOR-BASED VAGINAL GEL FOR HIGH-RISK HPV CLEARANCE :12-MONTH FINAL RESULTS FROM THE PALOMA 2 CLINICAL TRIAL Patricia Sanmartin, Spain

PMS/PMDD

15:47-15:54	INVESTIGATING THE EFFECT OF AN ACUPRESSURE MAT ON PERCEIVED STRESS, SLEEP QUALITY, AND PREMENSTRUAL SYMPTOMS IN INDIVIDUALS WITH PREMENSTRUAL SYNDROME: A RANDOMIZED CONTROLLED TRIAL Ilknur Munevver Gonenc, Turkiye
15:54-16:01	CLINICAL CARE FOR MENOPAUSAL WOMEN Anuvat Roongpisuthipong, Thailand

POI

16:01-16:08	MITOCHONDRIA AND TELOMERES IN HUMAN PREANTRAL FOLLICLES: IMPACT OF AGE ON EARLY FOLLICULOGENESIS DYNAMICS Luciana Cacciottola, Italy
16:08-16:15	PREMATURE OVARIAN INSUFFICIENCY – A CASE SERIES SEEN IN A TERTIARY CHILDREN'S HOSPITAL PAEDIATRIC AND ADOLESCENT GYNAECOLOGY SERVICE Brianna Cloke, United Kingdom
16:15-16:22	MITOCHONDRIAL MEDIATED ENDOPLASMIC RETICULUM STRESS: LINK TO IDIOPATHIC PREMATURE OVARIAN INSUFFICIENCY Kajal Sihag, India

GYNECOLOGICAL ONCOLOGY

16:22-16:29	ROUTINE BLOOD TESTS IDENTIFY PATIENTS WITH ADVANCED CANCER AND UNMET NEEDS LIVING > 1 ->2 EXTRA YEARS Howard Bruckner, USA
16:29-16:36	AWANERESS OF GYNECOLOGICAL CANCER IN THE WOMEN RELATIVES OF CANCER PATIENTS AND ITS AFFECTING FACTORS Emel Ege, Turkiye

17:00-18:31	ORAL PRESENTATION 10 GYNECOLOGY	HALL E
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Chairperson **Johannes Ott, Austria**

GYNECOLOGY

17:00-17:07	ZERO BLIND PROCEDURES: THE ROLE OF TISSUE REMOVAL SYSTEMS IN A NEW ERA OF GYNECOLOGY, NO MORE D&C FOR RPOC Shahrazad Ansari, Iran
17:07-17:14	DIRECT TROCAR INSERTION - SAFE METHOD FOR THE CREATION OF PNEUMOPERITONEUM Branka Bacotic, Serbia
17:14-17:21	CASE REPORT: RARE CASE OF GIANT ENDOMETRIAL POLYP IN A REPRODUCTIVE AGE WOMAN Patricia Megan Baluyot, Philippines
17:21-17:28	VAGINAL MICROBIOME AWARENESS: 2025 RESULTS FROM THE INTERNATIONAL MICROBIOTA OBSERVATORY IN 11 COUNTRIES Jean Marc Bohbot, France
17:28-17:35	INVENTION OF MENOPAUSE: THE POLITICS OF THE PERFORMATIVE Danielle Choucroun, Luxembourg



17:35-17:42	EFFECTIVENESS OF TRANSTHEORETICAL MODEL-BASED EDUCATION SUPPORTED BY MOTIVATIONAL INTERVIEWS GIVEN TO WOMEN WITH URINARY INCONTINENCE: A RANDOMIZED CONTROLLED TRIAL Sevil Cicek Ozdemir , <i>Turkiye</i>
17:42-17:49	ESTABLISHMENT AND AUDIT OF A PAEDIATRIC AND ADOLESCENT GYNAECOLOGY SERVICE IN A TERTIARY CHILDREN'S HOSPITAL Brianna Cloke , <i>United Kingdom</i>
17:49-17:56	LASER IN GYNECOLOGY – ETHICAL ISSUES Ivan Fistoncic , <i>Croatia</i>
17:56-18:03	THE EFFECTS OF EMOTIONAL FREEDOM TECHNIQUE ON DEPRESSIVE AND MENOPAUSAL SYMPTOMS IN POSTMENOPAUSAL WOMEN Meltem Ugurlu , <i>Turkiye</i>
18:03-18:10	BENCH TO BEDSIDE: UTILIZING MIRNA BIOMARKERS FOR EARLY DIAGNOSIS OF ENDOMETRIOSIS – A MULTI-CENTER STUDY Payam Katebi Kashi , <i>USA</i>
18:10-18:17	RELATIONSHIP BETWEEN ENDOMETRIOSIS SYMPTOMS, POST-TRAUMATIC STRESS DISORDER, AND QUALITY OF LIFE Sewar Khatib , <i>Israel</i>
18:17-18:24	PREVALENCE AND CLINICAL CORRELATIONS IN PATIENTS WITH ENDOMETRIOSIS WHO UNDERWENT LAPAROSCOPIC SURGERY AT SIRIRAJ HOSPITAL ACCORDING TO THE ENZIAN CLASSIFICATION (2020) Supisara Mungkorntongsakul , <i>Thailand</i>
18:24-18:31	THE RELATIONSHIP BETWEEN WOMEN'S CLIMATE CHANGE ANXIETY AND THEIR ATTITUDES TOWARDS PROTECTING REPRODUCTIVE HEALTH Sureyya Kilic , <i>Turkiye</i>

Saturday, November 29, 2025

09:00-10:31	ORAL PRESENTATION 11 GYNECOLOGY: GYNECOLOGICAL ONCOLOGY	HALL B
Chairpersons	Eileen Manalo , <i>Philippines</i> Mark Brincat , <i>Malta</i>	
GYNECOLOGICAL ONCOLOGY		
09:00-09:07	CERVICAL CANCER PREVENTION, TREATMENT, AND SURVIVORSHIP IN SOUTHEAST ASIA: HETEROGENEOUS POLITICAL DETERMINANTS OF HEALTH AND BARRIERS TO CARE Nicole Rose Alberto , <i>Philippines</i>	
09:07-09:14	NODULOCYSTIC BASAL CELL CARCINOMA ARISING WITHIN THE BENIGN FOLLICULAR NEOPLASM OF VULVA: A RARE CASE Faiza Ansari , <i>United Kingdom</i>	
09:14-09:21	CLINICAL SIGNIFICANCE OF HUMAN PAPILLOVIRUS CO-INFECTION WITH SEXUALLY TRANSMITTED INFECTIONS WOMEN OF KAZAKHSTAN IN REPRODUCTIVE - AGE WITH CERVICAL PRECANCEROUS CONDITIONS Balkenzhe Imankulova , <i>Kazakhstan</i>	
09:21-09:28	GYNECOLOGIC PERIVASCULAR EPITHELIOID CELL TUMORS (PECOMAS): A COMPREHENSIVE ANALYSIS OF 48 CASES Payam Katebi Kashi , <i>USA</i>	
09:28-09:35	INCORPORATING COMORBIDITY INDEXES AND PERFORMANCE STATUS INTO ROUTINE GERIATRIC BREAST CANCER ASSESSMENT Marta Leitao Afonso , <i>Portugal</i>	
09:35-09:42	CERTIFICATION DOES NOT EQUAL IMPLEMENTATION: EDUCATION AS THE KEY DRIVER FOR ERAS ADHERENCE IN GERMAN GYNECOLOGIC ONCOLOGY – A CROSS-SECTIONAL STUDY Roxana Schwab , <i>Germany</i>	
09:42-09:49	AN IMMUNO-HORMONAL READOUT FOR EVERYDAY PRACTICE: ESTROGEN/PROGESTERONE RECEPTOR PHENOTYPES AND STROMAL TUMOR INFILTRATING LYMPHOCYTES FLAG ADVERSE PATHOLOGY PRIMARY ENDOMETRIAL CARCINOMAS Rine Limani , <i>Kosovo</i>	
09:49-09:56	VULVAR MELANOMA IN AN IMMUNOCOMPROMISED PATIENT: A CASE REPORT AND SURGICAL PERSPECTIVE Raquel Perez , <i>Philippines</i>	
09:56-10:03	CURRENT PRACTICE PATTERNS, RATIONALE, AND SAFETY CONSIDERATIONS IN POWER MORCELLATION: RESULTS FROM A NATIONAL SURVEY OF GYNECOLOGIC SURGEONS Roxana Schwab , <i>Germany</i>	
10:03-10:10	AN ONLINE SURVEY OF CANCER SURVIVOR'S VIEWS ON ACCESS TO INFORMATION AND SUPPORT FOR MENOPAUSE FOLLOWING CANCER Vikram Sinai Talaulikar , <i>United Kingdom</i>	
10:10-10:17	REASSESSING MISSED OPPORTUNITIES IN OVARIAN CANCER PREVENTION: A MULTI-INSTITUTIONAL STUDY Payam Katebi Kashi , <i>USA</i>	
10:17-10:24	EXTRAUTERINE ENDOMETRIAL STROMAL SARCOMA IN A NULLIGRAVID: A CASE REPORT Clarice Trinidad , <i>Philippines</i>	
10:24-10:31	COMPARATIVE EFFICACY OF WEEKLY METHOTREXATE VERSUS 8-DAY METHOTREXATE-FOLINIC ACID REGIMEN IN LOW-RISK GESTATIONAL TROPHOBLASTIC NEOPLASIA: A SYSTEMATIC REVIEW AND META-ANALYSIS Alvin Wijaya , <i>Indonesia</i>	



09:00-10:30	ORAL PRESENTATION 12 FETOMATERNAL MEDICINE: HIGH RISK PREGNANCY / LABOR AND DELIVERY / MEDICAL COMPLICATIONS IN PREGNANCY PRETERM DELIVERY PREVENTION AND TREATMENT	HALL E
Chairpersons	Howard Berger, Canada Valentina Tsibizova, Italy	
HIGH RISK PREGNANCY		
09:00-09:07	OBSTETRIC AND PERINATAL OUTCOMES OF PATIENTS DIAGNOSED WITH DEPRESSION: A 20 YEARS STUDY Vitoria Luisa de Souza Ferreira, Brazil	
09:07-09:14	GESTATIONAL DIABETES IN HIV-POSITIVE PREGNANCY: A TERTIARY HOSPITAL STUDY Mariana Aleixo, Portugal	
09:14-09:21	PLACENTAL SIZE: A MARKER OF FETAL WELLBEING Anne Eskild, Norway	
09:21-09:28	CAN NT-PROBNP ENHANCE ACCURACY OF ANGIOGENIC FACTORS IN THE SHORT-TERM PREDICTION OF PREECLAMPSIA? Carmen Garrido Gimenez, Spain	
09:28-09:35	PERIMENOPAUSAL PREGNANCIES - PERINATAL COMPLICATIONS AND OUTCOMES OF SPONTANEOUS VS. ASSISTED REPRODUCTION Linda Harel, Israel	
09:35-09:42	SUCCESSFUL TERM PREGNANCY IN A PATIENT WITH SEVERE REFRACTORY IMMUNE THROMBOCYTOPENIC PURPURA: A CASE REPORT Vanna Natalie Itom, Philippines	
09:42-09:49	PREVALENCE AND PREDICTORS OF MATERNAL NEAR-MISS AND MORTALITY ASSOCIATED WITH ACQUIRED CARDIAC DISEASES Suchinan Kaewsuksai, Thailand	
09:49-09:56	TREATMENT OF HETEROTOPIC CERVICAL PREGNANCY WITH AN ONGOING INTRAUTERINE TWIN PREGNANCY: A CASE REPORT Khumar Mammadli, Azerbaijan	
09:56-10:03	LIFE OUTSIDE THE WOMB: A SUCCESSFUL CASE OF ADVANCED SECONDARY ABDOMINAL PREGNANCY Kristel Keith Nieva, Philippines	
10:03-10:10	OBSTETRIC CHALLENGES IN MOYAMOYA DISEASE: ELECTIVE CESAREAN VERSUS INDUCTION OF LABOUR—A CASE REPORT Carlota Pacheco, Portugal	
10:10-10:17	INVESTIGATION OF RELATIONSHIP BETWEEN CYBERCHONDRIA, DEPRESSION, ANXIETY AND STRESS IN PREGNANT WOMEN Nulufer Erbil, Turkiye	
MEDICAL COMPLICATIONS IN PREGNANCY PRETERM DELIVERY PREVENTION AND TREATMENT		
10:17-10:24	EFFECT OF ORAL AND INTRAVENOUS HYDRATION THERAPY ON AMNIOTIC FLUID INDEX, MATERNAL AND PERINATAL OUTCOME IN BORDERLINE OLIGOHYDRAMNIOS Anjali Chaudhary, India	
11:00-12:31	ORAL PRESENTATION 13 GYNECOLOGY	HALL B
Chairpersons	Nick Panay, UK Linda Harel, Israel	
GYNECOLOGY		
11:00-11:07	DOES COPPER INTRA UTERINE DEVICE PROMOTE ENDOMETRIOSIS? Danielle Choucroun, Luxembourg	
11:07-11:14	THE FUNDAMENTAL ROLE OF HYSTEROSCOPY IN INFERTILITY Shahzad Ansari, Iran	
11:14-11:21	LAPAROSCOPIC MANAGEMENT OF INVASIVE RETAINED PRODUCTS OF CONCEPTION: A COHORT STUDY Michal Mara, Czech Republic	
11:21-11:28	RELEASING THE FROZEN PELVIS IN ADVANCED ENDOMETRIOSIS: STANDARDISED STEPS Sachin Naiknaware, India	
11:28-11:35	BIOCHEMICAL PROFILING OF ENDOMETRIOSIS TYPES USING FTIR SPECTROSCOPY AND ADVANCED CLASSIFICATION MODELS Piotr Olcha, Poland	
11:35-11:42	POOLED ANALYSIS FROM MULTIPLE CLINICAL TRIALS TO ASSESS THE INCIDENCE OF MALIGNANCIES WITH ELINZANETANT TREATMENT IN POSTMENOPAUSAL WOMEN Nick Panay, United Kingdom	
11:42-11:49	CHYLOUS ASCITES IN GYNECOLOGIC SURGERY: AN UNUSUAL PRESENTATION OF FOLLICULAR LYMPHOMA Mariana Salgado Simoes, Portugal	
11:49-11:56	REAL-WORLD TREATMENT FOR HEAVY MENSTRUAL BLEEDING IN THE UNITED STATES AND UNITED KINGDOM: A EUROPEAN HEALTH DATA AND EVIDENCE NETWORK (EHDEN) STUDY Mariana Schiffer Acar, Germany	
11:56-12:03	THE EFFECT OF WEB-BASED EDUCATION GIVEN TO MIDWIVES AND NURSES ON THEIR KNOWLEDGE LEVELS REGARDING ERAS PROTOCOLS APPLIED IN GYNECOLOGICAL AND OBSTETRIC SURGERY Asli Sis Celik, Turkiye	
12:03-12:10	EMERGENCY CERCLAGE FOR BULGING MEMBRANE IN THE MIDTRIMESTER: TO STITCH OR NOT TO STITCH? Avinoam Tzabari, Israel	
12:10-12:17	EARLY PREGNANCY LOSS: CLINICAL, PSYCHOLOGICAL CHARACTERISTICS AND MANAGEMENT IN A TERTIARY CENTER Corina Iliadi-Tulbure, Moldova	
12:17-12:24	SYNTHETIC TRANSOBTURADOR SUBURETHRAL SLINGS: RESULTS AND RISK FACTORS FOR FAILURE Patricia Vieira Tavares, Portugal	



12:24-12:31	MIDWIVES' VIEWS ON GENITAL AESTHETICS: A QUALITATIVE STUDY Aysenur Cintemur , <i>Turkiye</i>	
11:00-12:10	ORAL PRESENTATION 14 FETOMATERNAL MEDICINE: HIGH RISK PREGNANCY	HALL E
Chairpersons	Diogo Ayres-de-Campos , <i>Portugal</i> Emmanuel Attali , <i>Israel</i>	
HIGH RISK PREGNANCY		
11:00-11:07	HIV POSITIVE GESTATIONS AND DELIVERY MODE: A TERTIARY CENTER RETROSPECTIVE COHORT Mariana Aleixo , <i>Portugal</i>	
11:07-11:14	PROSPECTIVE STUDY TO EVALUATE PREDICTORS OF ADVERSE MATERNAL OUTCOME IN HOSPITALIZED PREGNANT/ POST-PARTUM WOMEN WITH ACUTE LIVER INJURY Aashima Arora , <i>India</i>	
11:14-11:21	SYSTEMATIC SCOPING REVIEW OF OBJECTIVE POSTPARTUM UTERINE ACTIVITY MONITORING Phebe Berben , <i>Netherlands</i>	
11:21-11:28	MORPHOLOGY AND FUNCTION OF THE FETAL HEART AND GESTATIONAL DIABETES MELLITUS Ivana Babovic , <i>Serbia</i>	
11:28-11:35	THE EFFECT OF ORAL PROBIOTICS ON GLYCEMIC CONTROL OF WOMEN WITH GESTATIONAL DIABETES MELLITUS: A SYSTEMATIC REVIEW AND META-ANALYSIS Marian Joy Santos , <i>Philippines</i>	
11:35-11:42	CONTINGENT FIRST-TRIMESTER PREECLAMPSIA SCREENING WITH SELECTIVE USE OF ANGIOGENIC BIOMARKERS: A REAL-WORLD MULTICENTER STUDY (CRISP) Cristina Trilla , <i>Spain</i>	
11:42-11:49	CLINICAL AND BIOCHEMICAL PREDICTORS OF INSULIN THERAPY IN GESTATIONAL DIABETES: THE ROLE OF OGTT-BASED PHENOTYPES Libera Troia , <i>Italy</i>	
11:49-11:56	IS ORAL HYDRATION THE KEY TO SAFER BIRTHS IN OLIGOHYDRAMNIOS? INSIGHTS FROM A SYSTEMATIC REVIEW AND META-ANALYSIS Anita Yadav , <i>India</i>	
11:56-12:03	THE EFFECT OF BIRTH PREPARATION MEDITATION USING THE THETAHEALING MEDITATION METHOD ON BIRTH FEAR, BELIEFS ABOUT VAGINAL DELIVERY, AND SELF-EFFICACY Serap Ejder Apay , <i>Turkiye</i>	
13:30-15:00	ORAL PRESENTATION 15 ART/IVF/INFERTILITY: INFERTILITY/ENDOCRINOLOGY / IVF CASE REPORT (STUDY)	HALL B
Chairperson	Georgios Petsas , <i>Greece</i>	
INFERTILITY/ENDOCRINOLOGY		
13:30-13:37	COMPARISON OF THE EFFICACY OF DIFFERENT OVULATION INDUCTION AGENTS IN OVULATION INDUCTION AND INTRAUTERINE INSEMINATION THERAPY IN POLYCYSTIC OVARY SYNDROME PHENOTYPES Ezgi Aydin Aytemiz , <i>Turkiye</i>	
13:37-13:44	INFERTILE MALES' PERCEPTIONS OF INFERTILITY: A METAPHOR ANALYSIS Dilek Coskuner Potur , <i>Turkiye</i>	
13:44-13:51	REPRODUCTIVE OUTCOMES AND LONG-TERM HEALTH RISK FACTORS IN WOMEN WITH POOR OVARIAN RESPONSE: A MULTICENTER PROSPECTIVE COHORT STUDY (RUBIC CONSORTIUM) Cathrine Voigt Dalgaard , <i>Denmark</i>	
13:51-13:58	RELATIONSHIP OF CYBERCHONDRIA WITH DEPRESSION, ANXIETY, STRESS AND QUALITY OF LIFE IN INFERTILITY WOMEN Duygu Gulec Satir , <i>Turkiye</i>	
13:58-14:05	THE EFFECT OF SURGICAL TREATMENT ON REPRODUCTIVE AND PREGNANCY OUTCOMES IN WOMEN WITH DEEP ENDOMETRIOSIS Piotr Olcha , <i>Poland</i>	
14:05-14:12	PREGNANCY OUTCOMES OF ARTIFICIAL AND NATURAL CYCLES IN FET CYCLES ACCORDING TO THE PRETREATMENT AMH STATUS? Batuhan Ozmen , <i>Turkiye</i>	
14:12-14:19	PERCEPTION OF FERTILITY PERSERVATION OPTIONS IN TRANSGENDER PATIENTS: EXPERIENCE FROM A SINGLE-CENTER COHORT Lea Rothermund , <i>Austria</i>	
14:19-14:26	PREMATURE OVARIAN FAILURE: WHEN AND HOW TO TREAT PREMATURE OVARIAN FAILURE Zinaida Sarbu , <i>Moldova</i>	
14:26-14:33	SIMPLE INDICES OF INSULIN RESISTANCE AS A POSSIBLE INDICATORS OF TYPE 2 DIABETES AND PREDIABETES IN WOMEN WITH PCOS – A PRELIMINARY, RETROSPECTIVE STUDY Elzbieta Zarychta , <i>Poland</i>	
IVF CASE REPORT / STUDY		
14:33-14:40	NEGATIVE NON-INVASIVE PRENATAL TESTING (NIPT) AND SUBSEQUENT LIVEBIRTH RESULTING FROM A TRANSFER OF AN ANEUPLOID EMBRYO: A CASE REPORT Serines Virian Decano-De la Paz , <i>Philippines</i>	
14:40-14:47	LIVE BIRTH FOLLOWING CYTOPLASMIC TRANSFER IN A 48-YEAR-OLD WOMAN WITH REPEATED IVF FAILURE: FIRST REPORT FROM AZERBAIJAN Khumar Mammadli , <i>Azerbaijan</i>	
14:47-14:54	INVESTIGATION OF RELATIONSHIP BETWEEN DYADIC ADJUSTMENT AND SEXUAL FUNCTION WITH PREMENSTRUAL SYNDROME AMONG WOMEN Nulufer Erbil , <i>Turkiye</i>	



13:30-15:00		ORAL PRESENTATION 16 ART/IVF/INFERTILITY: FERTILITY PRESERVATION / CLINICAL ART/IVF / UTERINE PATHOPHYSIOLOGY	HALL E
Chairpersons	Antonio Pizzuti, Italy Mark Brincat, Malta		
FERTILITY PRESERVATION			
13:30-13:37	FIRST REPORT OF THE HISTOLOGICAL AND MOLECULAR ASSESMENT OF THE REMOVED OVARIAN TISSUES FOLLOWING OVARIAN TRANSPLATION IN LEUKEMIA PATIENTS Batuhan Aslan, Turkiye		
13:37-13:44	FERTILITY PRESERVATION IN YOUNG PATIENT WITH PREVIOUS OVARIAN DYSGERMINOMA Marini Satullo, Italy		
13:44-13:51	EPIGENETIC MEDIATED TELOMERE INSTABILITY IN CRYOPRESERVED SPERM OF CANCER PATIENTS: IMPLICATIONS FOR ONCO-FERTILITY Bhaskar Saxena, India		
13:51-13:58	FIRST SPONTANEOUS PREGNANCIES FOLLOWING OVARIAN TISSUE TRANSPLANTATION IN LEUKEMIA SURVIVORS Murat Sonmezer, Turkiye		
13:58-14:05	THE EFFECT OF COUNSELING BASED ON WATSON'S THEORY OF HUMAN CARING ON REPRODUCTIVE CONCERN IN WOMEN DIAGNOSED WITH CANCER: A RANDOMIZED CONTROLLED TRIAL Ruken Yagiz Altintas, Turkiye		
14:05-14:12	THE RELATIONSHIP BETWEEN PREGNANT WOMEN'S CLIMATE CHANGE AWARENESS AND THEIR APPROACHES AND ATTITUDES TOWARD RECEIVING ANTENATAL CARE AND HEALTHY LIFESTYLE BEHAVIORS Sema Dereli Yilmaz, Turkiye		
CLINICAL ART/IVF			
14:12-14:19	COMPARISON OF IVF FET PROTOCOLS IN POLYCYSTIC OVARY SYNDROME BASED ON FORT (FOLLICULAR OUTPUT RATE), FOI (FOLLICLE-OOCYTE INDEX), AND OSI (OVARIAN SENSITIVITY INDEX) VALUES Batuhan Turgay, Turkiye		
14:19-14:26	EUPLOIDY RATE IN IVF VERSUS ICSI EMBRYOS FOR INDIVIDUALS OR COUPLES WITH NON-MALE FACTOR INFERTILITY: A RETROSPECTIVE CASE CONTROL STUDY OF SPLIT IVF/ICSI CYCLES Olivia Walsh, Canada		
14:26-14:33	UNVEILING METABOLIC CUES IN MATERNAL OBESITY AND EMBRYO DEVELOPMENT Leticia Whitaker, Brazil		
UTERINE PATHOPHYSIOLOGY			
14:33-14:40	EVALUATION OF PREGNANCY RATES POST-ANTIBIOTIC TREATMENT IN PATIENTS WITH PATHOGENIC PROFILE IN PRE-TRANSFER ENDOMETRIAL MICROBIOME ANALYSIS José Antonio Horcajadas, Spain		
14:40-14:47	AGE-RELATED INCREASED PERIPHERAL BLOOD NATURAL KILLER CELLS MAY CONTRIBUTE TO IMPLANTATION FAILURE AND PREGNANCY LOSS: A RETROSPECTIVE STUDY José Antonio Horcajadas, Spain		
14:47-14:54	CAESAREAN SECTION UTERINE INCISION CONTROVERSIES AND CONSEQUENCES Abubakr Mohamed Ali Nasr, Sudan		

15:00-16:30		ORAL PRESENTATION 17 FETOMATERNAL MEDICINE: LABOR AND DELIVERY / OTHER	HALL B
Chairpersons	Basky Thilaganathan, UK Eyal Sheiner, Israel		
LABOR AND DELIVERY			
15:00-15:07	CULTURAL TIMING AND CHILDBIRTH: THE INFLUENCE OF LUNISOLAR CALENDAR BELIEF ON DELIVERY SCHEDULING IN VIETNAM Toan Nguyen, Vietnam		
15:07-15:14	THE EFFECT OF MEDIOLATERAL EPISIOTOMY ON THE RISK OF OBSTETRICAL ANAL SPHINCTER INJURIES IN OPERATIVE VAGINAL DELIVERY Carlota Pacheco, Portugal		
15:14-15:21	EFFECT OF INTRAMUSCULAR PETHIDINE ON DURATION OF LABOR: A PROSPECTIVE COHORT STUDY Kantapong Paibulsirichit, Thailand		
15:21-15:28	THE INFLUENCE OF BMI IN MATERNAL AND NEONATAL OUTCOMES IN PROM AT TERM PREGNANCIES: A COMPARATIVE SUBGROUP RETROSPECTIVE ANALYSIS Mariana Quilho Pereira, Portugal		
15:28-15:35	DELIVERY PLANNING IN A CASE OF MUSCULAR DYSTROPHY IN PREGNANCY Juancho Raymundo, Philippines		
15:35-15:42	EFFICIENCY OF CONSERVATIVE SURGICAL TECHNIQUE FOR PLACENTA ACCRETA SPECTRUM DISORDERS Roman Shmakov, Russia		
15:42-15:49	FEAR OF CHILDBIRTH: DOES PARITY MATTER? Tamar Shyldkrot, Israel		
15:49-15:56	THE EFFECT OF A PRENATAL YOGA-SUPPORTED CHILDBIRTH PREPARATION EDUCATION BASED ON SELF-EFFICACY THEORY ON FEAR OF CHILDBIRTH AND CHILDBIRTH SELF-EFFICACY IN PRIMIPAROUS WOMEN: A STUDY PROTOCOL Eda Simsek Sahin, Turkiye		
15:56-16:03	RISK FACTORS AND PREVALENCE OF OBSTETRIC ANAL SPHINCTER INJURIES IN QUATERNARY CARE CENTER IN SOUTHERN THAILAND: A CASE-CONTROL STUDY Chanikan Wiriyasumon, Thailand		



16:03-16:10	DEVELOPMENT OF A GYNECOLOGICAL AND OBSTETRIC EXAMINATION GARMENT, ITS EFFECT ON PRIVACY PERCEPTION AND SATISFACTION: RANDOMIZED CONTROLLED TRIAL Sezer Er Guneri , <i>Turkiye</i>
FMM OTHER	
16:10-16:17	POSTPARTUM REVERSIBLE VASOCONSTRICTION SYNDROME - A RARE BUT SEVERE CAUSE OF POSTPARTUM HEADACHE Carolina Ribeiro , <i>Portugal</i>
ORAL PRESENTATION 18	
15:00-16:30	GYNECOLOGY: CASE REPORT(STUDY) / TECHNOLOGICAL INNOVATIONS / OTHER / GYNECOLOGY
Chairperson	Eileen Manalo , <i>Philippines</i> Mark Brincat , <i>Malta</i>
GYN CASE REPORT / STUDY	
15:00-15:07	EFFECTIVENESS OF LABIAPLASTY MAJORA IN TREATING VULVAR PRURITUS UNRESPONSIVE TO CONSERVATIVE TREATMENT: A CASE SERIES Sungil Choo , <i>South Korea</i>
15:07-15:14	RUPTURED OVARIAN ECTOPIC PREGNANCY WITH HISTOLOGICAL EVIDENCE OF ASSOCIATED ENDOMETRIOSIS: A RARE CASE REPORT Raquel Gouveia , <i>Portugal</i>
15:14-15:21	ASYMPTOMATIC MIGRATION OF RING PESSARY INTO RECTUM WITH DUAL RECTOVAGINAL FISTULAE Maria Malta Cruz , <i>Portugal</i>
15:21-15:28	ECTOPIC ADRENOCORTICAL TISSUE IN PARA-OVARIAN TISSUE Patricia Venisse Marquina , <i>Philippines</i>
15:28-15:35	A RARE CASE OF ECTOPIC COMPLETE MOLAR PREGNANCY Ma. Katarina Angeli Rumbaoa , <i>Philippines</i>
15:35-15:42	LAPAROSCOPIC ETHANOL SCLEROTHERAPY AMONG WOMEN WITH INFERTILITY AND ENDOMETRIOMA: A CASE SERIES IN A LOW RESOURCE SETTING Regina Alexandra Cruz , <i>Philippines</i>
GYN TECHNOLOGICAL INNOVATIONS	
15:42-15:49	A METHODOICAL APPROACH TO ADNEXAL TORSION: DR. SACHIN'S CRITERIA Sachin Naiknaware , <i>India</i>
15:49-15:56	MECHANICAL ENUCLEATION OF FIGO TYPE 1 MYOMAS: OPTIMIZING FERTILITY AND BLEEDING OUTCOMES Nereena San Pedro , <i>Philippines</i>
15:56-16:03	AESTHETIC GYNECOLOGY AS AN ADJUNCT TO REPRODUCTIVE MEDICINE: EVIDENCE, FUNCTIONAL BENEFITS, AND FUTURE PERSPECTIVES Ani Yeremyan , <i>Armenia</i>
GYN OTHER	
16:03-16:10	MODE OF DELIVERY AND PERINEAL TRAUMA IN WOMEN WITH VULVAL DISEASE: IMPACT ON HEALING, ONCOLOGICAL SAFETY AND LONG TERM-OUTCOMES Faiza Ansari , <i>United Kingdom</i>
GYNECOLOGY	
16:10-16:17	RISK FACTORS OF RECURRENCE AFTER LAPAROSCOPIC ADENOMYOMECTOMY Qiming Wang , <i>China</i>
16:17-16:24	NAVIGATING MENSTRUAL STIGMA, CONCEALMENT AND RESISTANCE: A QUALITATIVE STUDY OF LIVED EXPERIENCES Lisa Zuidema , <i>Netherlands</i>

Notes



Moderated E-Poster Sessions

Friday, November 28, 2025

13:10-13:30	MODERATED E-POSTER SESSION 01: ART/IVF/INFERTILITY - MIXED SUB TOPICS	<i>Area Cir</i> SCREEN 1
Chairperson	Edgardo Somigaliana, Italy	
IVF OTHER		
13:10-13:13	ACCEPTANCE AND PERSPECTIVE AND ITS ASSOCIATED FACTORS TOWARD SURROGACY AMONG OBSTETRICIANS AND GYNECOLOGISTS IN THE POGS ACCREDITED INSTITUTIONS IN METRO MANILA, PHILIPPINES: A CROSS SECTIONAL STUDY Lorielee Cruz, Philippines	
13:13-13:16	HEALTH AWARENESS AND 24-HOUR MOVEMENT BEHAVIOUR: CONTROVERSIAL PREDICTORS OF QUALITY OF LIFE IN INFERTILE WOMEN Viktoria Premusz, Hungary	
REPRODUCTIVE GENETICS		
13:16-13:19	A CLINICAL STUDY TO UNDERSTAND THE EPIGENETIC STATUS (DNA METHYLATION) OF VARIOUS GENES INVOLVED IN THE PATHOGENESIS OF POLYCYSTIC OVARY SYNDROME Lekha Saha, India	
IVF TECHNOLOGICAL INNOVATIONS		
13:19-13:22	EFFECT OF AUTOLOGOUS PLATELET-RICH PLASMA INTRAUTERINE INFUSION ON CLINICAL PREGNANCY RATE AND LIVE BIRTH RATE AMONG WOMEN WITH IMPLANTATION FAILURE: A SINGLE CENTER STUDY Kreziah Erika Silva, Philippines	
IVF CASE REPORT / STUDY		
13:22-13:25	OVARIAN REJUVENATION WITH PLATELET-RICH PLASMA IN ASSISTED REPRODUCTION: A CASE STUDY Thaina Naback Henriques, Brazil	
UTERINE PATHOPHYSIOLOGY		
13:25-13:28	HIGHER RISK OF VILLOUS MATURATION AND VASCULAR PLACENTAL DISORDERS LINKED TO ALTERED IMMUNE RESPONSE IN TERM DECIDUA AFTER ENDOMETRIOSIS-RELATED INFERTILITY: IMPACT OF SURGERY PRIOR TO ART TREATMENT Stipe Dumancic, Croatia	
13:10-13:30	MODERATED E-POSTER SESSION 02: FETOMATERNAL MEDICINE - LABOR AND DELIVERY	<i>Area Cir</i> SCREEN 2
Chairperson	Giuseppe Rizzo, Italy	
LABOR AND DELIVERY		
13:10-13:13	PREVALENCE AND RISK FACTORS OF POSTOPERATIVE COMPLICATIONS FOLLOWING CESAREAN SECTION AT RAMATHIBODI HOSPITAL Oranuch Intasaro, Thailand	
13:13-13:16	EFFECTIVENESS OF NURSING PROTOCOL COMPLIANCE IN THE PREVENTION AND MANAGEMENT OF POSTPARTUM HEMORRHAGE AFTER VAGINAL DELIVERY: A RETROSPECTIVE STUDY IN A SECONDARY CARE HOSPITAL Nuttaya Pornmalairungruang, Thailand	
13:16-13:19	PULMONARY ASPERGILLOSIS IN PRIMIGRAVIDA PRESENTED IN EARLY POSTPARTUM: TO HOST OR NOT TO HOST – CASE REPORT OF ALTERED IMMUNITY IN PREGNANCY Stipe Dumancic, Croatia	
13:19-13:22	ENHANCING BLOOD BOOKING PROCEDURES IN THE LABOR ROOM: EXPERIENCE FROM RAMATHIBODI CHAKRI NARUEBODINDRA HOSPITAL Papatsara Khamsanam, Thailand	
13:22-13:25	UTERINE RUPTURE FOLLOWED BY EMERGENCY HISTERECTOMY DURING LABOR: A CASE REPORT Ines Lima, Portugal	
13:25-13:28	TRENDS AND OUTCOMES OF EMERGENCY CEASAREAN SECTION IN A TERTIARY HOSPITAL: A 3 YEAR RETROSPECTIVE ANALYSIS Saranya Sirisuwan, Thailand	



13:30-13:57	MODERATED E-POSTER SESSION 03: GYNECOLOGY - CASE REPORT/STUDY	<i>Area Cir</i> SCREEN 1
Chairperson	Mark Brincat, Malta	
GYNECOLOGY CASE REPORT / STUDY		
13:30-13:33	UNVEILING SWYER'S SYNDROME: A CASE OF A FEMALE PHENOTYPE WITH XY KARYOTYPE Maria Franzzy Samantha Manalo-Salinas, Philippines	
13:33-13:36	MOSAIC TURNER SYNDROME PRESENTING WITH AMBIGUOUS GENITALIA WITH A MIXED OVARIAN GERM CELL TUMOR IN A FILIPINO ADULT: A CASE REPORT Khristine Rosemarie Bunda-Sabido, Philippines	
13:36-13:39	CILIARY BODY LEIOMYOMA IN A 20-YEAR OLD FEMALE: A CASE REPORT AND REVIEW OF LITERATURE Anna Rominia Cruz, Philippines	
13:39-13:42	TWO CASES OF UNEXPECTED UTERINE MALIGNANCIES IDENTIFIED DURING A PROSPECTIVE FERTILITY STUDY ON SURGICAL VERSUS CONSERVATIVE MANAGEMENT OF ADENOMYOSIS AND UTERINE FIBROIDS Vojtech Lukavec, Czech Republic	
13:42-13:45	SHOULD MEDICAL MANAGEMENT BE FIRST LINE IN THE TREATMENT OF UTEROCUTANEOUS FISTULAS? TWO SUCCESSFUL CASES OF MANAGEMENT WITH GNRH ANALOGUES Vanessa Huang, United Kingdom	
13:45-13:48	PARASITIC FIBROIDS IN A 45 YEAR-OLD FEMALE WITH NO HISTORY OF GYNECOLOGIC SURGERY- CASE REPORT AND DISCUSSION Aman-Vir Mandair, USA	
13:48-13:51	RADIOLOGIC EVALUATION OF RETAINED INTRAUTERINE CONTRACEPTIVE DEVICE (IUD) OR A MISSING IUD THREAD - CASE REPORT WITH DISCUSSION Grace Chen, USA	
13:51-13:54	THORACIC AND PELVIC ENDOMETRIOSIS - A CASE REPORT Patricia Vieira Tavares, Portugal	
13:54-13:57	SPONTANEOUS CONCEPTIONS WITHIN SIX MONTHS POST-CHEMOTHERAPY FOR GESTATIONAL TROPHOBLASTIC DISEASE: A CASE SERIES OF VARIED PREGNANCY OUTCOMES Alvin Wijaya, Indonesia	
13:30-13:50	MODERATED E-POSTER SESSION 04: GYNECOLOGY	<i>Area Cir</i> SCREEN 2
Chairperson	Micheline Misrahi, France	
GYNECOLOGY		
13:30-13:33	THE ROLE OF TRANSVAGINAL ULTRASOUND IN THE DIFFERENTIAL DIAGNOSIS OF URINARY INCONTINENCE: A CASE SERIES OF UNDERLYING GYNECOLOGIC MALIGNANCIES Sungil Choo, South Korea	
13:33-13:36	ENDOMETRIAL STROMAL NODULE IN A 36-YEAR-OLD FEMALE PRESENTING WITH ABNORMAL UTERINE BLEEDING: A RARE CASE REPORT FROM NORTH INDIA Prabal Saha, India	
13:36-13:39	CLITORAL HEMANGIOMA: A RARE PRESENTATION OF VASCULAR LESION- A CASE REPORT Carol Marjorie Pacioles-Flavier, Philippines	
13:39-13:42	REDUCTION IN DAYTIME AND NIGHTTIME VASOMOTOR SYMPTOMS (VMS) FREQUENCY AND SLEEP DISTURBANCES WITH ELINZANETANT: POST-HOC POOLED ANALYSES FROM OASIS-1 AND -2 Rossella Nappi, Italy	
13:42-13:45	CLINICAL EVALUATION FOR RETAINED INTRAUTERINE CONTRACEPTIVE DEVICE (IUD) – CASE REPORT AND DISCUSSION Darby Richards, USA	
13:45-13:48	RELEVANCE OF MINIMALLY INVASIVE GYNECOLOGIC SURGERY RESIDENCY CURRICULUM IN THE PRACTICE OF FILIPINO OBSTETRICIAN GYNECOLOGISTS: A RETROSPECTIVE CROSS-SECTIONAL STUDY Jewel Charisse Corpuz, Philippines	
16:40-16:55	MODERATED E-POSTER SESSION 05: FETOMATERNAL MEDICINE - CASE REPORT/STUDY & OTHER	<i>Area Cir</i> SCREEN 1
Chairperson	Gerard Visser, Netherlands	
FETOMATERNAL MEDICINE CASE REPORT / STUDY		
16:40-16:43	BANDL RING DURING CESAREAN SECTION – CASE REPORT AND MULTIDISCIPLINARY MANAGEMENT Frederick Eruo, USA	
16:43-16:46	THE SILENT CRISIS: UTERINE VARICOSITY RUPTURE IN TWIN PREGNANCY—A TICKING TIME BOMB Iwi Dancel, Philippines	
16:46-16:49	REFRACTORY NAUSEA AND VOMITING IN PREGNANCY - PATHOGENESIS AND MANAGEMENT Frederick Eruo, USA	
FETOMATERNAL MEDICINE OTHER		
16:49-16:52	EFFECTS OF PRE-PREGNANCY BODY MASS INDEX AND GESTATIONAL WEIGHT GAIN ON NEWBORN BIRTHWEIGHT Vesna Čosić, Croatia	
MEDICAL COMPLICATIONS IN PREGNANCY PRETERM DELIVERY PREVENTION AND TREATMENT		
16:52-16:55	EFFECT OF DOXYLAMINE/PYRIDOXINE 10/10MG PROLONGED-RELEASE CAPSULES ON QUALITY OF LIFE IN WOMEN WITH NAUSEA AND VOMITING OF PREGNANCY: NOVEL RESULTS OF THE CARIBENE STUDY Juan Luis Delgado, Spain	



16:40-16:55	MODERATED E-POSTER SESSION 06: ART/IVF/INFERTILITY - GENETICS & GENOMICS, INFERTILITY/ENDOCRINOLOGY	Area Cir SCREEN 2
Chairperson	Georgios Petsas, Greece	
GENETICS & GENOMICS		
16:40-16:43	LACTYLATION-RELATED HUB GENES TKT PROMOTE PREECLAMPSIA VIA REPROGRAMMING OF MACROPHAGE THROUGH PARP1/CGAS-STING PATHWAY Nan Shan, China	
INFERTILITY/ENDOCRINOLOGY		
16:43-16:46	ASSESSING CELLULAR IMMUNE CAUSES IN REPRODUCTIVE FAILURE USING A SINGLE NATURAL KILLER CELL TEST Sung Ki Lee, South Korea	
16:46-16:49	REFINING DIAGNOSTIC CRITERIA: PROPOSAL OF A NEW REFERENCE RANGE OF PROTEIN S ACTIVITY IN WOMEN WITH REPRODUCTIVE FAILURE Jae Won Han, South Korea	
16:49-16:52	EFFECTS OF ESTETROL/DROSPIRENONE VERSUS ETHINYL ESTRADIOL/DROSPIRENONE ON GLUCOSE TOLERANCE IN WOMEN WITH POLYCYSTIC OVARY SYNDROME: A RANDOMIZED CONTROLLED TRIAL Satit Klangsin, Thailand	
16:52-16:55	FAVOURABLE MODULATION OF THE VAGINAL MICROBIOME WITH A MYO-INOSITOL AND PROBIOTIC-BASED NUTRACEUTICAL IN WOMEN OF REPRODUCTIVE AGE: RESULTS FROM THE INOBIOTIC STUDY Clara Palacio De Marco, Spain	

Saturday, November 29, 2025

10:40-10:55	MODERATED E-POSTER SESSION 07: ART/IVF/INFERTILITY - MIXED SUB TOPICS	Area Cir SCREEN 1
Chairperson	Rami Wakim, UK	
FERTILITY PRESERVATION		
10:40-10:43	THE USE OF EX-VIVO IN-VITRO MATURATION OF OVARIAN TISSUE OOCYTES FOR FERTILITY PRESERVATION IN OVARIAN CANCER/ BORDERLINE OVARIAN TUMOURS - A DISCUSSION OF TWO PATIENTS Charissa Shu Ying Goh, Singapore	
10:43-10:46	PROMISING RESULTS IN FERTILITY PRESERVATION IN A COHORT OF 365 WOMEN, A 6-YEAR PROSPECTIVE STUDY Mariola Hernandez Martinez, Spain	
CLINICAL ART/IVF		
10:46-10:49	EARLY OR LATE PROGESTIN INITIATION IN OOCYTE DONORS? A TWO-CENTER RANDOMISED NON-INFERIORITY TRIAL Antonio Forgiarini, Spain	
10:49-10:52	OPTIMIZATION OF IVF PROGRAMS FOR PATIENTS WITH ENDOMETRIOSIS: ENVIRONMENTAL ANALYSIS FOR EMBRYO CULTURE Lida Stepanyan, Armenia	
EMBRYOLOGY		
10:52-10:55	LIMB BODY WALL COMPLEX: A CASE SERIES Rayyana Ayesha Macabalang, Philippines	

10:40-10:55		MODERATED E-POSTER SESSION 08: FETOMATERNAL MEDICINE - MIXED SUB TOPICS	Area Cir SCREEN 2
Chairperson	Rinat Gabbay-Benziv, Israel		
FETOMATERNAL MEDICINE CASE REPORT / STUDY			
10:40-10:43	INDIGO AMNIOINSTILLATION TO RULE OUT PPROM IN DI-DI TWIN GESTATION - CASE REPORT AND DISCUSSION Frederick Eruo, USA		
10:43-10:46	TRANSIENT GESTATIONAL DIABETES INSIPIDUS IN THE POSTPARTUM PERIOD: A CASE REPORT Anna Rominia Cruz, Philippines		
10:52-10:55	EHLERS-DANLOS SYNDROME IN PREGNANCY - MANAGEMENT CHALLENGES AND MULTIDISCIPLINARY APPROACH Frederick Eruo, USA		
TECHNOLOGICAL INNOVATIONS			
10:46-10:49	ADJUVANT AUTOLOGOUS PLATELET-RICH PLASMA GEL FOR DECREASING BLOOD LOSS IN POSTERIOR PLACENTA PREVIA: A CASE SERIES AND LITERATURE REVIEW Chatuporn Duangkum, Thailand		
MULTIFETAL PREGNANCY			
10:49-10:52	THE SURVIVAL OF SINGLETON AFTER SECOND TRIMESTER DIMISE IN TWO FETUSES IN TRIPLET PREGNANCY-CASE REPORT AND MANAGEMENT APPROACH Vesna Livrinova, North Macedonia		



12:40-13:00	MODERATED E-POSTER SESSION 09: GYNECOLOGY - GYNECOLOGICAL ONCOLOGY / OTHER / CASE REPORT	<i>Area Cir</i> SCREEN 1
Chairperson	Joop Laven , <i>Netherlands</i>	
GYNECOLOGICAL ONCOLOGY		
12:40-12:43	APOPTOSIS AND METASTASIS INHIBITION EFFECTS OF MELONIS PEDICELLUS EXTRACTS ON BREAST CANCER CELL LINES Chang Hoon Lee , <i>South Korea</i>	
12:43-12:46	NON-PUERPERAL UTERINE INVERSION SECONDARY TO CARCINOSARCOMA MANAGED WITH HAULTAIN PROCEDURE Carol Marjorie Pacioles-Flavier , <i>Philippines</i>	
12:46-12:49	A CASE OF PAPILLARY CARCINOMA ARISING IN STRUMA OVARIi IN A NULLIGRAVID: THE PREDICAMENTS OF DISCOVERY OF MALIGNANCY AFTER MINIMALLY INVASIVE SURGERY Uriel Gem Paguio , <i>Philippines</i>	
GYNECOLOGY OTHER		
12:49-12:52	OBSTETRICS AND GYNECOLOGY TRAINEES RESEARCH ROAD MAP - CURRICULUM DEVELOPMENT - SINGLE INSTITUTION EXPERIENCE Darby Richards , <i>USA</i>	
12:52-12:55	LASER THERAPY AND HYALURONIC ACID FOR POST-CANCER VAGINAL STENOSIS: PROMISING TREATMENT OR OVERHYPED APPROACH? Rugile Miksyte , <i>Lithuania</i>	
GYNECOLOGY CASE REPORT / STUDY		
12:55-12:58	ABDOMINAL WALL INCISION SITE ENDOMETRIOSIS-CASE REPORT AND DISCUSSION Frederick Eruo , <i>USA</i>	

12:40-13:00	MODERATED E-POSTER SESSION 10: FETOMATERNAL MEDICINE - HIGH RISK PREGNANCY	<i>Area Cir</i> SCREEN 2
Chairperson	Anna David , <i>UK</i>	
HIGH RISK PREGNANCY		
12:40-12:43	THE CLINICAL EFFECT OF ASPIRIN COMBINED WITH LOW MOLECULAR WEIGHT HEPARIN IN THE TREATMENT OF SEVERE PREECLAMPSIA Nan Shan , <i>China</i>	
12:43-12:46	RISK FACTOR AND OUTCOME OF UNSCHEDULED DELIVERY IN PLACENTA PREVIA Ho Yeon Kim , <i>South Korea</i>	
12:46-12:49	PLACENTAL PATHOLOGY IN WOMEN WITH EARLY AND LATE ONSET PRE-ECLAMPSIA Pradip Kumar Saha , <i>India</i>	
12:49-12:52	BEHAVIORAL CHANGES AS INITIAL PRESENTING SYMPTOMS IN HELLP SYNDROME- CASE REPORT WITH DISCUSSION Darby Richards , <i>USA</i>	
12:52-12:55	INTRAPARTUM CARDIOTOGRAPHIC PATTERNS AND PERINATAL OUTCOMES IN EXTREME PRETERM BIRTHS: AN EXPLORATIVE RETROSPECTIVE COHORT STUDY Nadine de Klerk , <i>Netherlands</i>	
12:55-12:58	GESTACIONAL DIABETES: IMPACT OF TIMING OF DIAGNOSIS ON MATERNAL AND PERINATAL OUTCOMES Maria Isabel Ribeiro , <i>Portugal</i>	

13:00-13:20	MODERATED E-POSTER SESSION 11: GYNECOLOGY - GYNECOLOGY / CASE REPORT / STUDY	<i>Area Cir</i> SCREEN 1
Chairperson	Andrea Genazzani , <i>UK</i>	
GYNECOLOGY		
13:00-13:03	LOW-GRADE ENDOMETRIAL STROMAL SARCOMA IN A 36-YEAR-OLD FEMALE PRESENTING WITH ABNORMAL UTERINE BLEEDING: A RARE CASE REPORT FROM NORTH INDIA Prabal Saha , <i>India</i>	
13:03-13:06	EFFECT OF ELINZANETANT ON WAKEFULNESS AFTER SLEEP ONSET: POST HOC ANALYSIS OF THE PHASE II NIRVANA PILOT STUDY IN WOMEN IN POSTMENOPAUSE Rossella Nappi , <i>Italy</i>	
13:06-13:09	EFFICACY OF ELINZANETANT IN PREVIOUS OR NEVER USERS OF HORMONE THERAPY FOR MENOPAUSE SYMPTOMS: A POOLED ANALYSIS OF OASIS-1 AND -2 TRIALS Nick Panay , <i>United Kingdom</i>	
13:09-13:12	EFFECTS OF ELINZANETANT ON VASOMOTOR SYMPTOMS ASSOCIATED WITH NATURAL, SURGICAL, OR ENDOCRINE THERAPY-INDUCED MENOPAUSE SYMPTOMS Christian Seitz , <i>Germany</i>	
13:12-13:15	SAFETY AND TOLERABILITY OF ELINZANETANT: POOLED ANALYSIS FROM MULTIPLE CLINICAL TRIALS Christian Seitz , <i>Germany</i>	
CASE REPORT / STUDY		
13:15-13:18	POST-PLACENTAL INSERTION OF INTRAUTERINE CONTRACEPTIVE DEVICE FOLLOWING CESAREAN SECTION - NEW LONGTERM CONTRACEPTIVE APPROACH Anu Ayo-Olaniyan , <i>USA</i>	



ART/IVF/Infertility

ANDROLOGY

- METABOLOMIC PROFILING OF SEMINAL PLASMA IN MALE PATIENTS WITH NON-TRANSFUSION-DEPENDENT THALASSEMIA
Yi Gong, China
- INTRACYTOPLASMIC INJECTION OF MORPHOLOGICALLY SELECTED SPERMATOZOA FROM PATIENTS WITH MALE FACTOR INFERTILITY: CLINICAL AND EMBRYO DEVELOPMENT OUTCOMES
Yi Gong, China
- CRYOPRESERVATION AND CENTRIFUGATION IMPACT ON SPERM DFI: CLINICAL IMPLICATIONS FOR ASSISTED REPRODUCTION
Cristina Guarneri, Italy
- IN VITRO EFFECT OF A 4% PENTOXIFYLLINE VAGINAL GEL ON SPERM MOTILITY AND VITALITY IN ASTHENOZOOSPERMIC MEN: PROSPECTIVE RANDOMIZED DOUBLE-BLIND STUDY
Cristina Trilla, Spain

CLINICAL ART/IVF

- ASSESSING BATCH-TO-BATCH VARIABILITY IN HMG PRODUCTS: A COMPARATIVE ANALYSIS OF MERIOFERT® AND MENOPUR®
Dana Chuderland, Denmark
- REPRODUCTIVE OUTCOMES FOLLOWING FSH VS FSH+HMG/LH STIMULATION: A BALANCED COHORT SUB-ANALYSIS
Marcos Ferrando, Spain
- DRUG USAGE AND STIMULATION EFFICIENCY IN FSH VS FSH+HMG/LH PROTOCOLS: A BALANCED SUB-ANALYSIS
Marcos Ferrando, Spain
- LOW OVARIAN RESERVE ASSOCIATED WITH MATERNAL AGE: A DESCRIPTIVE STUDY
Yolanda Gil Gonzalez, Spain
- COMPARATIVE REPRODUCTIVE OUTCOMES OF DAY 7 VERSUS DAY 5–6 EUPLOID BLASTOCYSTS IN SINGLE FROZEN EMBRYO TRANSFER CYCLES
Sejeong Kim, South Korea
- INFLUENCE OF ENDOMETRIOSIS ON THE OUTCOMES OF ASSISTED REPRODUCTIVE TECHNOLOGY IN POOR OVARIAN RESPONDERS WITH PREVIOUS IMPLANATATION FAILURES
Yun Hee Koo, South Korea
- COUNSELING DONOR FAMILY MEMBERS
Wendy Kramer, USA
- OBSTETRIC OUTCOMES AND COMPLICATIONS ASSOCIATED WITH EMBRYO TRANSFER PROTOCOLS: A RETROSPECTIVE REVIEW
Beatriz Moya Esteban, Spain
- EFFECTIVENESS OF A SINGLE-DOSE GNRH ANTAGONIST ON THE DAY OF HCG TRIGGER IN PREVENTING PREMATURE LUTEINIZATION DURING NATURAL CYCLE IVF IN WOMEN WITH DIMINISHED OVARIAN RESERVE
Juhee Park, South Korea
- AGAINST THE ODDS: ACHIEVING MOTHERHOOD THROUGH IVF AFTER FERTILITY-SPARING THERAPY FOR EARLY-STAGE ENDOMETRIAL CARCINOMA
Iva Pitner, Croatia
- SEVERE OVARIAN HYPERSTIMULATION SYNDROME FOLLOWING FRESH EMBRYO TRANSFER. A CASE REPORT
Ana Robles Corchado, Spain
- CONCORDANCE OF THREE-DIMENSIONAL TRANSVAGINAL ULTRASOUND WITH HISTOLOGICAL DIAGNOSIS OF CHRONIC ENDOMETRITIS VIA JUNCTIONAL ZONE ASSESSMENT
Yavuz Emre Sukur, Turkiye
- PREGNANCY OUTCOMES OF ARTIFICIAL AND NATURAL CYCLES IN FET(FROZEN EMBRYO TRASNFER) CYCLES WITH 5-DAY GRADE 1 EMBRYO TRANSFER
Batuhan Turgay, Azerbaijan
- ROLE OF UTERINE ARTERY DOPPLER ASSESSMENT DURING MID-LUTEAL PHASE IN WOMEN WITH UNEXPLAINED INFERTILITY: A COMPARATIVE OBSERVATIONAL STUDY
Anita Yadav, India
- PREPROCEDURAL PREDICTION OF IVF OUTCOMES USING MACHINE LEARNING: ESTABLISHED FEMALE DETERMINANTS AND THE EMERGING ROLE OF MALE PARTNER FACTORS
Janos Zadori, Hungary

EMBRYOLOGY

- COMPARISON OF SURVIVAL AND PREGNANCY RATES OF VITRIFIED CLEAVAGE (DAY 3) VS BLASTOCYST (DAY 5 AND DAY 6) IN FROZEN EMBRYO TRANSFER
Amy Lee, Singapore
- CULTURE CONDITIONS INFLUENCE BLASTOCYST QUALITY AND REDUCE NON-FERTILIZATION RATES IN IVF CYCLES
Cristina Pastor Leary, Austria
- FERTILIZATION TIMING ADJUSTED ACCORDING TO MEIOTIC SPINDLE STATUS : IMPLICATIONS FOR OOCYTE ATURATION SND EMBRYO PLOIDY
Olga Tepla, Czech Republic



FERTILITY PRESERVATION

- MODERN OBSTETRIC ON THE PATH TO FERTILITY PRESERVATION IN MAJOR PERIPARTUM COMPLICATIONS
Monica Mihaela Cirstoiu, Romania
- EVALUATION OF FATTY ACID ADDITION IN VITRIFICATION AND WARMING MEDIA: EFFECTS ON OOCYTE SURVIVAL AND EMBRYONIC DEVELOPMENT IN MICE
Hye Gyeong Jeong, South Korea
- MITIGATING AGE-RELATED OVARIAN DYSFUNCTION WITH THE ANTI-INFLAMMATORY AGENT MIT-001
Hak Cheon Lee, South Korea
- A RARE CASE OF A LARGE CERVICAL FIBROID IN A PRIMIGRAVID AND MANAGEMENT DILEMMA TO PRESERVE FERTILITY
Mila Rose Villamin, Philippines
- A RARE CASE OF FERTILITY PRESERVATION AND SUCCESSFUL DELIVERY FOLLOWING IMPLANT-BASED BREAST RECONSTRUCTION IN A YOUNG BREAST CANCER PATIENT
Sodam Yi, South Korea

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- HORMONAL RESPONSE TO PULSATILE GnRH THERAPY IN FUNCTIONAL HYPOTHALAMIC AMENORRHEA: INFLUENCE OF POLYCYSTIC OVARIAN MORPHOLOGY
Magdalena Boegl, Austria
- POLYAMINE HAS THE POTENTIAL TO INFLUENCE OVARIAN PHYSIOLOGY AND FERTILITY IN MICE WITH POLYCYSTIC OVARY SYNDROME (PCOS)
Subrata Das, India
- THE IMPORTANCE OF THE GENITAL MICROBIOME ON THE SUCCESS AND OUTCOME OF IMPLANTATION
Ana Devic, Serbia
- VARIABILITY OF PROGESTERONE LEVELS IN EMBRYO CRYOTRANSFER DURING HORMONE REPLACEMENT THERAPY CYCLES
Maria Henar Gonzalez De Diego, Spain
- COMPARATIVE EFFICACY OF LETROZOLE VERSUS CLOMIPHENE CITRATE FOR OVULATION INDUCTION IN SUBFERTILITY
Sanila Gul, United Kingdom
- GLOBAL PATTERNS OF PCOS RISK AND DIAGNOSIS: PREDICTIVE INSIGHTS FROM A MULTI-COUNTRY STUDY
Sharanya Gupta, USA
- MIG-6 PLAYS A CRITICAL ROLE AS A PGR MEDIATOR IN MAINTAINING EPITHELIAL AND STROMAL CELLS FOR UTERINE RECEPTIVITY
Jae-Wook Jeong, USA
- ANALYSIS OF UTERINE NATURAL KILLER CELL CHANGE IN A RAT MODEL OF ENDOMETRIOSIS
Incheul Jeung, South Korea
- THE EFFICACY OF ACTIVE COLLECTION OF MENSTRUAL BLOOD-DERIVED STEM CELLS COMPARED TO PASSIVE COLLECTION IN WOMEN WITH REPEATED PREGNANCY LOSS WHO UNDERWENT IN VITRO FERTILIZATION
Yong-Jin Kim, South Korea
- PRIMARY AMENORRHEA SECONDARY TO HYPOGONADOTROPIC HYPOGONADISM SECONDARY TO DIAPHRAGMA SELLA MENINGIOMA
Rayyana Ayesha Macabalang, Philippines
- EFFECT OF OBESITY ON MALE FERTILITY
Maria Del Carmen Ruiza Dominguez, Spain

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- TREATMENT WITH A PATENTED 3.6:1 MYO-INOSITOL/D-CHIRO-INOSITOL, ANTIOXIDANTS AND PROBIOTICS TO INCREASE PREGNANCY CHANCES IN WOMEN WITH ADVANCED MATERNAL AGE AND LOW OVARIAN RESERVE
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- SUPPLEMENTATION WITH 3.6:1 MYO-INOSITOL/D-CHIRO-INOSITOL, ANTIOXIDANTS AND PROBIOTICS TO IMPROVE OOCYTE QUALITY AND INCREASE PREGNANCY CHANCES IN WOMEN WITH HISTORY OF ART FAILURES WITHOUT PCOS
Carine Emsellem, Spain
- A CASE OF REPETITIVE SPERM RETRIEVAL FAILURE OVERCOME BY SERIAL EJACULATE COLLECTION IN CRYPTOZOOSPERMIA
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- SUCCESSFUL TWIN PREGNANCY THROUGH IVF-ET IN YOUNG WOMEN DIAGNOSED PREMATURE OVARIAN INSUFFICIENCY
Minhee Lee, South Korea
- HETEROTOPIC PREGNANCY FOLLOWING OVULATION INDUCTION WITH CLOMIPHENE CITRATE: A CASE REPORT
In Hae Na, South Korea

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Yolanda Gil Gonzalez, Spain
- DISPARITIES IN ACCESS TO ASSISTED REPRODUCTIVE TECHNOLOGIES IN EUROPE: A REVIEW OF BARRIERS AND INEQUITIES
Isheeta Gupta, USA
- LIFESTYLE AND SUPPLEMENT USE IN ASSISTED REPRODUCTION: CONTROVERSIAL PATTERNS FROM THE FAIR-HU STUDY
Eszter Skriba, Hungary
- EVALUATING INFERTILITY EDUCATION AND CLINICAL PREPAREDNESS IN UK MEDICAL SCHOOLS: A CROSS-SECTIONAL SURVEY OF STUDENTS AND DOCTORS
Sadia Zare, United Kingdom

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- WHEN AI CALLS THE TRIGGER: DATA-DRIVEN TIMING YIELDS MORE MII IN IVF
Urszula Sankowska, Poland



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- THE ROLE OF ORAL SUPPLEMENTATION WITH VITAMIN D, VITAMIN B6, AND GREEN TEA EXTRACT IN THE TREATMENT OF UTERINE FIBROIDS
Elena Djakovic, *Serbia*
- WHICH TYPE OF IMMUNE ABNORMALITY-T CELL OR NK CELL-IS MORE RESPONSIVE TO IVIG TREATMENT?
Jae Won Han, *South Korea*
- INFLUENCE OF BODY WEIGHT ON PROGESTERONE LEVELS IN EMBRYO CRYOTRANSFER DURING HORMONE REPLACEMENT THERAPY CYCLES
Marina Marti Sopena, *Spain*

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Alyssa Marie Clemente, *Philippines*
- PREVALENCE, DEMOGRAPHIC FACTORS, AND PREGNANCY OUTCOMES ASSOCIATED WITH CONSUMPTION PATTERNS OF DHA-CONTAINING FOODS AND SUPPLEMENTS IN THAI PREGNANT WOMEN
Chamnan Tanprasertkul, *Thailand*

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- RECURRENT POST-CAESAREAN WOUND INFECTION IN A LOW RISK PATIENT: A CASE REPORT
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- FETAL REDISTRIBUTION WITHOUT APPARENT CAUSE AS THE FIRST SIGN OF NOONAN SYNDROME
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- NAUSEA AND VOMITING OF PREGNANCY: PREVALENCE, CLINICAL CHARACTERISTICS, AND MANAGEMENT FINDINGS OF AN ITALIAN MULTI-CENTER STUDY
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- BILATERAL RECTUS SHEATH HEMATOMA IN A PREGNANT PATIENT
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- MEDICAL MANAGEMENT OF CORNUAL ECTOPIC PREGNANCY IN A PERIMENOPAUSAL WOMAN: A CASE REPORT
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- CHRONIC PREGESTATIONAL HYPERTENSION LEADING TO EARLY-ONSET INTRAUTERINE GROWTH RESTRICTION: A CASE REPORT
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- EARLY OLIGOHYDRAMNIOS AS A PREDICTOR OF ADVERSE PREGNANCY OUTCOME: A CASE REPORT
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- POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME IN LATE PREGNANCY: A CASE REPORT — REVERSIBLE ONLY IF RECOGNIZED
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Yuki Gen, *South Korea*
- IMPACT OF NIPPLE LENGTH AND DIAMETER ON BREASTFEEDING SUCCESS AND MATERNAL BREASTFEEDING SELF-EFFICACY: A LONGITUDINAL OBSERVATIONAL STUDY
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- SUBJECTIVE HEALTH PERCEPTION MODERATES THE ANTIDEPRESSANT EFFECTS OF HOME-BASED TRANSCRANIAL DIRECT CURRENT STIMULATION IN PERINATAL WOMEN: A REAL-WORLD OBSERVATIONAL STUDY
Min-Kyoung Kim, *South Korea*
- KNOWLEDGE ATTITUDES AND ACCEPTANCE TOWARDS EXERCISE AMONG PREGNANT WOMEN ATTENDING THAMMASAT UNIVERSITY HOSPITAL
Tongta Nanthakomon, *Thailand*
- THE MATERNAL BODY IMAGE AND EATING BEHAVIORS SCALE: TURKISH VALIDITY AND RELIABILITY STUDY
Eda Simsek Sahin, *Turkiye*
- THE SEPP1 POLYMORPHISM HAVE A PROTECTIVE EFFECT AGAINST GESTATIONAL DIABETES MELLITUS?
Demet Yilmaz Karadag, *Turkiye*



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- IS THERE A DIFFERENT MOLECULAR IMPRINT BETWEEN PREECLAMPSIA AND PREECLAMPSIA WITH SEVERE FEATURES? AN INTEGRATIVE BIOINFORMATICS ANALYSIS
Jelena Brakus, *Serbia*
- NEURAL TUBE DEFECTS IN THE CZECH REPUBLIC, INCIDENCE, PRENATAL DIAGNOSTICS AND SEX RATIO
Antonin Sipek, *Czech Republic*

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- POSTPARTUM UTERINE ACTIVITY IN PATIENTS WITH AND WITHOUT POSTPARTUM HEMORRHAGE IN THE FIRST 30 MINUTES AFTER CHILDBIRTH
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- ACCURACY OF 48-72 HOURS POSTPARTUM 75G ORAL GLUCOSE TOLERANCE TEST FOR PREDICTING POSTPARTUM GLUCOSE INTOLERANCE IN GESTATIONAL DIABETES MELLITUS
Pakprapa Chaipakdi, *Thailand*
- IMMUNE THROMBOCYTOPENIA IN PREGNANCY: CONTROVERSIES IN DELIVERY MODE AND NEONATAL RISK ASSESSMENT
Monica Mihaela Cirstoiu, *Romania*
- THE ROLE OF SFLT-1/PLGF RATIO IN THE PREDICTION AND MANAGEMENT OF PRE-ECLAMPSIA
Dorota Darmochwal-Kolarz, *Poland*
- SCOPING REVIEW OF FETAL HOME MONITORING IN HIGH-RISK PREGNANCIES: NO EVIDENCE OF INCREASED RISK COMPARED TO HOSPITAL CARE
Nadine de Klerk, *Netherlands*
- WHEN THE VIRUS HIDES: SILENT MATERNAL PARVOVIRUS B19 INFECTION WITH COMPENSATORY FETAL HEPATOMEGALY
Ana Rita Duarte, *Portugal*
- EVALUATION OF ARTERIAL STIFFNESS IN PREECLAMPSIA: A COMPARATIVE STUDY WITH NORMAL PREGNANCY
Yoon Ha Kim, *South Korea*
- ASSOCIATION OF SERUM POTASSIUM AND MAGNESIUM LEVELS IN PREECLAMPSIA IN PATIENTS ADMITTED IN A LEVEL III HOSPITAL: A CASE-CONTROL STUDY
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Ana Robles Corchado, *Spain*
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- DIVERGENT PROFILES IN EARLY AND LATE POSTPARTUM PREECLAMPSIA
Anat Shmueli, *Israel*
- CEASAREAN DELIVERY AS A TRIGGER FOR POSTPARTUM PREECLAMPSIA – WHO IS AT RISK?
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- DEVELOPMENT OF A RISK SCORE MODEL TO PREDICT MATERNAL NEAR-MISS AND MORTALITY IN ACQUIRED CARDIAC DISEASE
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- PITUITARY APOPLEXY (SHEEHAN'S SYNDROME) SECONDARY TO POSTPARTUM HEMORRHAGE AFTER ITERATIVE CEASARIAN DELIVERY
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- ANTIBIOTIC PROPHYLAXIS IN ELECTIVE CESAREAN SECTION: CEFAZOLIN VS CEFTRIAXONE
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- PREDICTING THE OUTCOME OF LABOR INDUCTION: DO WE HAVE A MODEL?
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Olena Shcherbinska, *Ukraine*
- USE OF STARSIL® HEMOSTAT FOR BLEEDING CONTROL AND ADHESION PREVENTION IN REPEAT CESAREAN SECTION
Avinoam Tzabari, *Israel*
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- POSTPARTUM CEREBRAL EMBOLIC INFARCTION
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- PATIENTS' SATISFACTION ON COMBINED MEDICAL CLINIC IN A UNIVERSITY HOSPITAL IN HONG KONG
Ka Wai Kitty Ma, *Hong Kong SAR of PRC*
- CONGENITAL CYSTIC ADENOMATOID MALFORMATION OF THE LUNG. ULTRASOUND IMAGES OF A CLINICAL CASE REPORT
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- CASE OF TRISOMY 9 MOSAIC
Maria Prat Om, *Spain*
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- A SERIES OF UNFORTUNATE EVENTS: A CASE SERIES ON LUTEOMA OF PREGNANCY
Rythnel Sabang, *Philippines*
- FEASIBILITY AND LEARNING CURVE OF UNIVERSAL TRANSVAGINAL CERVICAL LENGTH SCREENING AMONG OPERATORS WITH DIFFERENT LEVELS OF EXPERIENCE USING THE PROTOCOL OF THE FETAL MEDICINE FOUNDATION (FMF)
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- CASE REPORT: ADNEXIAL TORSION
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- EFFECTS OF A MONOPHASIC HORMONAL CONTRACEPTIVE WITH NORGESTIMATE + ETHINYLESTRADIOL ON MENSTRUAL BLEEDING: INTERIM ANALYSIS OF A MULTICENTER, PROSPECTIVE, OPEN-LABEL, NON-COMPARATIVE STUDY IN ITALY
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- PATIENT WITH TWO SYNCHRONOUS TUMORS OF GYNECOLOGICAL LOCALIZATION
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- VAGINAL LEIOMYOMA: NAVIGATING THE DIAGNOSTIC AND THERAPEUTIC UNCERTAINTIES
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Abstracts



SPEAKER ABSTRACTS

SPERM VITRIFICATION: THE FUTURE OF SPERM CRYOPRESERVATION AND CRYOBANKING

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A new method of sperm vitrification (VetriStraw) has been recently developed that preserves sperm ultrastructure and function. Unlike slow-freezing, VetriStraw prevents the formation of intracellular crystals and cell damage. The basic VetriStraw design consists in a clipped inner 0.25ml CBS straw containing 100µl of a mixture of the supernatant-free sperm pellet processed by density gradient centrifugation and a non-permeable cryoprotectant. The inner straw is inserted into a 0.5ml CBS straw and thermosealed to make the system airtight. Thereafter, the CBS straw is submerged into LN2 for 10 sec in the horizontal position and stored in the cryogenic tank. Total million motile count (TMMC) in the inner straw is of 1.5M, 2.5M and 5M, depending on whether the straw will be used for ICSI, conventional IVF or donor-IUI, respectively. A TMMC of 2.5M can be also used for donor-IUI obtaining similar results to those obtained with a TMMC of 5M. Post-devitrification progressive motility is about 80%. Devitrification is a very simple procedure that will be described in a videoclip during the presentation. If the devitrified straw has a TMMC of 1.5M, an aliquot of 3-4µl can be directly transferred from the devitrification medium to the PVP micro droplet for ICSI. If donor-IUI is to be performed, the 2.5M or 5M straw is centrifuged at 100g/10min, 100µl of the pellet and supernatant aspirated, transferred to a sterile test tube and resuspended in 0.4ml of the insemination medium (total of 0.5ml). In addition to preserving sperm ultrastructure and function, it has recently been reported that the IZUMO1 sperm membrane protein is highly conserved in vitrified sperm, unlike in sperm that are slow-frozen (Cots-Rodríguez et al., 2025). Consequently, vitrified sperm would be expected to have a greater fertilizing potential than slow-frozen sperm. Another important feature of the VetriStraw technology is that incubation at 37°C for 15-30 min of thawed sperm, results in a 2-fold increase in double strand breaks (DSB) in sperm DNA, as measured by the CometFertility Test (CIMAB, Barcelona), while DSB values after incubation post-devitrification do not change. It is well known that DSB levels well above the normal threshold of the CometFertility Test lead to a lower blastocyst rate, poor pregnancy outcome and miscarriage. Our preliminary results with VetriStraw show blastocyst rates of up to 75% in ICSI/IVF, 75% ongoing pregnancy rates per transfer in ICSI/IVF with donor oocytes and 35-40% pregnancy rates in donor-IUI. In conclusion, VetriStraw is a novel cryopreservation technology that preserves sperm ultrastructure and function and significantly improves embryo development and pregnancy outcome compared to slow-freezing.

MECHANICAL REGULATION OF FOLLICULOGENESIS AND OOCYTE QUALITY

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Reproductive aging is associated with decline in oocyte quantity and quality. With aging human and mouse ovaries become stiffer, however, how stiffness impacts ovarian function and oocyte quality is unknown. Here, we used an alginate-encapsulated *in vitro* system, which allow us to precisely modulate the environment in which the follicles develop. We synthesized hydrogels recapitulating the age-associated changes in ovarian mechanical properties (Young environment - 0.5% alginate: 1.79±0.08kPa) and reproductively old environment - 2% alginate: 4.56±2.03kPa), and we cultured mouse secondary follicles for 12 days. Follicles cultured in the reproductively old environment showed significant reduction in size (0.5%: 226.9±17.4µm; 2%: 160.8±9.9µm, p<0.0001). These differences were triggered by granulosa cells (GCs; 0.5%: 160.04±13.4µm; 2%: 103.37±16.5µm, p<0.0001), suggesting that GCs are not proliferating in stiff environment. At the end of the culture, we isolated the oocytes and found that their quality significantly declined in 2%, with 68.9±16.8% of oocytes degenerated. Next, we performed RNAseq and found that the follicle's transcriptome quickly changes upon exposure to a stiff environment. Upregulated genes in the stiff condition were involved in response to external stimuli, inflammation, and collagen and extracellular matrix (ECM) remodeling. However, in the soft hydrogel, most of the upregulated genes were related to cell cycle and metabolism. Overall, our study is the first to demonstrate that ovarian follicles are highly mechanosensitive and that the age-

associated increased stiffness in the ovary impairs folliculogenesis and oocyte quality. Overall, our results reveal that altering the mechanical properties of the ovary alone is sufficient to induce an aging phenotype in the oocyte, opening the door to treatments that modulate the ovarian environment to extend reproductive lifespan and improve oocyte quality. Finally, we are now expanding our biomechanical studies to human oocytes.

CHALLENGES IN DIAGNOSING PCOS IN ADOLESCENTS

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Polycystic Ovary Syndrome (PCOS) is a multifactorial endocrine disorder with significant long-term implications for reproductive, metabolic, and psychological health. Diagnosing PCOS in adolescents is particularly challenging due to the overlap between normal pubertal physiology and features typically associated with PCOS, such as irregular menses, acne, and polycystic ovarian morphology. A primary diagnostic uncertainty lies in interpreting menstrual irregularity: while irregular cycles are common in the first year after menarche, persistent irregularity beyond this period may suggest underlying ovulatory dysfunction. Moreover, androgen levels usually reach adult ranges between ages 12 and 15, complicating the use of biochemical hyperandrogenism as a reliable diagnostic marker. Ultrasound imaging, often employed in adult diagnostic criteria, has limited utility in adolescents. It remains uncertain whether ovarian volume or antral follicle count provides greater diagnostic accuracy in this age group. Additionally, Anti-Müllerian Hormone (AMH), recommended for diagnosis, may also be elevated in adolescents with PCOS, but its diagnostic value in this population remains debated. The prevalence and phenotypic expression of PCOS vary significantly across ethnic and geographic populations, making the establishment of universal diagnostic thresholds challenging. This presentation critically examines these diagnostic challenges and explores emerging adolescent-specific guidelines aimed at reducing the risk of misdiagnosis or overdiagnosis, thereby ensuring appropriate clinical care.

REVITRIFICATION AND REBIOPSY FOR PGT: THE GOOD, THE BAD AND THE UGLY

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This presentation provides a comprehensive review of the effects of double biopsy during preimplantation genetic testing (PGT) cycles on embryo viability and clinical outcomes. During PGT cycles, embryos may occasionally yield inconclusive or missing diagnostic results. In such cases, a re-biopsy may be required, involving additional manipulation and re-cryopreservation of the embryos. To date, several studies have explored the impact of double biopsy on clinical outcomes, reaching contradictory findings. We systematically analyzed data from 12 peer-reviewed studies focusing on the clinical consequences of double biopsy. Primary outcomes evaluated included live birth rate, embryo survival after re-biopsy, clinical pregnancy rate, and miscarriage rate. The findings were controversial, with 7 out of 12 studies showing negative effects on survival and clinical outcomes, while 5 reported no impact. To further clarify the evidence, we developed detailed evidence tables. Data were systematically extracted for live birth, survival, clinical pregnancy, and miscarriage rates. For each study, absolute numbers (numerator and denominator) were identified for all reported outcomes. We then calculated the percentage change between the study and control groups for each outcome. Our evidence table analysis revealed a notable decrease in live birth rates by approximately 39.3% in blastocysts undergoing double biopsy compared to controls. The compromised clinical outcomes in re-biopsied blastocysts may be attributed to potential risks associated with additional handling, including the further loss of trophoblast cells during a second biopsy. Given these findings, this presentation emphasizes the importance of careful patient selection and thorough counseling regarding the potential risks and benefits of double biopsy in PGT cycles. In conclusion, while some conditions may give no alternative (i.e., no result in the PGT-M/PGT-SR cycles), there are other scenarios where the decision to perform a second step of biopsy may be doubtful. It is important to inform patients on realistic expectations about embryo survival and competence when a re-biopsy is applied. In the long term, large-scale studies using national birth registries are needed to explore the potential health risks for newborns associated with re-biopsy.



PAPER MILLS? NIMBY! THE MAGNITUDE OF THE PROBLEM?

Lex Bouter

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Paper mills are providers selling authorships on and citations to scientific publications, usually on a 'no cure, no pay' basis. This is often done by making up data, writing fake papers, rigging peer review and bribing editors. The resulting fraudulent publications are polluting the scholarly literature, which subsequently may corrupt systematic reviews and clinical guidelines. Together with flawed or ethically unacceptable papers papermill products need to be retracted. Generative artificial intelligence (GAI) is rapidly changing how research is done and published. GAI also makes the production of fake or fraudulent publications substantially easier. The presentation will discuss the magnitude, the drivers and the remedies of the problem.

WHAT CAN FUNDERS OF RESEARCH DO TO FOSTER RESPONSIBLE RESEARCH PRACTICES?

Lex Bouter

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Vrije Universiteit Amsterdam | Faculty of Humanities | Department of Philosophy, Netherlands*

Funders have the potential to change how science is done quickly, because they not necessarily need to take popular measures only: all scholars are eager for grants and prepared to act according to the rules mandated by funders. An example is how funders made open data rapidly the norm. But there is more they can do for the quality, transparency and integrity of scientific research. This presentation will explore the importance of demanding good training, supervision and quality control in the institutions that receives the funds, fair and open procedures for grant applications, good monitoring of funded projects, and also funding research on research.

PIONEERING UTERUS TRANSPLANTATION: REFLECTIONS ON BREAKTHROUGHS AND DELIVERIES

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Uterus transplantation (UTx) has emerged as the first treatment enabling gestational parenthood in individuals with absolute uterine factor infertility (AUI)—a condition previously considered untreatable. Since the world's first successful UTx with live birth in Sweden in 2014, the field has seen rapid and global development, moving from experimental proof-of-concept to structured clinical protocols. Today, it is estimated that >140 UTx procedures have been performed in >20 centres worldwide, and with > 70 babies born. This presentation reflects on key breakthroughs and the clinical milestones that have shaped UTx over the past decade. The talk will give an overview of the animal experiments in five different animal species, which were necessary to optimize and safeguard the complex surgery, immunosuppression and rejection diagnosis before clinical introduction. Data concerning inclusion criteria for recipients and donors will be presented. I will then explore the evolution of surgical techniques—including minimally invasive approaches—as well as the immunological management required for graft survival and successful pregnancy outcomes. Guidelines for uterine graft postoperative care, fertility treatment integration, and delivery strategies, including timing and mode of cesarean section in the context of a transplanted uterus will be mentioned. Attention will be given obstetrical outcome in relation to maternal and perinatal outcomes of the published births of UTx. Data will also be presented on medical and psychological long-term follow up of recipients, live donors and children. As UTx continues to evolve, ongoing research, long-term outcome studies, and equitable implementation strategies will be critical. This presentation aims to contribute to a nuanced understanding of UTx as both a groundbreaking medical achievement and a complex, evolving clinical practice.

PROSPECTS FOR USE OF BIOENGINEERED TISSUE FROM STEM CELLS IN GYNECOLOGY

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Stem cell-based tissue engineering is rapidly emerging as a transformative strategy in gynecology, with the potential to restore reproductive and organ function in conditions where traditional therapies fall short. Uterine factor infertility, extensive myometrial scarring, congenital anomalies such as MRKH syndrome, and complications following hysterectomy are just a few examples where bioengineered tissues could offer new hope. Recent advances in uterus bioengineering have demonstrated that specific grafts can be developed using decellularized scaffolds seeded with autologous cells to promote immune tolerance and avoid the need for lifelong immunosuppression. Research has focused on scaffolds derived from decellularized uterine tissue, which retain the native extracellular matrix architecture and biological signalling potential. These scaffolds have been successfully repopulated with various cell types—including mesenchymal stem cells (MSCs), uterine epithelial and stromal cells—and have shown the ability to restore fertility in preclinical rodent models. Larger animal models, such as sheep and pigs, are now being used to scale these findings toward clinically relevant applications. Early studies suggest that it is feasible to generate functional scaffolds capable of promoting angiogenesis, cell infiltration, and tissue regeneration. Although full-organ bioengineering remains a long-term goal, intermediate applications such as localized tissue patches for uterine repair or regeneration of the endometrium represent nearer-term opportunities. Technical hurdles remain, including improving recellularization efficiency, identifying optimal cell sources, and ensuring biomechanical and immunological compatibility. Concerning other applications in gynaecology, tissue engineering experiments are conducted in animals for future use in treatment of pelvic organ prolapse. Preclinical and clinical studies have been conducted on creation of vagina and urinary bladder. These studies will be reviewed in the talk. This presentation will highlight the current state of preclinical uterus bioengineering, including scaffold development, cell integration strategies, and translational models. It will also explore how these technologies may be applied in gynaecology more broadly, setting the stage for regenerative therapies that are not only innovative but also ethically and clinically viable.

WHY WE SHOULD SCREEN FOR CHRONIC ENDOMETRITIS BEFORE ASSISTED REPRODUCTIVE TECHNIQUES (ART)

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Background: Chronic endometritis (CE) is a pathology poorly known until few years ago. Histologically it is a persistent inflammation of the endometrial lining characterized by plasma cell (CD138+) infiltration. Often asymptomatic, it is increasingly recognized as a potentially reversible cause of implantation failure and reduced endometrial receptivity. Its prevalence among infertile women ranges from 10% to 45%, reaching up to 60% in cases of recurrent implantation failure (RIF) or recurrent pregnancy loss (RPL). **Objectives:** To analyze the scientific evidence supporting CE screening before ART, assessing its impact on pregnancy rates, clinical benefits, and cost-effectiveness compared with the absence of screening. **Methods:** A narrative review of international guidelines (ASRM 2023, ESHRE 2024) and recent studies on the diagnosis, treatment, and reproductive outcomes of women with CE undergoing assisted reproductive techniques was conducted. **Results:** Evidence indicates that CE is associated with significantly lower implantation and live birth rates. Following antibiotic treatment and histologic confirmation of resolution, clinical pregnancy rates increase from 23% to 59%, and live birth rates approximately double. Implementing targeted screening (endometrial biopsy, CD138 immunostaining, or hysteroscopy) in high-risk groups has proven cost-effective and improves ART success rates. **Conclusions:** Screening for chronic endometritis before ART is a simple, low-cost, and potentially outcome-enhancing strategy. Current evidence supports a selective approach for patients with RIF or RPL; however, emerging data suggest that broader evaluation could further improve the efficiency and success of assisted reproductive programs.

Keywords: Chronic endometritis, assisted reproductive techniques, implantation failure, endometrial receptivity, screening, antibiotics, fertility



AI IN CLINICAL CARE

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Artificial Intelligence (AI) is a current hot topic in IVF, although the first model of an artificial neuron dates back to 1943, 35 years before Louise Brown was born. Alongside ovarian stimulation, gametes and embryo selection, and laboratory management, AI is beginning to reshape patient counseling. By supporting predictive modeling and decision-making tools, AI may assist clinicians in setting realistic expectations and personalizing treatment pathways, potentially reducing emotional burden and drop-out rates.

There are four primary reasons why AI is becoming essential in IVF laboratories:

- Enhanced data analysis to produce objective and clinically relevant evidence.
- Standardized and reproducible embryo assessment, which remains highly subjective.
- Automated traceability and quality control.
- Integration of digital ecosystems to support real-time key performance indicators and multicenter management.

Clinically, AI is being used to individualize ovarian stimulation—helping define FSH starting doses and optimize trigger timing—leading to improved oocyte yield in responsive patients and more efficient resource use in non-responders. It also holds promise in 3D follicular growth tracking. In sperm and oocyte analysis, AI offers new tools, although validation remains ongoing. For embryo assessment, AI contributes to automation, quantification, and standardization. Deep learning models show strong correlations between morphokinetics and clinical outcomes, yet their application for embryo ranking—especially within euploid cohorts—requires further refinement. Looking ahead, the long-theorized "lab-on-a-chip" concept is becoming tangible. As AI systems move from black-box to explainable models, reproductive specialists' roles are expected to evolve from manual operators to strategic leaders within multidisciplinary teams. In this shift, intellectual and interpretative competencies will outweigh technical skills, underscoring the need for continuous education and cross-disciplinary collaboration. AI is not here to replace IVF professionals—it is here to empower them to deliver more effective, transparent, and personalized reproductive care.

THE FIRST 24H OF LIFE: IMPLICATIONS FOR DEVELOPMENT AND PREGNANCY

Giovanni Coticchio

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Human embryos are frequently affected by maternally inherited aneuploidies, which in most cases lead to developmental arrest either before or shortly after implantation. Yet, recent findings—arising from the convergence of advanced technologies now standard in IVF laboratories—have uncovered a broader and more intricate picture. Deviations at the cellular or molecular level can influence multiple stages along the path from fertilization to blastocyst formation. Fertilization itself represents a particularly fragile stage, as it marks the transition from gametic to embryonic existence. Centrosomes, indispensable for mitosis, are assembled de novo from components contributed by both parents. The initially large and widely separated nuclei (pronuclei) migrate toward one another and align centrally. During this process, the overall architecture of the cell shifts from an asymmetric to a symmetric configuration. The maternal and paternal chromosome sets, initially isolated within their respective pronuclei, cluster at the site of pronuclear juxtaposition to enable proper spindle assembly. Emerging preimplantation genetic technology has also shown that atypically fertilized zygotes—showing one or more than two pronuclei—can be biparental euploid, suggesting a striking plasticity of the embryo already at the zygote stage. After breakdown of pronuclei, the meiotic spindle is then replaced by a segregation apparatus that may exist either transiently or persistently as a dual mitotic spindle. Concurrently, maternal proteins promote the degradation of maternal mRNAs, thereby permitting translation of newly transcribed zygotic genes. The remarkable diversity and temporal precision of these tightly orchestrated events render fertilization an inherently error-prone process. Consequently, even at the first mitotic division, disruptions to cellular or genomic integrity can occur, often with fatal implications for subsequent embryonic development.

IN UTERO GENE THERAPY - A NEW HORIZON?

Anna David

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The Professor Tan Seang Lin, Dr Grace Tan and OriginElle Fertility Distinguished Chair in Women's Health, London, UK

Visiting Professor of Maternal Fetal Medicine, Department of Development and Regeneration, KU Leuven, Belgium.

Genomic medicine harnesses genetic knowledge to create personalised treatments for patients, directly targeting genetic abnormalities. Gene therapy has now arrived as a major treatment modality for adults and increasingly in neonates. Many of the original barriers to effective postnatal gene therapy have been overcome, such as difficulty targeting the appropriate organ, a robust immune response to the therapy and low-level expression of the therapeutic protein. When disease only manifests after birth, gene therapy can be effective when given early in neonatal life. But when congenital disease pathology occurs during fetal development then treating the fetus may be the only solution. Preclinical studies in animal models show that fetal genetic manipulation using viral vectors or gene editing can cure severe genetic disease. Structural anomalies in fetal preclinical animal models can also be prevented using fetal gene therapy. Non-invasive prenatal diagnosis using detection of circulating fetal DNA in the maternal blood allows clinicians to detect congenital disease as early as 10 weeks of gestation, giving families time to consider their options including a possible in utero treatment. Despite its promise, fetal application of gene therapy has not yet occurred in clinical practice but trials of fetal protein and stem cell transplantation for congenital disease are showing promising results. For some non-genetic conditions, timely expression of a particular protein, for example during the middle of pregnancy, may alleviate pathology—this is now the basis of a first-in-human trial of an intra-amniotic protein therapy for a congenital skin disease. Fetal stem cell transplantation has now progressed, with two international clinical trials completed, one in osteogenesis imperfecta and one in alpha thalassaemia. There is an ongoing first-in-human trial of in utero enzyme replacement for congenital metabolic disorders. There are huge challenges to clinical translation and implementation of fetal genetic therapy due to concerns about off-targeting effects and the fetal immune response, germline gene transfer and the potential risk to the mother of genetic interventions. Conducting clinical trials in this area is also challenging but new terminology (MFAET: maternal fetal adverse event terminology) will improve the safety of these trials. This talk will summarise the current knowledge regarding fetal genomic medicine, describe current trials and outline a way forward.

FAST OOCYTE CRYOPRESERVATION: IS IT WORTH IT? NO: OOCYTE VITRIFICATION WORKS WELL AS IT IS, NO NEED TO CHANGE IT!

Lucia De Santis

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Although vitrification (rapid cooling) is already the standard for oocyte cryopreservation (OC), researchers continue to explore techniques to make it faster and safer. Vitrification protocol improvements primarily focus on reducing time exposure of oocytes (or embryos) to cryoprotective agents (CPAs) and improving laboratory workflow efficiency. There are two different approaches in order to optimize both the warming and the cooling phase. One of the most promising areas is the simplification and acceleration of the warming protocol, also known as the "shortened dilution protocol" to achieve increased operational efficiency, improved success rates and increased ongoing pregnancy. Preclinical studies using both rapid vitrification (FV) and rapid warming (FW) have demonstrated that it is possible to dramatically reduce vitrification time (from 12-15 minutes to 2 minutes) and warming time (from 10 minutes to 1 minute). These protocols claim to maintain oocyte integrity, meiotic spindle integrity, and embryonic developmental potential in animal models and discarded human oocytes. However, studies are gradually emerging that detect cytoskeletal and meiotic abnormalities in oocytes cooled/warmed with the so called "fast protocols". Although promising results have emerged from preclinical and clinical studies using rapid warming on embryos, the applicability to human oocytes requires further research. Some considerations are necessary. With the advent of rapid oocyte /embryo freezing and thawing protocols, the term "fast freezing" has been conceptually incorrect: the CPAs exposure times and concentrations have been modified (in some cases, with the complete omission of certain steps), but the cooling and heating curves/rates remain the same as those used in standard vitrification



protocols. The key point that must determine whether or not to switch from current protocols to "fast" ones cannot be limited to the clinical preliminary outcome but must consider the impact that different exposure times to CPAs and temperatures can have on the subcellular structure of the oocyte. Anyone with decades of embryological experience knows well that, when developing protocols for oocyte cryopreservation through slow freezing, improved survival rate at a macroscopic level actually corresponded to greater cytoskeletal, chromatin, and ultrastructural damage. In a well-run laboratory setup, the time advantages are not always so evident. Furthermore, an additional difference remains in the approach to thawing vitrified oocytes in egg donation programs. Simplification of any protocol is certainly desirable, but caution is essential before shifting to a new approach.

ORAL, INTRAVAGINAL, INJECTABLE PROGESTERONE

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Priming of endometrial receptivity stems from donor-egg ART. By allowing to fertilize oocytes in vitro, transferring embryos in women deprived of ovarian function became possible. The challenge was to make the endometrium receptive solely with exogenous hormone. From the beginning, success rates of donor-egg ART exceeded those regular IVF [1], and became the reference for frozen embryo transfers (FET). Originally, progesterone was administered from IM injections of oil-base solutions, which are painful. Oral progesterone is not an option, as it is metabolized in the liver and serum concentrations are erroneously high because current assays cross-reacts with metabolites [2], making oral progesterone not an option. To avoid these inconvenience, progesterone has been administered vaginally. As uterine concentrations are high following vaginal administration, we assumed that serum levels of progesterone did not matter, which turned out to be wrong [3]. Moreover, Devine et al. demonstrated that vaginal progesterone is insufficient in programmed FETs [4]. Subsequently, Labarta's group [5] and others have shown that sub cutaneous progesterone (25mg/day, Prolutex®, IBSA Switzerland) corrects the insufficiency of vaginal progesterone when serum levels are low, while others added subcutaneous progesterone systematically [6]. In summary therefore endometrial receptivity can be achieved in programmed FET cycles using combined vaginal and injectable subcutaneous progesterone. In natural cycles, the needs for progesterone are less clear, but most investigators use vaginal or/and injectable progesterone.

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THE VAGINAL MICROBIOME AS A MARKER OF FEMALE INFERTILITY

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The vaginal microbiota plays a crucial role in maintaining reproductive tract homeostasis and supporting female fertility. A healthy vaginal environment is typically dominated by *Lactobacillus* species, which maintains an acidic pH through lactic acid production and provides protection against pathogens. Disruptions in this microbial balance, termed vaginal dysbiosis, have been increasingly associated with gynecological conditions, adverse reproductive outcomes, and reduced assisted reproductive technology (ART) success rates. Microbial community profiling studies have classified the vaginal microbiota into five Community State Types (CSTs), based on *Lactobacillus* dominance or anaerobic overgrowth. Among these, CST I (*L. crispatus*-dominated) is considered the most stable and protective, while CST IV, characterized by diverse anaerobic bacteria and low *Lactobacillus*, is associated with bacterial

vaginosis, infertility, and pregnancy complications. Recent meta-analyses and systematic reviews have underscored the clinical relevance of vaginal dysbiosis in ART outcomes. A meta-analysis by Singer et al. (2019) demonstrated a 1.4-fold reduction in pregnancy rates among women with abnormal vaginal microbiota undergoing IVF. This was confirmed by Skafte-Holm et al. (2021), where vaginal dysbiosis significantly increased the risk of early pregnancy loss (RR 1.71, 95% CI 1.29–2.27) and reduced clinical pregnancy rates (RR 0.55, 95% CI 0.32–0.93) in IVF patients. Emerging evidence highlights the specific importance of *L. crispatus*. Studies by Amato et al. (2019), Väinämö et al. (2023), and Vergaro et al. (2009) consistently demonstrated that vaginal *L. crispatus*-dominance is significantly associated with higher clinical pregnancy and live birth rates following intrauterine insemination and IVF, including donor oocyte cycles. Moreover, Koort et al. (2023) confirmed that *L. iners* and *L. gasseri*-dominant profiles are linked to lower ART success compared to *L. crispatus*. Additionally, studies have explored the correlation between vaginal and endometrial microbiota, reporting partial microbial concordance, but with distinct niches and possible cross-contamination concerns. The vaginal microbiome has also been implicated in obstetric outcomes. Large cohort studies (Fettweis et al., 2019; Gudnadottir et al., 2023) linked low-*Lactobacillus* vaginal profiles to increased risk of spontaneous preterm birth. In conclusion, the vaginal microbiome, particularly *L. crispatus* predominance, emerges as a valuable non-invasive biomarker for predicting reproductive outcomes and tailoring fertility treatments. Standardization of diagnostic methods and prospective studies are essential to translate these findings into clinical practice.

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MULTIVARIATE PREDICTION MODELS: A KEY TOOL IN DEVELOPING MORE PATIENT TAILORED INFERTILITY CARE

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Over the last three decades research efforts predominantly focused on the randomized controlled trial, usually comparing a novel treatment strategy with the standard of care. Under the evidence based medicine paradigm the RCT is considered the highest level of scientific evidence. Ultimately, the combined analysis of multiple RCTs (referred to as meta analysis), is considered to be as close as possible to the 'truth'. Still today only relatively few scientific publications involve the reporting of RCT results. Moreover, the clinical significance of findings may be restricted due to insufficient sample size to include real life primary study endpoints, and patients included in such trial may not represent our every day patients. Conclusions of meta analyses may sometime be questioned because of the limited number of available trials, uncertainty about the quality of the studies included, and – as outline more recently – science integrity issues of included trials. In more recent years, the focus of science of means of a groups of patients has shifted towards individualized or patient tailored medicine, aiming to identify the medical intervention which best suits the individual needs of a given patient. To achieve this goal, prospective cohort follow-up studies should be performed, aiming to find associations between patient characteristics and treatment outcome. I.e. applying multivariate prediction model analysis. As opposed to other medical fields such as oncology and cardiovascular disease, the individualized approach has not been widely studied and applied in reproductive medicine.

Such individualized approaches have been studied in detail in the following areas:

- Prediction of chances to conceive without medical intervention in unexplained infertility
- Prediction of chances for tubal infertility based on chlamydia antibody titer in blood.
- Chances of ovulation and live birth in infertile women diagnosed with PCOS undergoing ovulation induction.
- Prediction of pregnancy complications in infertile women with PCOS
- Dose prediction of exogenous FSH for ovarian stimulation of women undergoing IVF. A first example in reproductive medicine of so called 'companion diagnostics' where the individual FSH dose is calculated based on AMH and body weight.

Most approaches as mentioned above should be considered work in progress. However, the continued disclosure of novel relevant biomarkers and genetic markers, along with improved clinical data IT, artificial intelligence and big-data will beyond doubt further strengthen patient tailored approaches in reproductive medicine.

HOW TO REDUCE RESEARCH WASTE

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No unified definition of research waste exists. In general, it is described as practices that are inefficient, unnecessary, or fail to deliver reliable results. In other words poor quality research with limited benefits for society, policymakers or clinician.

Different aspects of research waste can be identified:

- Methodological: poor study design, multiple research questions, patient inclusion issues, retrospective or underpowered studies, use of questionable surrogate outcomes, inadequate data analysis, post-hoc analysis.
- Invisible: non-publication (especially of negative trials), wrong journal choice, no data sharing.
- Negligible: futile research question, unnecessary duplication, meta-analyses of limited number of poorly designed studies.
- Underreporting: reporting of incomplete or selected data.
- Structural: lack of patient involvement in defining most relevant research question, inadequate research prioritization, lack of focus on implementation of research findings

Although no consensus regarding research waste criteria exists, it is estimated by multiple investigators that around 70-80% of all publications worldwide can be considered wasteful. Think about how much money can be saved by more focus on high quality studies. This should be primary responsibility of investigators themselves, universities and funding bodies. Examples of some low quality studies will be discussed.

DEBATE: THE DEBATE GOES ON: PRP FOR REJUVENATION TO IMPROVE OVARIAN RESPONSE

YES: SAFETY AND EFFICACY BASED ON A SINGLE CENTER EXPERIENCE

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Background: Ovarian rejuvenation is an innovative procedure intended to restore ovarian fertility and development during the climacteric and has been used to enhance fertility in women with premature ovarian insufficiency (POI). This retrospective study was conducted to determine the effects of an intraovarian platelet-rich plasma (PRP) injection on ovarian stimulation outcomes in women referred to an in vitro fertilisation centre. **Methods:** Population: This was a retrospective observational study, and the inclusion criteria included women of reproductive age with at least one ovary with a history of infertility, hormonal abnormalities, an absence of a menstrual cycle, and premature ovarian failure. During the patient's first consultation, a detailed reproductive history was recorded, a pelvic scan for ovarian size was conducted, and hormonal analysis for follicle-stimulating hormone (FSH), anti-Müllerian hormone (AMH), estradiol (E2), and luteinizing hormone (LH) was conducted. **Results:** In the study, 469 women with a history of infertility, hormonal abnormalities, an absence of a menstrual cycle, and premature ovarian failure had hormonal levels recorded up to four months after treatment, and these were included in the study. The volume of peripheral blood required to prepare 6-8 mL of PRP for administration was 40-60 mL. The initial concentration of platelets in the peripheral blood sample was about 25000/ μ L, whereas the prepared PRP had a concentration of 900.000/ μ L. A volume of approximately 2-4 mL per ovary, depending on the ovarian volume, was used for the intraovarian injection. PRP intervention had significant effects on FSH concentration at the $\alpha = 0.05$ level. Statistically significant increases in normal values of FSH and E2 were observed for months three and four after the PRP intervention for all age groups. **Conclusions:** The results of our observational study revealed that a PRP intraovarian injection is associated with improved ovarian tissue and function. Future randomised clinical trials are needed to shed light on the use of PRP in ovarian rejuvenation before offering it routinely in clinical practice.

FAST OOCYTE CRYOPRESERVATION: IS IT WORTH IT?

YES: RAPID VITRIFICATION AND WARMING SHOULD BE ADOPTED BY ALL

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Vitrification enables temporal and spatial separation between the collection and use of gametes and embryos in IVF treatments. By transforming cytoplasmic water into an amorphous solid through ultrarapid cooling, vitrification prevents lethal intracellular ice formation. Traditionally, protocols employ two solutions: a less concentrated equilibration solution (ES) and a highly concentrated vitrification solution (VS). Since the early work of Rall and Fahy, this two-step method has been refined and clinically adopted with extended exposure to ES to achieve osmotic equilibrium. Recent advances challenge this paradigm. Modelling studies based on human oocyte permeability demonstrated that the critical osmotic changes required for vitrification occur within the first 30–60 seconds of ES exposure, reaching similar intracellular osmolarity to that achieved with conventional 9–15 minute protocols. These findings support the feasibility of short vitrification protocols, reducing preparation time to approximately 1 minute. Pre-clinical validation in both murine and human models has yielded encouraging results, with ongoing studies exploring clinical application. While cleavage-stage embryos appear suitable for such short protocols, blastocysts—with their multicellular, fluid-filled structure—pose greater osmotic complexity, and the applicability of one-minute protocols remains under investigation. Similarly, warming protocols have evolved. Historically, gradual rehydration using stepwise CPA dilution was considered essential. However, evidence now supports simplified one-step warming using 1M non-permeable CPA solutions (e.g., sucrose or trehalose), followed by immediate culture medium exposure without intermediate steps. Recent studies indicate that this approach achieves effective rehydration and maintains embryo viability, potentially allowing further simplification to lower CPA concentrations or direct warming in culture medium. Shortened vitrification and warming protocols offer clear advantages: reduced manipulation time, minimized exposure to non-physiological osmotic and temperature conditions, and decreased CPA cytotoxicity. These changes may also lead to more stable cytoplasmic conditions during cooling and warming, potentially improving outcomes. Nevertheless,



implementation requires rigorous validation and internal monitoring to ensure clinical safety and efficacy. In summary, the development of one-minute vitrification and warming protocols represents a potential paradigm shift in cryopreservation, challenging long-held assumptions about osmotic tolerance and equilibration. If validated clinically, these streamlined approaches could enhance efficiency, reduce cytotoxic exposure, and improve the physiological relevance of cryopreservation in assisted reproduction.

DEBATE: SHOULD MCA DOPPLER BE INCORPORATED INTO ROUTINE FETAL SURVEILLANCE?

NO

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If there is a clear association between abnormal MCA Doppler readings and adverse outcomes, and MCA Doppler demonstrates the highest area under the curve (AUC) for predicting adverse outcomes, then why shouldn't MCA Doppler be part of routine fetal surveillance? There are two main reasons:

A) The evidence of clinical benefit is not yet robust.

Randomized clinical trials are required to support the routine use of MCA Doppler, and to date, only one clinical trial has demonstrated any benefit, which was limited to morbidity.

B) Methodological considerations:

There is still no consensus on several key aspects:

1. Which outcomes we aim to prevent.

The MCA Doppler reflects placental function and is most accurate in predicting cesarean sections due to abnormal CTG. However, its predictive ability for fetal death is less reliable, as fetal demise is not always caused by placental dysfunction. Other factors, such as cord accidents, placental abruption, or uterine rupture, may contribute to fetal death. Furthermore, predicting cesarean sections for abnormal CTG is not entirely accurate due to unpredictable causes like cord compression and vasa previa. Additionally, CTG can be influenced by factors like excessive uterine contractions and cervical resistance, especially in cases of labor induction.

2. The optimal time interval between assessment and outcome.

Prediction accuracy declines significantly if the time between assessment and delivery is too long. For MCA Doppler to be effective, the interval should be as short as possible.

3. The appropriate gestational age for testing.

The predictive accuracy of MCA Doppler improves with gestational age, reaching its peak near term, just before the expected delivery date.

4. What clinical action should follow an abnormal MCA PI.

Should pregnancy be terminated in response to an abnormal MCA PI reading, and if so, when and how should this be done? The clinical management plan for such findings remains unclear.

5. Technical considerations.

There is also a need for agreement on technical aspects, such as the fetal heart rate at which MCA Doppler measurements remain valid. Cerebral impedance decreases with fetal heart rate (approximately 0.2 PI units for every 10 beats per minute increase).

Finally, given that the predictive ability of the MCA PI and CPR is only moderate, we must first agree on how to optimize its AUC before incorporating this technique into routine practice. One potential strategy is to adopt a multivariable approach that incorporates other parameters—such as estimated fetal weight (EFW), onset of labor, parity, fetal sex, and PIGF levels. This would improve the prediction accuracy of cerebral flow, as these additional factors enhance prediction across all gestational ages and intervals.

AUTOIMMUNITY IN POI

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Premature ovarian insufficiency is defined as amenorrhoea with hypergonadotropic hypogonadism ≤ 40 years of age. Its incidence is about 3.7%. In about 10-30% autoimmune conditions seem to be associated with otherwise unexplained POI. First and foremost, antithyroid antibodies have been found. Notably, also antiovarian antibodies have been described. However, no standardized serological testing has been established so far. The lecture focuses in all aspects of autoimmunity in POI as well as on future chances and challenges. In summary, it is likely that there is an autoimmune cause for premature ovarian insufficiency. However, there are no simple, specific, noninvasive and sensitive diagnostic test is

available to check for antiovarian antibodies. Last not least, there is no routine, standardized treatment explicitly prescribed for autoimmunity of the ovary.

NEUROKININ-3 RECEPTOR ANTAGONISTS A NOVEL APPROACH TO TREATING MENOPAUSAL VASOMOTOR SYMPTOMS

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Vasomotor symptoms (VMS), including hot flashes and night sweats, are among the most common and disruptive symptoms experienced by women during the menopausal transition and postmenopause. Affecting up to 70% of women, VMS can persist for several years and significantly impair quality of life, sleep, emotional wellbeing, and daily function. Hormone therapy (HT) remains the gold standard for managing these symptoms; however, its use is contraindicated in certain populations—such as women with a history of hormone-sensitive cancers or thromboembolic disease—and may not be acceptable to others. Consequently, there is a critical need for safe, effective non-hormonal treatments that directly target the underlying pathophysiology of VMS. Recent discoveries in neuroendocrinology have elucidated the role of the hypothalamic KNDy (kisspeptin/neurokinin B/dynorphin) neuronal network in thermoregulatory control. Estrogen withdrawal during menopause leads to upregulated neurokinin B (NKB) activity and subsequent overstimulation of neurokinin-3 receptors (NK3R) in the median preoptic nucleus of the hypothalamus. This dysregulation results in inappropriate activation of heat-dissipation mechanisms and the onset of vasomotor symptoms. Neurokinin-3 receptor antagonists (NK3RAs) offer a novel, non-hormonal therapeutic strategy by directly modulating this disrupted thermoregulatory pathway. Two agents in advanced clinical development—fezolinetant and elinzanetant—have shown promise in targeting menopausal VMS with differing receptor profiles and clinical implications. Fezolinetant is a selective NK3RA that has demonstrated rapid, significant, and sustained reductions in both frequency and severity of moderate-to-severe hot flashes in multiple phase 3 randomized controlled trials. It exhibits a favorable safety and tolerability profile, with hepatic transaminase elevations observed infrequently and managed with routine monitoring. As of 2023, fezolinetant has received regulatory approval for the treatment of VMS in postmenopausal women by both the U.S. Food and Drug Administration (FDA) and the European Medicines Agency (EMA), marking a major milestone in non-hormonal menopause management. Elinzanetant, in contrast, is a dual NK1/NK3 receptor antagonist, currently in phase 3 trials. Its broader mechanism of action may confer additional benefits, including improvements in mood and sleep disturbances, which frequently co-occur with VMS. While clinical data is still emerging, early studies suggest promising efficacy and safety. This presentation will explore the neurobiological basis of VMS, the mechanism of action of NK3RAs, and comparative clinical evidence of fezolinetant and elinzanetant. Emphasis will be placed on the therapeutic positioning of these agents, their safety profiles, and their emerging role in personalized, non-hormonal management of menopausal symptoms.

PERSONALIZATION OF OVARIAN STIMULATION: OPTIMIZING OUTCOMES THROUGH INDIVIDUALIZED APPROACHES

Enrico Papaleo, Italy

Ovarian stimulation (OS) is a cornerstone of assisted reproductive technology (ART), yet a one-size-fits-all approach often limits efficacy and increases the risk of complications such as ovarian hyperstimulation syndrome (OHSS). Personalization of OS offers a strategy to optimize both safety and reproductive outcomes by tailoring treatment protocols to the individual patient's ovarian reserve, age, BMI, and previous response to stimulation. Advances in biomarkers, including antral follicle count (AFC) and anti-Müllerian hormone (AMH) levels, allow for accurate prediction of ovarian response. Integrating these markers with clinical factors enables clinicians to select the most appropriate gonadotropin type, starting dose, and protocol—whether agonist, antagonist, or mild stimulation regimens. Such individualized planning not only enhances oocyte yield and quality but also reduces the incidence of poor or excessive responses, thereby improving cumulative live birth rates. Personalized OS also extends to dynamic monitoring during stimulation. Adjustments in gonadotropin dosing based on follicular growth and estradiol levels, combined with trigger strategies (hCG versus GnRH agonist), allow for flexible, patient-centered management that minimizes risk without compromising success.



Emerging approaches, such as pharmacogenomics and predictive algorithms, promise further refinement of treatment, potentially transforming OS from protocol-driven to precision medicine. Clinical evidence increasingly supports the benefits of personalized OS. Studies demonstrate that individualized dosing based on AMH and body weight reduces the risk of OHSS while maintaining or improving oocyte yield. Furthermore, personalization enhances patient experience and adherence, as treatment burden and side effects are minimized. By addressing variability in ovarian response, personalization ensures equitable outcomes across diverse patient populations, including those with diminished ovarian reserve or polycystic ovary syndrome (PCOS). In conclusion, personalization of ovarian stimulation represents a paradigm shift in ART, emphasizing efficacy, safety, and patient-centered care. By tailoring protocols to individual biological and clinical characteristics, clinicians can maximize reproductive outcomes while minimizing complications. As ART continues to evolve, personalized OS will remain central to advancing precision reproductive medicine and optimizing both short-term success and long-term patient satisfaction.

DOES OBESITY REDUCE FERTILITY AND ART SUCCESS RATES?

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The concurrent and rapidly increasing prevalence of both obesity and infertility has prompted hypotheses suggesting a link between obesity and reproductive health. This presentation will summarize findings from both individual studies and meta-analyses that have explored the relationship between obesity and reproductive outcomes. The primary objective is to provide an overview of how obesity influences the success rates of infertility treatment via in vitro fertilization (IVF). By highlighting current evidence, the presentation aims to support reproductive medicine specialists in counseling patients on achieving a body weight that may enhance the likelihood of successful treatment outcomes. Following the presentation of pathophysiological mechanisms by which excess body weight and obesity may impair fertility in both women and men, the focus will shift to clinical data evaluating the impact of body mass on assisted reproductive technology outcomes. Through a comprehensive and evidence-based approach, this lecture also seeks to enhance the knowledge and counseling skills of healthcare professionals, enabling them to provide individualized, weight-related guidance to patients undergoing fertility treatment, with the ultimate goal of improving reproductive success. The presentation will also briefly highlight novel anthropometric indices that enable a more precise assessment of obesity and its various subtypes, with a particular focus on their potential association with assisted reproductive technology outcomes. By drawing attention to these emerging measures, we aim to stimulate further scientific exploration and offer guidance for future research in this area.

THE FUTURE OF HUMAN-AI COLLABORATION IN ART

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Artificial Intelligence (AI) is no longer a futuristic concept in Assisted Reproductive Technology (ART)- it is happening now, reshaping the landscape of fertility care. Yet, its true potential lies not in replacing human expertise but in elevating it. This presentation will challenge traditional perspectives on AI in ART, revealing how the collaboration between human intuition and machine intelligence can lead to a paradigm shift in reproductive medicine. Imagine an IVF process where every decision- stimulation protocol, embryo selection, treatment timing - is informed by AI-driven predictive analytics, maximizing success rates while minimizing patient burden. AI is already capable of analyzing thousands of cycles, identifying patterns invisible to the human eye, and offering clinicians recommendations backed by data, not just intuition. But can AI truly enhance clinical outcomes without compromising the deeply human aspects of fertility treatment? We will explore real-world case studies showcasing AI's impact on ovarian stimulation, embryo grading, and cycle optimization, as well as its limitations and ethical challenges. Attendees will gain insight into where AI is heading: Will it become the co-pilot of every fertility specialist? Will ART shift towards automation-driven precision medicine? Join us as we dissect the next frontier of AI-human collaboration in reproductive healthcare.

Learning Objectives

By the end of this lecture, participants will:

1. Uncover the power of AI in decision-making – understand how AI transforms stimulation protocols, embryo selection, and cycle management, and why it outperforms traditional approaches.
 2. Explore AI's role as a clinical Co-Pilot – Learn how AI is assisting, not replacing, fertility specialists and how to harness it effectively in patient care.
 3. Analyze real-world applications and limitations – gain insights from AI-driven success stories and cases where AI fell short, helping to set realistic expectations.
 4. Debunk myths and navigate ethical challenges – discuss bias in AI models, patient trust, and regulatory hurdles that shape AI's future in ART.
 5. Envision the future of AI in fertility treatment – dive into emerging innovations such as self-learning algorithms, AI-driven cycle personalization, and predictive reproductive health analytics.
- This lecture will equip attendees with a deep understanding of AI's transformative power in ART- not as a distant possibility but as a practical, necessary evolution in fertility care.*

LONG TERM HEALTH OF WOMEN AND NEONATES AFTER DELIVERY AFTER THE AGE OF 40

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Advanced maternal age is a well-established risk factor for adverse immediate perinatal outcome. However, there does not appear to be a clear cutoff for "advanced" maternal age, probably because the effects of the increasing age occur as a continuum, rather than as a threshold effect. While it is clear that these women have higher rates of diabetes and hypertension- both conditions pose a significant long-term risk for cardiovascular disease, less is known regarding their offspring. In a population-based study, children born to older mothers did not have a significantly different cumulative incidence of long-term pediatric morbidities including cardiovascular, endocrine, neurological, hematological, respiratory and gastro-intestinal morbidities, as compared with the comparison group. Despite the association of advanced maternal age with adverse maternal and immediate neonatal outcomes, there does not seem to be an association with the long-term morbidity of the offspring. Little is known about the perinatal outcomes of women aged 50 years and above. In a population-based cohort study, perinatal outcomes of women aged 50 years and above were compared with pregnancies in women according to maternal age. Pregnancy at the maternal age of 50 years and older was independently associated with higher rates of GDM, cesarean delivery, and lower Apgar scores at 5 minutes; however, most perinatal complications were not higher compared with pregnant women aged 40 to 49 years. These findings suggest that while there is an increased risk of perinatal complications in pregnancies of women aged 40 years or above compared with younger women, there are no significant increased risks in women aged over 50 years.

CAN WE BLAME PREGNANCY COMPLICATIONS IN THE DEVELOPMENT OF AUTISM SPECTRUM DISORDER (ASD)?

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Recent data has provided insight into the association between pregnancy complications and autism spectrum disorder (ASD), unveiling a complex relationship. While the overall risk of having a child with ASD remains relatively low, some studies have suggested that pregnancy and labor and delivery complications might be a risk factor for its development. To gain a deeper understanding, the lecture will explore these associations while carefully adjusting for confounders.

- a. The association between preterm birth (PTB) and ASD remains debated. A population-based cohort revealed a significant association between PTB and ASD (1.6% for <28 weeks vs 0.3% for 28-32 weeks vs 0.8% for 32-37 weeks vs 0.7% for term, $P = 0.036$), using a univariate analysis. However, adjusted results showed no significant association: adjusted hazard ratio = 0.74 (95% CI 0.24-2.34, $P = 0.61$) for <28 weeks, 0.99 (95% CI 0.24-3.99, $P = 0.98$) for 28-32 weeks, and 1.07 (95% CI 0.81-1.43, $P = 0.63$) for 32-37 weeks. Meaning that after controlling for confounders such as gender and ethnicity, no significant association between PTB and childhood ASD diagnosis appears.
- b. Techniques of medically assisted reproduction interact with the embryo at crucial developmental stages, yet their impact on the fetus and subsequent child's health remains unclear. Given



rising infertility rates and more frequent use of fertility treatments, a critical question is whether these methods heighten the risk of autism spectrum disorder (ASD) in children. Offspring from OI and IVF had higher initial ASD rates (2.1% and 1.3%) than natural conceptions (0.6%). In a Cox model accounting for maternal age, ethnicity, and gender, neither OI nor IVF was significantly associated with ASD. Thus it seems that fertility treatments, including OI and IVF, do not exhibit a significant association with heightened ASD risk in offspring.

- c. Controversy exists regarding the association between autism spectrum disorder (ASD) in children whose mother had labor epidural analgesia for their birth, as the few existing investigations have reported mixed findings. Epidural analgesia was more common among high-risk pregnancy groups (including pregnancies complicated with diabetes mellitus, hypertensive disorders, etc). In a Cox model, the association between epidural and ASD lost statistical significance following adjustment for confounders such as maternal age, gestational age, hypertensive disorders, diabetes mellitus, and ethnicity [adjusted hazard ratio = 1.13, 95% confidence interval (CI), 0.96 to 1.34, P = 0.152]. Epidural analgesia is not independently associated with autism spectrum disorder in the children. These findings enhance our knowledge regarding the safety of epidural analgesia and enable patients to make informed decisions about their pain relief techniques during labor.

SHOULD WOMEN WITH PREVIOUS 3RD DEGREE TEAR UNDERGO VAGINAL DELIVERY? NO

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Women who sustained a third- or fourth-degree perineal tear during a previous vaginal delivery (OASIS) face an increased risk of recurrent anal sphincter injury and long-term pelvic floor dysfunction in subsequent vaginal births.

1. Risk of recurrence: The recurrence rate of OASIS in subsequent vaginal deliveries ranges between 5–10%, substantially higher than in primiparous women. Repeat sphincter trauma may further compromise anal continence.
2. Anal incontinence and quality of life: Even if symptoms resolved after the initial injury, a repeat vaginal birth can exacerbate fecal or flatal incontinence, perineal pain, and dyspareunia due to cumulative damage to the external and internal anal sphincters and pudendal nerves.
3. Functional considerations: Endoanal ultrasound and manometry studies demonstrate that many women remain with subclinical sphincter defects or reduced resting/squeeze pressures. Vaginal delivery may worsen these defects.
4. Cesarean section as a preventive strategy: Elective cesarean delivery is recommended for women with: Persistent anal incontinence, Abnormal endoanal ultrasound (sphincter defect), Low anal pressures, Psychological trauma from prior delivery. In such cases, cesarean section avoids further mechanical strain on the sphincter complex and prevents deterioration of continence and pelvic floor function.
5. Evidence basis: Recommend individualized counseling, and emphasize that cesarean section should be considered and often preferred when residual symptoms or sphincter abnormalities exist.

THE GUT MICROBIOME. THE GREAT DIRECTOR OF WOMEN'S HEALTH

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The gastrointestinal tract represents the largest human body surface in contact with the environment. The mucosal barrier is positioned at the body-environment interface and extends for 200-300 square meters, separating gut contents from the largest portion of the whole human immune system (approximately 70%). A Correct balance among luminal contents (diet, microbiota and products of their metabolism), integrity of the mucosa barrier, and an adequate response of the immune system (eubiosis) is the basis for human health. Inadequate diet, abnormal gut microbiota, leaky gut mucosa, and excessive or insufficient immune response (dysbiosis) are the basis for the majority of human diseases ranging from infectious, autoimmune, metabolic and neoplastic diseases to psychiatric

disorders and unhealthy aging. Lack of recognition of this reality (supported by an overwhelming amount of scientific evidence) by practicing physicians can cause severe damage to affected individuals. A simple example of this is the dramatic sequence of events starting with some sort of unrecognized dysbiosis (i.e. chronic constipation from childhood, stress- or infective-induced leaky gut, abnormal gut microbiota with transmucosal translocation), leading to recurrent bacterial infection of the urinary tract, erroneously treated with repeated antibiotic therapies which in turn would lead to mycotic intestinal and vaginal overgrowth, repeated vaginal infections and chronic vaginal inflammation. Thus, nowadays treatment of urogenital inflammation cannot disregard the need of restoring a normal gut mucosa integrity, a normal gut microbiota and a normal activity of gut immune system, relating the use of antibiotics to the exclusive role of symptomatic agents only in cases of severe local pain and burning. Other important aspects of female health associated with dysbiosis include: ovarian, cervical and breast cancer, PCOS and menopause. Osteoporosis, dysmetabolism and inflammaging are also associated with dysbiosis, but can obviously affect also males.

OPTIMAL DATING AND TIMING OF BIRTH IN TWIN PREGNANCY

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Objective: To evaluate the impact of twin dating by ultrasound-measured crown-rump length (CRL) of the larger (CRL-L), smaller (CRL-S) or mean twin measurement (CRL-M) on the rates of preterm birth (PTB) and detection of small for gestational age (SGA) birth. **Design and setting:** A retrospective cohort study in a tertiary fetal medicine centre. **Population or sample:** All twin pregnancies between 1998 and 2023 who underwent ultrasound assessment of first trimester CRL and fetal growth. **Methods:** Data collection included CRL measurement, estimated fetal weight (EFW), pregnancy outcome and birthweight (BW) for each twin. Pregnancies were retrospectively re-dated by CRL-S, CRL-L and CRL-M. The main outcome measures were: SGA <10th centile and extreme PTB rates (<28 weeks). **Results:** In the 1129 twin pregnancies median CRL-S was 61mm (IQR:56.0-66.0) and CRL-L was 63mm (IQR:58.4-68.9) with a mean discordance of 4.0%. Prenatal SGA diagnosis occurred in 19.8% and 23.1% of smaller twins when dated by CRL-S and CRL-L, respectively. When pregnancies were dated by CRL-M versus CRL-S or CRL-L there was no difference in prenatal SGA diagnosis (p=0.275 and p=0.419); SGA at birth (p=0.132 and p=0.325), or extreme PTB (p=>0.999 and p=0.765). **Conclusions:** Dating by the smaller, larger or mean-twin CRL doesn't significantly alter rates of extreme preterm birth, SGA detection or SGA birth. Dating by the mean twin CRL reduces stigmatisation of the smaller twin and retains the utility of accurate gestational age assessment without impacting on clinical outcomes.

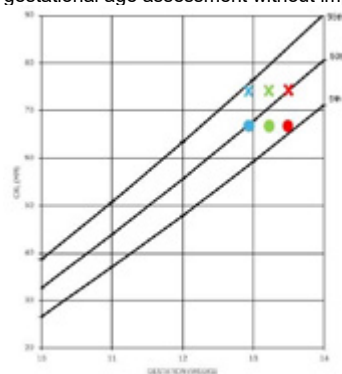


Figure 1. Infographic representation of twin dating by Crown-rump length.

Crown-rump length (CRL) chart illustrating impact of dating by CRL of larger twin (red), smaller twin (blue) and the mean twin CRL (green). Dating by the CRL of the larger twin (x) causes the smaller twin (•) to fall to the lower centiles. CRL centiles obtained from Intergrowth-21st.



IS THERE ROOM FOR OVARIAN TISSUE CRYOPRESERVATION FOR BREAST CANCER PATIENTS? WHAT IS THE RISK?

NO

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The criteria for fertility preservation measures are as follows:

1. High efficacy
2. Low risk of the measure
3. Low long-term risks for the patient
4. Low costs

The following table evaluates these criteria regarding ovarian tissue cryopreservation in breast cancer patients, compared with the alternative measure of ovarian stimulation and oocyte freezing.

	Ovarian tissue freezing	Oocyte freezing	Comment
Efficacy			
Chance of conception	Lower	Higher	
Risks of the measure			
Time needed before start of chemotherapy	Shorter	Longer	Preliminary studies: Longer time needed does not decrease disease free survival rate
Risk of stimulation for tumor growth	No	Yes	Preliminary studies: Ovarian stimulation does not decrease disease free survival rate
Surgical risks of the procedure	Low	Low	
Long term risks			
Reduction of ovarian reserve	Yes	No	
BRCA positivity - PGT possible	No	Yes	
Costs	Moderate-high	Moderate-high	
Summary	3x red, 3x green	3x red, 3x green	

The equal number of red and green criteria indicates that both techniques are comparable. However, if preliminary studies on the low risks of ovarian stimulation for oocyte freezing prove correct, oocyte freezing fulfils more criteria for fertility preservation and is therefore superior. It should therefore be preferred as the primary fertility preservation measure for breast cancer patients. Ovarian tissue cryopreservation should only be considered for breast cancer patients if the two weeks needed for oocyte freezing cannot be provided.



ORAL PRESENTATION 1:

ART/IVF/INFERTILITY: IVF OTHER / EMBRYOLOGY / ANDROLOGY

IVF OTHER

CHANGES AT SINGLE CELL LEVEL OF THE ENDOMETRIUM POST LOCAL ENDOMETRIAL INJURY IN WOMEN WITH RECURRENT IMPLANTATION FAILURE.

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Problem Statement: Recurrent Implantation Failure (RIF) affects up to one in ten women undergoing In Vitro Fertilisation where repeated transfer of top-quality embryos does not result in implantation. Local endometrial injury (LEI) also known as endometrial scratching in selected patients has demonstrated benefit in meta-analyses. However, the mechanism of benefit is still unknown. In this study, single-cell RNAseq of the endometrium of women with RIF before and after LEI was performed to map key perturbations post LEI with an aim to uncover the putative mechanisms for which LEI improve IVF outcomes for women with RIF. **Methods:** Consecutive paired mid-luteal phase (urinary LH +7-9 days) endometrial biopsies were obtained from patients with RIF which was confirmed by an ovulatory level of serum progesterone at time of LEI. The samples were processed immediately into single cells with cell viability above 80%. The scRNA-Seq libraries were generated with 10x Chromium GEM-X Single Cell 5' Reagent Kits v3. Single-cell RNA-seq data analysis was performed with Cell Ranger 9.0.1, R 4.3.3, Seurat package v5.3.0 with integration of data performed with Harmony v1.2.3. **Results:** Ten participants (Ages: 35.0±2.8yrs old) were recruited. Three of the 10 participants achieved pregnancy. Single cell analyses were performed for the seven matched endometrial samples. After computational quality control and integration of transcriptomes, we obtained 141,473 endometrial single-cells transcriptomes. Mesenchymal cells accounted for 60 to 87% of the cells, followed by immune (9-25%), epithelial (1-18%) and endothelial cells (2%). Across the seven paired samples, 6 genes (PRELID1, HSPA1A, THSD7A, HSPA1B, NFKBIA, SYNE2) were more than two-fold downregulated in the second LEI. Reduced expression of TIMP-3 and IGF-2 was also found after LEI but only within the pregnant group (n=2). **Conclusion:** In this study, we showed that there are differential gene expression of genes involved in progesterone signalling and decidualization pathway at the single cell level. More in depth mapping of the key differences, including receptor-ligand interactions in both stromal and other cell types in the endometrium after LEI in RIF will enable detailed understanding of key mesenchymal, immune and epithelial cell compartments governing implantation events.

AI-POWERED SYSTEM FOR AUTOMATED NORMAL SPERM MORPHOLOGY ANALYSIS

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Problem statement: Accurate assessment of sperm morphology is a critical component of male infertility evaluation, yet conventional manual analysis remains time-consuming, subjective, and prone to inter-observer variability. In this study, we developed an artificial intelligence (AI)-based technology designed to automatically identify and classify normal sperm morphology from microscopic images. **Methods:** A dataset of 3,775 sperm images obtained from 16 infertile males was collected and annotated by five experienced embryologists in

accordance with the WHO 6th edition criteria. Each image was finally labeled as normal only when at least three of the five embryologists agreed, resulting in 4% of all samples being annotated as normal. To address the class imbalance, we applied data augmentation to normal sperm images while preserving their original morphological features using flips and rotations. The proposed AI system consisted of three components: (1) a sperm localizer based on a YOLO (You Only Look Once) model, (2) a feature extractor combining a U-Net and ResNet (Residual Network), and (3) a final classifier implemented with a CNN (Convolutional Neural Network) layer. The system was trained and evaluated with a standard train (70%): validation (15%): test (15%) split, with early stopping and systematic hyperparameter tuning. **Results:** The system exhibited distinct performance patterns depending on system configuration. A baseline without a feature extractor and data augmentation achieved very high precision (0.874) but extremely low recall (0.223), resulting in a conservative decision to classify nearly all samples as abnormal. In contrast, integrating a U-Net with a ResNet backbone as a feature extractor increased recall (0.479) for normal sperm images but reduced precision (0.485), leading to more false positives. **Conclusion:** This technology holds potential as a supportive tool in clinical andrology laboratories, enabling standardized, rapid, and objective sperm morphology evaluation. However, severe class imbalance continues to hinder precision, and the quality of annotation remains fundamentally dependent on the subjectivity of assessment. Given that the current system serves as a proof of concept, it is necessary to continue refining the model and exploring alternative architectures to achieve more stable performance. Further validation in larger, multi-center datasets is underway to facilitate clinical application.

HOW AI IS REDEFINING FERTILITY FRONTIERS

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AI has influenced the way we assess sperms, oocytes and embryo assessment. This talk presents a synopsis on what is offered in a modern IVF clinic. Patient survey indicate that having access to visual information through their app would have had a positive impact in their understanding of IVF treatment and greatly reduce stress throughout their fertility treatment. Adding 3D morphology and AI allows us to identify the right embryo to put back and increases the chances of implantation. **Methods:** Data collected from AI software for prediction purposes using scoring for sperms eggs and embryos. **Results:** Comparing morphology, Time Lapse, PGT-A, AI proved its potential use and application to predict euploidy. **Conclusion:** AI is non invasive , consistent and timely tool that we can use to increase potentially LBR.

EMBRYOLOGY

THE NEW VITRIFICATION AND WARMING PROTOCOLS: WHEN "RAPID" IS NOT REALLY RAPID – A CALL TO AUTHORS, RESEARCHERS, EDITORS, AND MANUFACTURERS.

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Problem statement: Recently, new vitrification and warming protocols have been introduced to shorten handling time and reduce exposure to potentially toxic cryoprotectants (CPAs). These are often described as "rapid" or "ultra-fast", but these terms are misleading. In cryopreservation, speed-related terms traditionally describe cooling and warming rates, not the duration of CPA exposure. Referring to these protocols as "rapid" suggests an increase in thermal transition speed from cryogenic (-196 °C) to body temperature (37 °C) or vice versa. However, most protocols simply reduce steps or CPA exposure time. Precise language is crucial to ensure clear communication and accurate data interpretation, and proper clinical practice. **Methods:** Studies of interest were selected from an initial cohort of 697 potentially relevant records retrieved. PubMed was systematically searched for peer-reviewed original papers and reviews identified by keywords and medical subject heading (MeSH) terms: "rapid" OR "fast" OR "ultra fast" OR "shortened" OR "single step" AND "warming" OR "dilution" OR "elution" OR "vitrification" AND "blastocyst" OR "oocytes" OR "embryo". We calculated the proportion of published studies on new warming/vitrification protocols that included the terms rapid, fast, or ultra-fast in their titles or abstracts, relative to the total number of publications on the topic. **Results:** A total of 14 studies were included,



of which 9 (64.2%) used the terminology rapid, fast, or ultra-fast in their titles or abstracts.

Conclusions: While innovation in cryopreservation protocols is welcome and necessary, it must be accompanied by equally rigorous attention to the terminology used. The terms "rapid" and "ultra-fast" should apply only when cooling or warming rates are truly increased. Protocols that modify only CPA exposure or skip steps should instead be referred to as "shortened protocols". It is time for authors, researchers, editors, and manufacturers to adopt terminology that accurately describes the specific protocol being employed.

A COMPARISON OF SURVIVAL RATE BETWEEN BIOPSIED AND NON-BIOPSIED BLASTOCYSTS POST-VITRIFICATION: IS BLASTOCOEL COLLAPSE STILL RELEVANT?

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Problem statement: At the KKIVF Centre, KK Women's and Children's Hospital, Singapore, pre-vitrification collapse of the blastocoel in blastocysts is neither routinely offered nor performed. However, an observational trend suggests that the post-thaw survival rate of frozen non-biopsied blastocysts without collapse of blastocoel appears to be lower compared to that of biopsied blastocysts (blastocoel collapsed). This raises an important question: Does artificial blastocoel collapse prior to vitrification still play a critical role in improving blastocyst survival rates post-warming? **Methods:** This retrospective study analysed frozen embryo transfer (FET) cycles conducted at the KKIVF Centre between 2020 and 2024. Only cycles involving blastocyst transfers were included in this analysis. Patients were categorised into two groups: (a) Group A: Transfers using non-biopsied blastocysts (without collapse of blastocoel) and (b) Group B: Transfers using biopsied blastocysts (blastocoel collapsed). The primary outcome assessed was post-thaw blastocyst survival. Statistical comparison between groups was performed using the Chi-square test, with a significance threshold set at p0.05. **Results:** During this five-year period, a total of 6309 FET cycles were performed, of which 5029 cycles involved blastocyst-stage embryo transfers. A total of 6390 blastocysts were warmed: 6267 from Group A and 123 from Group B. Post-thaw survival of Group B (97.56%, 120/123) was significantly higher than Group A (91.43%, 5730/6267), p0.05. Additionally, 108 FET cycles in Group A were cancelled (2.2%), whereas none were cancelled in Group B. **Conclusion:** The improved survival observed in the Preimplantation Genetic Testing group (Group B) may be attributed to blastocoel collapse induced during the biopsy procedure. This finding raises the possibility that blastocoel collapse, even when not performed intentionally for vitrification, may enhance cryosurvival. Given the higher survival in the biopsied group, re-evaluating current vitrification protocols to consider routine blastocoel collapse prior to freezing may be warranted, even in non-biopsied blastocysts. While this retrospective data suggests a correlation between blastocoel status and survival, prospective studies are needed to confirm whether artificial collapse directly contributes to improved post-warming outcomes.

BACK TO THE ROOTS: STANDARD WARMING BETTER PRESERVES CYTOSKELETAL INTEGRITY AND MITOCHONDRIAL MASS THAN SHORTER PROTOCOLS IN OOCYTES CRYOPRESERVED WITH STANDARD VITRIFICATION

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Problem statement: Do shortened (SW) or ultra-shortened (USW) warming protocols have clinical applicability for oocytes cryopreserved using standard vitrification (SV)? Recent studies have shown that SW/USW protocols yield outcomes comparable or superior to standard (STD) methods. However, most studies have combined shortened vitrification with warming protocols; therefore, further research is needed to evaluate the effectiveness of SW and USW protocols on oocytes

cryopreserved with SV. **Methods:** This prospective sibling study involved 436 mature human oocytes. Experiment-1 (314 oocytes) compared STD and SW (2 minutes at 37°C) protocols, while Experiment-2 (122 oocytes) compared SW and USW (1 minute at 37°C) protocols. In the end, a pooled analysis combining SW oocytes from both experiments was performed to compare STD, SW, and USW. Oocyte survival was assessed 2 hours post-warming. Sub-analyses included spindle configuration (n=78), spindle morphometry [length (n=57), width (n=64), and pole (n=58)], chromosomal distribution (n=92), and mitochondrial mass (n=67). **Results:** In Experiment-1, no significant differences were observed in survival rates (p=0.27) or chromosomal distribution (p=0.25). However, a non-significant trend toward reduced normal spindle configurations was observed in the SW group (p=0.09). In Experiment-2, no significant differences were observed in survival rates (p=0.30). The USW group showed a significant reduction in normal chromosomal distribution (p=0.03) and a non-significant trend toward reduced normal spindle configuration (p=0.25). In the pooled analysis, significant differences were observed in chromosomal distribution between STD and USW (p=0.0008), in spindle configuration between STD and SW (p=0.03), and between STD and USW (p=0.001). Spindle-morphometry analysis showed that SW-warmed oocytes had longer spindles (Experiment-1, p=0.03), while USW and SW-warmed oocytes exhibited wider spindle poles (Pooled analysis, p=0.02, p=0.05, respectively) when compared to the STD group. Mitochondrial mass was significantly reduced in the SW compared to the STD group (p0.001). No significant differences were observed between STD and USW (p=0.10) or between SW and USW (p=0.07). **Conclusions:** Although comparable survival rates were observed, the cytoskeletal abnormalities observed in SW or USW protocols may have significant adverse effects on oocyte developmental competence. These findings highlight the need for caution and further investigation regarding the clinical use of SW/USW protocols for SV-cryopreserved oocytes.

LOW AMH DOES NOT PREDICT BLASTOCYST UTILIZATION IN WOMEN UNDER 35: A RETROSPECTIVE COHORT STUDY

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Problem Statement: Young women with low Anti-Müllerian Hormone (AMH) levels often receive discouraging In Vitro Fertilization (IVF) prognosis, yet the relationship between AMH and blastocyst utilization across age groups remains uncertain. This study clarifies whether AMH correlates with embryo utilization, particularly in young patients.

Methods: This retrospective cohort study analyzed 205 IVF cycles from January 2023 to May 2025. Patients were stratified by AMH: low (1.5 ng/mL, n=62) and high (1.5 ng/mL, n=143), with age sub-stratification (≤35, 36-39, ≥40 years). Serum AMH was measured using electrochemiluminescence immunoassay during early follicular phase. Controlled ovarian hyperstimulation used gonadotropin releasing hormone (GnRH) Antagonist protocols with individualized gonadotropin dosing. Mature oocytes underwent intracytoplasmic sperm injection (ICSI), with fertilization confirmed by two pronuclei (2PN) presence at 16-18 hours. Embryos were cultured in single-step media (6% CO₂, 5% O₂, 37°C) until days 5-6. Blastocyst quality was assessed using Gardner grading; only grade ≥3BB blastocysts were considered for utilization (blastocysts suitable for transfer or cryopreservation). The primary outcome was utilized blastocyst rate, calculated as the number of ≥3BB blastocysts divided by a total of 2PN embryos. **Results:** Across all age categories (P0.5 in all comparisons), overall utilized blastocyst rates were virtually identical between low and high AMH groups (49.7% vs 50.2%, P=0.950). In women ≤35 years, rates were similar (45% vs 49%, P=0.800). Women aged 36-39 years with low AMH showed superior outcomes (67% vs 57%, P=0.600). No differences were observed in women ≥40 years (48% vs 42%, P=0.800). Chi-square analysis revealed no statistically significant differences across all age groups.

Conclusion: This study demonstrates no statistically significant association between serum AMH levels and utilized blastocyst rates across all age groups. Age-dependent relationships suggest oocyte quality, rather than quantity, primarily determines embryo utilization success. AMH should be interpreted cautiously as a prognostic marker, with age serving as a more reliable predictor. However, male factor contributions to infertility were not assessed in this study. Young women



with low AMH should receive reassuring counseling regarding IVF prospects.

Disclosure of Interest: The authors declare no financial or other conflicts of interest in relation to this work.

PREDICTIVE FACTORS OF EMBRYO EUPLOIDY IN OOCYTE PRESERVATION: INFLUENCE OF VITRIFICATION AGE, AMH, ANTRAL FOLLICLE COUNT, AND STORAGE DURATION

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Problem statement: Maternal age at vitrification is a crucial determinant of oocyte quality and embryo chromosomal integrity. Although ovarian reserve markers such as AMH and AFC are widely used in clinical practice, their predictive value for embryo euploidy remains uncertain. Concerns also persist about the impact of prolonged oocyte storage on reproductive potential. This study aimed to evaluate the influence of vitrification age, ovarian reserve markers, and storage duration on embryo euploidy rates. **Methods:** We conducted a retrospective cohort study including patients who underwent oocyte vitrification, warming, and embryo biopsy at a single fertility center between 2015 and 2023. Data collected included age at vitrification, AMH, AFC, number of warmed oocytes, and euploid embryo outcomes. Statistical analyses included correlation tests, ANOVA, and logistic regression models to identify significant predictors of embryo euploidy. **Results:** Euploidy rates declined with increasing vitrification age: 66.7% (30 years), 36.1% (30–34 years), 30.1% (35–37 years), 29.1% (38–40 years), and 4.6% (41–43 years). The steepest decline occurred after age 35, with a dramatic reduction in the 41–43 group. The number of oocytes required per euploid embryo increased with age: 8.5 (30 years), 9.6 (30–34), 15.1 (35–37), 17.9 (38–40), and 152 (41–43). A positive correlation was observed between the number of warmed oocytes and probability of obtaining a euploid embryo ($p=0.014$). AMH and AFC did not significantly predict euploidy ($p=0.092$ and $p=0.170$). Storage duration showed no association with euploidy probability ($p=0.935$), indicating that vitrification time does not compromise chromosomal integrity. **Conclusion:** Maternal age at vitrification is the strongest predictor of embryo euploidy, emphasizing the importance of early fertility preservation. Ovarian reserve markers such as AMH and AFC do not reliably predict euploidy probability, while storage duration does not affect outcomes, supporting the safety of long-term cryopreservation. These findings provide important evidence for patient counseling and reproductive planning.

Disclosure of Interest: The authors declare no conflicts of interest.

Keywords: Oocyte vitrification; Embryo euploidy; Maternal age; Fertility preservation; Cryostorage; AMH; Antral follicle count

ANDROLOGY

SOCIAL SILENCE: PSYCHOLOGICAL BURDEN AND PERCEPTION OF MASCULINITY IN MALE INFERTILITY

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Problem statement: Infertility can be an emotionally complex and challenging process for both men and women, regardless of the underlying cause. However, historically, research into infertility has focused more on women, with male infertility being underrepresented. This has resulted in limited understanding of the psychosocial effects experienced by men and the challenges they encounter. In many cultures, however, masculinity is closely linked to fatherhood, productivity, and social status. Consequently, being unable to become a biological father can cause men to question their masculine identity and lead to feelings of inadequacy. This study aims to examine the psychosocial dimensions of male infertility and its impact on perceptions of masculinity. **Methods:** A literature review was conducted using the keywords 'male infertility', 'psychological impact' and 'gender roles' in the PubMed, ScienceDirect, Web of Science, Wiley and Springer databases between 2020 and 2025. A total of 472 studies were identified. 32 studies that were published in English, had the full text available, and were relevant to the topic were selected for review. **Results:** The examined studies reveal that men experience feelings of vulnerability, loneliness, failure, and futility during the infertility process. They are reportedly reluctant to share their experiences, tending

towards avoidance and internal concealment. Male infertility is perceived as a failure of masculinity, and is accompanied by silence and emotional suppression. Social stigmatisation has destructive and alienating effects on individuals' lives. Negative emotions such as depression, hopelessness, anger and loss of self-confidence have been observed, as well as impulsive behaviours, relationship problems and social withdrawal. **Conclusion:** Male infertility should be assessed in terms of its biological, psychosocial and identity dimensions. There should be an increase in mental health services for men, with approaches that are appropriate to male identity being adopted. Psychological counselling should be integrated into infertility treatment programmes, and practitioners should receive training in this area. Future research should focus on the long-term effects and support strategies. Furthermore, culturally sensitive stress management and awareness programmes should be developed.

Keywords: Male Infertility, Psychological Impact, Gender Roles

ORAL PRESENTATION 2:

FETOMATERNAL MEDICINE: LABOR AND DELIVERY / FMM OTHER / HIGH RISK PREGNANCY

LABOR AND DELIVERY

RELATIONSHIP BETWEEN FEAR OF BIRTH AND PRENATAL BREASTFEEDING SELF-EFFICACY

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Problem Statement: Fear of childbirth is an anxiety linked to the unknown aspects of pregnancy and childbirth, leading to stress and anxiety. Women making the decision to breastfeed their babies during the prenatal period will positively affect the development of prenatal breastfeeding self-efficacy and facilitate the initiation of breastfeeding in the earliest postpartum period. This study aims to determine the relationship between prenatal breastfeeding self-efficacy and childbirth fear among pregnant women. **Methods:** The research is descriptive and correlational type. The study sample consisted of 271 primiparous pregnant women who applied to a university hospital. Data were collected using a face-to-face interview technique using a questionnaire, prenatal breastfeeding self-efficacy scale, and wijma birth expectation/experience scale (version A). In the analysis of the data, mean, standard deviation, minimum and maximum values, percentages, kolmogorov-smirnov test, independent sample t test, one-way analysis of variance (forward analysis tukey HSD), pearson correlation analysis, and linear regression analysis were used. **Results:** The results indicated that the average score obtained from the Prenatal Breastfeeding Self-Efficacy Scale was 82.62 ± 12.78 , and from the Wijma Delivery Expectancy/Experience Scale (Version A), it was 51.11 ± 20.89 . The level of childbirth fear among the participants was found to be low. There was a very weak negative correlation between the scores from the Prenatal Breastfeeding Self-Efficacy Scale and the Wijma Delivery Expectancy/Experience Scale, which was statistically significant ($p=0.0000$). **Conclusion:** In conclusion, it was determined that as the fear of childbirth decreases in pregnant women, prenatal breastfeeding self-efficacy increases. Establishing and enhancing pregnant women's perceptions of prenatal breastfeeding self-efficacy in a healthy manner, and ensuring a successful transition to the breastfeeding process in the postpartum period, are crucial for increasing readiness for childbirth and reducing childbirth fears.

Keywords: Breastfeeding, Fear of Childbirth, Prenatal Breastfeeding.

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A CASE OF PLACENTA PREVIA PERCRETA LEFT IN SITU

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Abstract Introduction: Placenta percreta is an obstetric emergency often associated with massive hemorrhage and emergency hysterectomy. **Case presentation:** We present the case of a 36-year-old woman, gravida 4, para 2, with placenta percreta managed by an alternative approach: the placenta was left in situ and a delayed hysterectomy was performed. **Conclusions:** Further studies are needed to develop the most appropriate management option for the most severe cases of abnormal placentation. Delayed hysterectomy may be a reasonable strategy in the most severe cases.



CROSS-SECTIONAL STUDY ON INDUCTION METHODS FOR THIRD-TRIMESTER STILLBIRTHS IN A HIGH-RISK REFERRAL CENTRE IN INDIA

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Aim: To know the various induction methods used for 3rd trimester stillbirths, induction delivery interval, success of induction methods and mode of delivery. **Materials and methods:** Prospective observational study of pregnant women admitted with 3rd trimester stillbirths done from 1st of January 2022 to 31st of December 2022. Women of all parity of more than 28 weeks of pregnancy with Bishop's score of ≤ 6 were included. Women already in labor, intrapartum stillbirths and multiple gestation were excluded from the study. Induction methods included Misoprostol (PGE1) only, Dinoprostone (PGE2) only, Intracervical Foley's catheter (mechanical) only and a combination of these. Frequency of use of inducing agents, Induction delivery interval, mode of delivery and adverse events were noted. **Results:** 170 pregnant women were included in the study. Out of 170 women who underwent induction, vaginal delivery was achieved in 161 (94.8%) cases and 9 (5.2%) cases required cesarean delivery. 93% of induced cases delivered within 24 hours. Induction delivery time was 10.5 hours with PGE2-only method and 12.8 hours with PGE1-only method. Combination methods were required more often in primigravida and at earlier gestational ages (less than 36 weeks). **Conclusion:** Early induction of 3rd trimester stillbirths is an acceptable option. Induction is associated with successful deliveries within 24 hours, with less morbidity. More data is required on standard induction protocols in this group of women for ideal stillbirth care. **Clinical significance:** Uniform induction protocols are lacking in 2nd and 3rd trimester stillbirth management. Women need to be counseled regarding expectant management vs induction based on high-risk factors and the success of induction. The current study will shed light on various induction methods used in 3rd trimester stillbirths at a high-risk referral center.

ASSOCIATION BETWEEN MATERNAL DIETARY INFLAMMATORY INDEX TRAJECTORIES DURING PREGNANCY AND OFFSPRING ALLERGIC DISEASE RISK: THE MODIFYING ROLE OF ADVERSE PREGNANCY OUTCOMES

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Problem statement: The global prevalence of allergic diseases is rising, with infants and young children bearing the heaviest burden. Pregnancy is a critical period for fetal organ development, during which maternal nutrition, health and childbirth conditions may influence the risk of offspring allergic disease. This study investigates the association between maternal prenatal dietary inflammatory index (DII) trajectories and offspring allergic diseases, considering the modifying effects of adverse pregnancy outcomes, including diabetes in pregnancy (DIP), hypertension (HDP), preterm, cesarean section, macrosomia, and low birth weight (LBW). **Methods:** Using data from the Jiangsu Birth Cohort Study, we analyzed singleton births from April 2014 to December 2022, with follow-ups at 42 days, 6, 12, and 36 months. DII was calculated from first, second, and third trimester dietary data. Outcome included allergic disease occurrence in offspring within specified periods. Data on adverse pregnancy outcomes were extracted from electronic health records. Latent growth mixture modeling identified DII trajectories, and multivariable logistic regression assessed associations with offspring diseases, including interaction terms between DII trajectories and adverse pregnancy outcomes to assess their multiplicative interactions. Dummy variables were created based on DII trajectory groups and the presence or absence of adverse pregnancy outcomes to evaluate their additive interactions. **Results:** Of 3,244 mother-child pairs, two DII trajectory groups were identified: a pro-inflammatory sustained group (91.03%) and a pro-inflammatory reversal group (8.97%). Excluding 540 pairs due to missing data on offspring allergic diseases, the pro-inflammatory sustained group showed significantly higher risks of any allergy (OR=1.59, 95% CI: 1.06–2.24) and eczema (OR=1.60, 95% CI: 1.06–2.26) within 6 months. A significant multiplicative interaction was found between DII trajectories and preterm for any allergy within 6 months (OR=11.16, 95% CI: 1.55–231.77, P=0.039) and eczema within

6 months (OR=11.04, 95% CI: 1.54–229.19, P=0.040). No significant multiplicative or additive interactions were observed with other adverse pregnancy outcomes. **Conclusion:** This cohort study demonstrates heterogeneity in maternal DII trajectories during pregnancy and suggests that maternal diet may affect offspring allergic disease risk. Assessing both maternal prenatal diet and preterm risk could serve as an intervention strategy for preventing allergic diseases in offspring.

THE EFFECT OF BIRTH BELIEFS OF PRIMIPAROUS PREGNANT WOMEN ON PRENATAL BREASTFEEDING SELF-EFFICACY

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Problem statement: In recent years, the impact of birth beliefs on breastfeeding self-efficacy has gained increasing attention. However, the number of studies on this subject in the literature remains limited, and particularly, research focusing on primiparous women is even scarcer. This study aims to examine the impact of primiparous women's beliefs about birth on their prenatal breastfeeding self-efficacy. **Methods:** This study employed a cross-sectional and correlational design. The research sample consisted of 250 primigravida women over the 28 and above week of pregnancy. Data were collected using the Birth Belief Scale and the Prenatal Breastfeeding Self-Efficacy Scale. The Birth Belief Scale assesses pregnant women's perception of birth as either a natural or a medical process. The data were analyzed using descriptive statistics, Pearson correlation, and linear regression analysis. **Results:** The participants had a mean age of 25.74±4.24 years, and 36.4% were high school graduates. Women have higher beliefs that birth is a natural process. The mean score for the natural process was 4.27±0.61, while the mean score for the medical process was 3.80±0.59. The average score on the Prenatal Breastfeeding Self-Efficacy Scale was 81.60±7.41. A significant positive relationship was found between the belief in birth as a natural process and prenatal breastfeeding self-efficacy (p<0.05). Belief in the natural process was a significant predictor of Breastfeeding self-efficacy (R=0.246, R²adjusted=0.057, F(1,248)=16.011; p<0.001). Belief in natural process explained 5.7% of the change in Breastfeeding Self-efficacy. No effect of the medical process subscale on breastfeeding self-efficacy was found. **Conclusion:** Primiparous women generally perceive birth as a natural process. As their belief in the natural process of birth increases, so does their prenatal breastfeeding self-efficacy.

ADVANCEMENTS IN AUTOMATIC ASSESSMENT OF INSTRUMENTAL DELIVERY FEASIBILITY: EVALUATING THE ROLE OF MATERNAL PARITY

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Problem Statement: Fetal occiput position during labor is a crucial factor guiding the choice between cesarean section and instrumental vaginal delivery. However, clinical decision-making in this context is highly operator-dependent and prone to variability. To address this challenge, an automatic algorithm has been developed to estimate the feasibility of instrumental delivery using three transperineal ultrasound (TPU)-derived parameters: occiput position, head-perineum distance, and midline angle. These inputs are integrated into a color-coded classification system: from green (high chances of success) to yellow (intermediate chance of success) to red (low chance of success). While the algorithm has shown promising predictive accuracy, its robustness in different obstetric subgroups requires further validation. In particular, maternal parity significantly influences labor dynamics: nulliparas are typically at higher risk for prolonged labor and operative interventions, whereas multiparas usually progress more efficiently. **Methods:** A retrospective analysis was conducted on 180 women in the second stage of labor, stratified by parity: 122 nulliparas, 48 primiparas, 7 secundiparas, and 3 women with parity 3. The algorithm classified delivery feasibility (green, yellow, red) based on TPU-derived parameters. Predictions were compared with actual delivery outcomes (successful instrumental vaginal delivery or cesarean section). Diagnostic performance was assessed through sensitivity, specificity, accuracy, and Cohen's Kappa coefficient. Intergroup comparisons were



performed to analyze variability according to parity. **Results:** The algorithm achieved high overall predictive performance, with accuracy of 0.86, sensitivity of 0.78, specificity of 0.95, and Cohen's Kappa of 0.80. Intergroup variability was minimal: accuracy ranged from 0.84 in nulliparas to 0.87 in secundiparas (Δ accuracy 3%). Sensitivity was slightly lower in nulliparas (0.75) compared with multiparas (0.79 in primiparas; 0.77 in secundiparas; 0.76 in parity 3), with Δ sensitivity 4%. Specificity remained consistently high across all groups, from 0.93 in nulliparas to 0.96 in primiparas (Δ specificity 3%). **Conclusion:** The algorithm demonstrated reliable and stable performance across parity groups. Its predictive accuracy was only marginally influenced by parity, underscoring robustness and generalizability. By offering an objective and consistent assessment of instrumental delivery feasibility, the tool has the potential to reduce subjectivity, optimize decision-making, and improve safety in operative obstetrics across diverse maternal populations.

THE EFFECT OF MIDWIVES EMPATHIC APPROACH ON LABOR PAIN EXPERIENCED BY PREGNANT WOMEN AND POSTPARTUM COMFORT

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Problem statement: This research was conducted to determine the effect of midwives empathetic approach on the labor pain experienced by pregnant women and postpartum comfort. **Material and Methods:** The sample of this descriptive type research consisted of 47 midwives working in the Erzurum City Hospital maternity ward between 01.05.2023 and 01.11.2024 and 352 primiparous puerperants who gave birth with the help of the midwives there. Data were collected using the "Midwife Introductory Information Form", "Midwifery Empathy Scale (MES)", "Pregnant Introductory Information Form", "VAS" and "Postpartum Comfort Scale (PCS)". The data were collected by the researcher on two study groups: midwives working in the delivery room and primiparous pregnant women assisted by these midwives during delivery. In order to collect data, the midwives were asked to fill out the introduction form and the EEÖ. When the pregnant women came to the delivery room, the introduction form was applied, and the VAS was filled out during the latent and active phases of labor. The Postpartum Comfort and VAS scales were filled out before the mother was discharged after delivery. The data were analyzed using the SPSS for Windows 22 program. **Result:** The average score received by midwives from MES and pregnant women from PCS was found to be low. The sociocultural comfort sub-dimension average of MES and PCS was found to be negatively significant. A meaningful relationship was found between the physical and psychospiritual comfort sub-dimensions of MES and PCS and VAS latent, VAS active, VAS postpartum period. A negative relationship was found between the socio-cultural comfort sub-dimension of PCS and the VAS postpartum period. And It has been stated that there is a negative relationship between the total score of PCS and the VAS active and VAS postpartum periods. **Conclusion:** It is thought that midwives who exhibit an empathetic approach have an impact on the comfort level of pregnant women. It is thought that pregnant women whose comfort level increases feel less pain.

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FMM OTHER

CAN WE MOVE TOWARDS A UNIVERSAL TERMINOLOGY FOR GESTATIONAL AGE?

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Whether in practice, or in literature review, there is sometimes difficulty to have a clear understanding on the way the due date was fixed and the gestational age counted. Pregnant women tend to assess the gestational age in terms of months, while in the literature, authors assess it in terms of weeks, not mentioning whether the count started from the first day of the last menstrual periods (LMP) or from the estimated date of conception, thus using interchangeably weeks of amenorrhea or weeks of pregnancy duration, under the terminology of gestational weeks. Moreover, due date or the estimated date of delivery (EDD) may differ from one country to another. For instance, to take only two examples, in France it is calculated on the basis of a 41 weeks duration while in Switzerland it is calculated on the basis of a 40 weeks duration. It could

be useful to clarify this terminology, to agree on two main variables in order to make it universal: (a) the estimated date of conception EDC, (b) the gestational age in weeks of amenorrhea or months of pregnancy. The estimated date of conception can be assessed using three important data: (a) the first day of LMP taking into consideration the duration and the regularity of the cycles, (b) an ultrasound at or before 10 weeks amenorrhea, considering the error margin, (b) any additional data that can add accuracy to the date of the EDC such as ovulation tests, sexual activity around the ovulation period. The obstetrician can with the combination of this information define an EDC which will be the first day used to count the gestational age in months. In order to introduce the assessment in weeks, the physician would consider that the "virtual" first day of LMP is 14 days earlier than the EDC, and this day, which might or not happen to be the real first day of LMP, will be the first day used to count the gestational age in weeks of amenorrhea. The due date and the follow-up for a post-term pregnancy before 42 weeks of amenorrhea, are beyond the scope of this abstract.

A PREDICTIVE MODEL FOR EXTERNAL CEPHALIC VERSION IN A PORTUGUESE POPULATION

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Problem Statement: Breech presentation occurs in 3-4% of term pregnancies and is associated with increased maternal and perinatal morbidity. External cephalic version (ECV) is a safe, cost-effective procedure that reduces rates of cesarean and vaginal breech delivery. Reported success rates vary widely (22-76%), depending on maternal, fetal, and procedural factors. Predictive models may improve counseling and clinical decision-making. This study aimed to develop a predictive model for ECV success in a large Portuguese cohort. **Methods:** Retrospective observational study including all women who underwent ECV between February 1997 and July 2025 at a tertiary hospital. Sociodemographic, obstetric, and pregnancy data were collected. The primary outcome was ECV success, defined as immediate conversion to cephalic presentation. Missing data were imputed in SPSS. The prediction model was developed using backward stepwise logistic regression (Wald). Model performance was assessed through calibration (Hosmer–Lemeshow test, Nagelkerke's R^2) and discrimination (ROC curve, AUC, sensitivity, specificity). Analyses were performed with IBM SPSS Statistics version 30, with statistical significance set at $p < 0.05$. **Results:** We included 684 cases, with a 45.5% ECV success rate. The final logistic regression model was expressed as $Z = 8.113 + 0.389x(\text{Parity}) + 0.223x(\text{Normal amniotic fluid}) + 1.828x(\text{Increased amniotic fluid}) + 0.325x(\text{Fundal placenta}) + 0.618x(\text{Lateral placenta}) + 0.748x(\text{Posterior placenta}) - 1.616x(\text{Longitudinal fetal position}) + 0.001x(\text{Estimated fetal weight}) - 0.206x(\text{Gestational age at ECV}) - 0.041x(\text{BMI})$, with probability (P) calculated as $P = 1/(1 + e^{-Z})$. The model showed acceptable calibration, as indicated by the Hosmer–Lemeshow test ($\chi^2 = 14.44$, $df = 8$, $p = 0.071$), explained 13.3% of outcome variability (Nagelkerke $R^2 = 0.133$), and had moderate discrimination (AUC = 0.680), with sensitivity of 46.8% and specificity of 80.2%. **Conclusion:** Previous scoring systems, such as Newman–Peacock, were based on smaller cohorts and lacked multivariable modeling. This study presents the first Portuguese predictive model for ECV success, using routine clinical variables to guide individualized counseling. The model showed greater accuracy in predicting failure than success, with moderate discriminative performance, underscoring the need for refinement and external validation before clinical implementation.

THE EFFECT OF THERAPEUTIC TOUCH BASED ON WATSON'S HUMAN CARE THEORY APPLIED TO INFANTS WITH INFANTILE COLIC FOR DIFFERENT DURATIONS ON COLIC SYMPTOMS: RANDOMIZED CONTROLLED STUDY

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Introduction: Infantile colic is a symptom that causes excessive crying and restlessness in infants. Therapeutic touch, a nonpharmacological method, may effectively reduce infantile colic symptoms. This study aimed to evaluate the long-term effect of therapeutic touch based on Watson human care theory, applied to infants with infantile colic for different periods of time, on colic symptoms (crying time, sleep time,



Infant Colic Scale). **Design:** A prospective, parallel three-group randomized controlled design. **Methods:** This study included infants aged 4–8 weeks were diagnosed with infantile colic. Infants were assigned to intervention 1 (n=32), intervention 2 (n=32) and control (n=32) groups using the stratified randomization method. Therapeutic touch was applied three days a week in addition to routine care for one week in the intervention 1 group and for two weeks in the intervention 2 group. The control group received routine care. Data were collected using Mother-Infant Information Form, Crying Time Follow-up Form, Sleep Time Follow-up Form, and Infant Colic Scale (ICS). Infants were followed on the 1st day, 1st, 2nd, 4th, and 8th weeks. Infants were followed on the 1st day, 1st, 2nd, 4th, and 8th weeks. **Results:** There was a statistically significant difference between the groups in terms of primary outcome crying time ($F=222.612$; $\eta^2=0.827$; $p<0.001$), and secondary outcomes sleep time ($F=47.244$; $\eta^2=0.504$; $p<0.001$) infant colic scale total scores ($F=219.247$; $\eta^2=0.825$; $p<0.001$). When the infants in the intervention 1 and intervention 2 groups were compared with the control group infants at all time points, it was determined that the effect size (group*time interaction) was large. However, the 2nd, 4th and 8th week follow-ups of infants in the intervention 2 group were statistically significantly different from the other groups ($p<0.001$). **Conclusions:** Based on the Watson human care theory, it was found that those with more therapeutic touch sessions were more effective in relieving colic symptoms in infants with infantile colic.

Keywords: crying, infant, infantile colic, sleep, therapeutic touch, Watson Human Care Theory

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GESTATIONAL WEIGHT GAIN AND ITS ASSOCIATION WITH PREECLAMPSIA, BLOOD PRESSURE TRENDS AND OBSTETRIC OUTCOMES: A RETROSPECTIVE COHORT STUDY

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Problem statement: Preeclampsia has a significant negative impact on maternal and foetal health. Excessive gestational weight gain (eGWG) is defined as weight gain in excess of recommendations as per the Institute of Medicine guidelines. eGWG is a risk factor for preeclampsia. We aimed to investigate the patterns of gestational weight gain and its relationship to the incidence of preeclampsia, trends in blood pressure and pregnancy outcomes within a hospital network in Sydney, Australia.

Methods: We conducted a retrospective cohort study to assess the patterns of gestational weight gain and its relationship with preeclampsia, blood pressure trends and maternal and foetal outcomes.

Results: 44,852 met the inclusion criteria. 958 (2.14%) patients developed preeclampsia. More patients had eGWG (57%) than those with recommended GWG (rGWG) or inadequate GWG (iGWG). eGWG was associated with increased incidence of caesarean section (35.08%) and postpartum haemorrhage (11.48%). eGWG correlated with increased incidence of preeclampsia (2.61% n=668, $p<0.001$). All patients with preeclampsia and all overweight and patients with obesity had excessive mean GWG per week in trimester 2 and 3. eGWG was associated with increased incidence of caesarean section (35.08% vs 31.72% and 31.2%), postpartum haemorrhage (11.48% vs 11.67% and 9.62%) compared to recommended and insufficient GWG. Higher pre-pregnancy BMI correlated to higher rates of eGWG. Patients with eGWG were less likely to have gestational diabetes compared to rGWG or iGWG (13.21% vs 18.84% vs 33.43%) as well as SGA babies (11.16% vs. 15.2% vs 17.69%). There appears to be a directly proportional relationship between weight and blood pressure - as BMI increased, blood pressure also increased. Patients with preeclampsia had higher blood pressures throughout the pregnancy compared to non-preeclampsia patients. eGWG was associated with higher blood pressure throughout the pregnancy. **Conclusions:** Excessive gestational weight gain appears to increase the risk of developing preeclampsia. Pre-pregnancy overweight and obesity increases risk of excessive gestational weight gain as well as blood pressure and incidence of preeclampsia. In pregnancy, weight appears to have a positive linear relationship with blood pressure.

PRENATAL DETECTION OF COMMON TRISOMIES BASED ON SECOND AND THIRD TRIMESTER ULTRASOUND SCAN

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Problem statement: Routine first trimester aneuploidy screening is widely implemented in developed countries. However, in centers without established first trimester programs, later scans are often the first opportunity to raise suspicion of chromosomal abnormalities. Our center lacks routine first trimester screening; therefore, second and third trimester ultrasound remains an important diagnostic tool. This study aimed to evaluate the performance of later trimester scans in detecting trisomy 21, 18, and 13, and to describe common sonographic abnormalities associated with these syndromes. **Methods:** We conducted a retrospective cohort study of all babies delivered at Prince Sultan Military Medical City between 2017 and 2021 diagnosed with trisomy 21, 18, or 13. Maternal records and prenatal ultrasounds were reviewed to extract abnormal findings, testing uptake, and confirmatory diagnostic results. Data were analyzed using SPSS version 22. Continuous variables were expressed as means (minimum–maximum), and categorical variables as frequencies and percentages. **Results:** A total of 151 babies were born with common trisomies during the study period (126 trisomy 21, 19 trisomy 18, 6 trisomy 13). Among Down syndrome cases, 80 women (63%) had at least one prenatal scan; of these, 50 (63%) demonstrated one or more abnormal ultrasound findings. Isolated findings included structural anomalies, soft markers, growth restriction, abnormal Doppler, or polyhydramnios (27 cases, 54%). The remainder (23 cases, 46%) exhibited multiple abnormalities. Overall, 15 pregnancies (19%) were suspected prenatally to have Down syndrome, but only 12 (15%) underwent confirmatory testing, mostly via cell-free fetal DNA (14%). In Edwards and Patau syndromes, ultrasound abnormalities were universal (100% of cases), with higher rates of diagnostic testing (63% and 60% respectively). Later trimester scans thus showed limited predictive value for trisomy 21 but excellent sensitivity for trisomy 18 and 13. **Conclusion:** Second and third trimester ultrasound reliably identifies trisomy 18 and 13, but is insufficient as a standalone tool for Down syndrome detection. First trimester screening programs should be implemented to enable earlier diagnosis and counseling. Increased public awareness of early prenatal care may further improve detection and support multidisciplinary management of high-risk pregnancies.

Disclosure of Interest: The authors declare no conflicts of interest.

PERINATAL PALLIATIVE CARE AND NURSING

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Problem statement: Perinatal palliative care (PPC) is a family-centred, interdisciplinary model that begins at the time of a life-limiting fetal diagnosis and extends through birth and the early neonatal period. Its aims are to enhance comfort, relieve distress, and honour family values. In practice, PPC can be delivered concurrently with intensive or life-prolonging interventions and requires shared decision-making with families. In Turkey, dedicated PPC pathways remain limited, highlighting the need for standardisation and nurse education. **Methods:** A literature search was conducted for 2015–2025 in PubMed, ScienceDirect, Web of Science, Wiley Online Library, SpringerLink and the Cochrane Library using the keywords "Nursing", "Perinatal Palliative Care" and "Neonatal Palliative Care", combined with Boolean operators. Peer-reviewed, full-text articles and guidelines in Turkish or English were included. Eligible publications were reviewed in full and synthesised thematically.

Results: Findings indicate that PPC functions as a "total care" approach from diagnosis onward; core components include shared decision-making, symptom control (pain, dyspnoea, secretions), feeding and skin care. Nurses play a pivotal role in care coordination, values-based communication, bereavement and spiritual support, and legacy-making practices (e.g., taking hand/footprints or casts; photographing or video recording; recording the heartbeat; preserving mementos—such as a lock of hair, the hospital ID band, or a blanket—in a "memory box"; and facilitating parents' letter-writing or journaling). In Turkey, structured nursing programmes for challenging contexts such as medical termination of pregnancy provide practical grounds for PPC in delivering bad news, grief counselling and the safe integration of cultural/ritual needs. **Conclusion:** PPC is a family-centred, nurse-led model that can be delivered alongside curative therapies. Localising



standard care pathways, strengthening nurse education and embedding ethical/spiritual dimensions into institutional protocols will improve quality. Interdisciplinary collaboration, measurable quality indicators and continuous education are priorities for sustainable PPC implementation in Turkey.

Keywords: Perinatal Palliative Care; Nursing; Neonatal Palliative Care.

THE RELATIONSHIP BETWEEN SELF-EFFICACY AND PREGNANCY-RELATED ANXIETY LEVELS IN WOMEN WITH GESTATIONAL DIABETES

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Problem statement: Gestational diabetes mellitus (GDM) is very commonly-seen in clinical settings, and is potentially harmful to the mother and the fetus as well. GDM patients especially undergoing insulin therapy may have higher levels of anxiety and forced managing GDM. The aim of this study was to determine the relationship between self-efficacy levels in managing gestational diabetes and pregnancy-related anxiety in pregnant women with gestational diabetes. **Methods:** The study was conducted in the obstetrics and gynecology outpatient clinic of a tertiary care hospital. A total of 108 pregnant women diagnosed with GDM and undergoing insulin therapy were included. Data were collected using Participant Identification Form, Self-Efficacy Scale in Gestational Diabetes, and Pregnancy-related Anxiety Scale. Data analysis was performed using SPSS 22. Independent samples t-test, one-way analysis of variance, and Pearson correlation tests were used for statistical analyses. **Results:** The mean age of the pregnant women was 35.7±5.9 years. The mean gestational week was 33.3±3.5. A history of gestational diabetes in a previous pregnancy was reported by 22.2% of the women. Additionally, 22.6% had a family history specifically of GDM. The mean body mass index of the women was 29.2±5.9, and the average weight gain during the current pregnancy was 15.6±7.8 kilograms. A significant negative correlation was found between the scores on the Self-Efficacy Scale in Gestational Diabetes and the Pregnancy-related Anxiety Scale ($p<0.05$). Pregnant women with a high school education or higher had significantly higher self-efficacy scores ($p<0.05$). Women with higher body mass index were found to have lower self-efficacy, and also higher pregnancy-related anxiety ($p<0.05$). **Conclusion:** It was determined that pregnant women with low self-efficacy in managing GDM exhibited higher levels of anxiety related to pregnancy, childbirth, and motherhood. Increased body mass index was found to negatively impact GDM management, and women with lower educational level were less successful in managing their condition. Enhancing self-efficacy in women with GDM who are on insulin therapy may be effective in reducing pregnancy-related anxiety. Therefore, it is recommended that interventions, education, and counseling services be developed and implemented to improve self-efficacy in the treatment management of women with GDM receiving insulin therapy.

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HIGH RISK PREGNANCY

APPLICATION OF SHARED MEDICAL APPOINTMENTS IN PREGNANT WOMEN WITH HYPERTENSIVE DISORDERS: THE POWER OF TEAMWORK

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Problem statement: Shared medical appointments(SMAs) is a patient-centred group consultation model that effectively enhances patients' self-management capabilities, improves disease management outcomes, and increases patient satisfaction. This study aims to evaluate the efficacy of SMAs when applied to pregnant women with hypertensive disorders of pregnancy(HDP). **Methods:** A total of 88 pregnant women with HDP who received obstetric check-ups in a tertiary A-level maternity hospital in Nanjing City from January to October 2023 were conveniently selected as the research subjects. According to the

order of obstetric examinations, 44 pregnant women with HDP from June to October 2023 were selected as an experimental group, and 44 pregnant women with HDP from January to May 2023 were selected as a control group. The experimental group received SMAs management, and the control group received the routine management. The scores of the rate of blood pressure attainment, the incidence of disease progression, the questionnaire on knowledge of HDP, the Hypertension Self-Management Scale, the Pregnancy-Related Anxiety Scale, and the Patient Satisfaction Questionnaire were compared between the 2 groups. **Result:** 41 patients in the experimental group and 39 patients in the control group completed the study. After the intervention, the blood pressure compliance rate of pregnant women with HDP in the experimental group was 95.12%, higher than 79.49% in the control group. The incidence of disease progression was 7.32%, lower than 25.64% in the control group. The score of the questionnaire on knowledge of HDP was 25.24±4.07, higher than (20.38±1.97) in the control group. The score of the Hypertension Self-Management Scale was (114.39±14.89), higher than (100.77±14.36) in the control group. The score of pregnancy-related anxiety scale was (18.02±2.15), lower than (23.18±9.58) in the control group. The score of patient satisfaction questionnaire was (19.56±1.14), higher than that (17.26±2.25) in the control group. The differences were statistically significant ($P<0.001$). **Conclusion:** SMAs can improve HDP pregnant women's self management, reduce the incidence of disease progression, and improve satisfaction, which provides a reference for optimising the HDP management model.

ORAL PRESENTATION 3:

ART/IVF/INFERTILITY: CLINICAL ART/IVF

WORDS HAVE POWER IN SPERM AND EGG DONOR FAMILIES: A STUDY OF 551 DONOR-CONCEIVED PEOPLE

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A qualitative and quantitative 20-question Google survey was distributed via the Donor Sibling Registry's newsletter and via social media. We asked which terms donor-conceived people (DCP) most often use to describe the sperm or egg donors and other donor relatives. 64.8% (357) of DCP indicated that they felt it important to use accurate terminology when referring to donor family members.

Sperm Donor Terminology:

47.5% (252) use the term Sperm Donor

52.4% (278) use the term Donor

42.7% (227) use the term Biological Father

20.7% (110) use the term Bio Dad

Egg Donor Terminology:

42% (21) use the term Egg Donor

20% (10) use the term Biological Mother

Half-Sibling Terminology

68.2% (376) use the term Half-Siblings

37% (204) use the term Donor Siblings

24.3% (134) use the term Siblings

11.1% (61) use the term Diblings

Parents of Donors Terminology

26.8% (145) use the term Biological Grandparents

17.9% (97) use the term Donor's Parents

11.3% (61) use the term Donor Grandparents

Counselors, therapists, and medical professionals can play a vital role in promoting and encouraging parents to use accurate terminology in donor families. Using honest terminology and dialog fosters trust, strengthens communication, and empowers donor-conceived people to understand and celebrate their unique identities.

COMPARISON OF GOOD QUALITY EMBRYO NUMBER BETWEEN PROGESTIN-PRIMED OVARIAN STIMULATION AND GnRH ANTAGONIST PROTOCOLS: A RETROSPECTIVE COHORT ANALYSIS

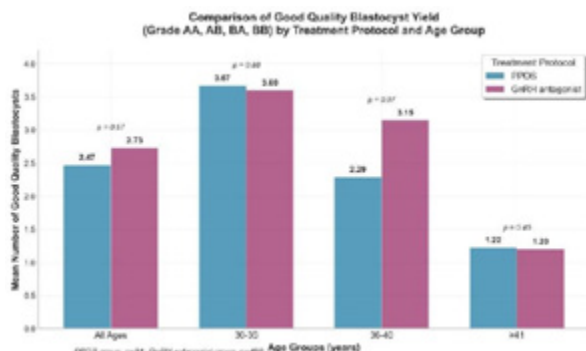
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Problem statement: Progestin-primed ovarian stimulation (PPOS) has emerged as an alternative to the GnRH antagonist protocol, offering advantages such as simplified scheduling, oral administration, lower cost, and suitability for freeze-all strategies. While both protocols achieve adequate oocyte yield, their impact on embryo quality remains uncertain. This study aimed to compare the number of good quality



embryos (GQEs) between PPOS and GnRH antagonist protocols using standardized grading criteria. **Methods:** We retrospectively analyzed 581 women aged ≥ 30 years who underwent ICSI cycles with either PPOS or GnRH antagonist protocols between January 2023 and May 2025. Embryo quality was assessed on Day 5–6 blastocysts using the Gardner & Schoolcraft system. GQEs were defined as blastocysts graded AA, AB, BA, or BB. The primary outcome was the number of GQEs per cycle. Mann–Whitney U tests compared embryo outcomes between protocols, with age stratification (30–35, 36–40, ≥ 41 years). **Results:** Among 581 patients, 91 (15.7%) received PPOS and 490 (84.3%) GnRH antagonist protocols. Baseline age was similar between groups (36.9 ± 3.7 vs 37.3 ± 4.5 years). Mean blastocyst numbers did not differ (3.34 ± 3.89 vs 3.71 ± 4.05 ; $p=0.48$). The number of GQEs was also comparable (2.47 ± 2.87 vs 2.73 ± 3.09 ; $p=0.57$). For top-quality embryos (Grade AA), no significant difference was observed (0.47 ± 1.03 vs 0.52 ± 1.11 ; $p=0.79$). Age-stratified analyses confirmed consistent results across all age groups. **Conclusion:** PPOS yielded similar numbers of good and top-quality embryos compared with the GnRH antagonist protocol in women aged ≥ 30 years. These findings support the use of PPOS as a clinically effective and potentially cost-saving alternative, without compromising embryo quality.



THE CHALLENGES OF OBESITY IN A PUBLICLY FUNDED ASSISTED REPRODUCTION FACILITY

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Obesity is a growing global health concern with an increasing body of research on the association between obesity and reproductive outcomes. Obesity in women is linked to irregular menstrual cycles, polycystic ovarian syndrome (PCOS)(1), subfertility and miscarriage (2-4). The latest WHO update shows that global obesity rates have doubled since 1990 (5). This obesity epidemic not only impacts the individuals but also, already stretched fertility services. Therefore, our objective was to examine the challenges of obesity in a publicly funded assisted reproduction facility. **Methods:** This is a single centre, retrospective cohort study of the first 210 women referred to The Coombe Hospital Fertility Hub and were seen between January 2024 and December 2024. All 210 charts were reviewed by the research team and data was collated and analysed in Microsoft Excel. Further analysis was done on patients whose BMI ≥ 30.0 kg/m² and then compared with the overall study population. **Results:** Following exclusions, 170 women were analysed. Of the 170 women analysed, 12.1% of women were found to have a BMI ≥ 30.0 kg/m². The average BMI of these women compared to the study population was 36.2 kg/m² vs 26 g/m², with an average weight of 99kgs vs 72kg respectively. When gynaecology history was reviewed the obese cohort were more likely to have miscarriages (57% vs. 41%), irregular menstrual cycles (23% vs. 10%) and PCOS (28.5 vs. 12.9%). On review of the preconception interventions in both groups, rates of folic acid consumption were similar (11.6% vs 10%) and there were expected higher rates of weight loss medication use in the obese cohort (9.5% vs 1%). When analysing eligibility, 100% of the obese cohort were originally ineligible for publicly funded IVF, however after weight loss interventions 9.5% of women were eligible. In the overall study population 80% were eligible. **Conclusion:** This data demonstrates the adverse impact of being obese in a publicly funded assisted reproduction facility. Infertility represents a burden for couples and society; it is essential to identify and tackle modifiable risk factors

such as obesity to improve chances of spontaneous conception.

NEONATAL OUTCOMES FOLLOWING ASSISTED REPRODUCTION TECHNIQUES: ANALYSIS OF 101,655 SINGLETON LIVE BIRTHS FROM 2019 TO 2022 IN SPAIN

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Introduction: Singleton pregnancies achieved through assisted reproductive technologies (ART) have been associated with an increased risk of preterm birth, potentially due to factors related to infertility itself or to the ART procedures. This study aimed to compare perinatal outcomes—specifically preterm birth (PTB) and very preterm birth (vPTB)—among singleton live births following IVF/ICSI, oocyte donation (OD), and preimplantation genetic testing for aneuploidies (PGT-A), using data from the Spanish Fertility Society Registry. **Methods:** We analyzed anonymized data from ART cycles performed in Spain between 2019 and 2022, obtained from the Spanish Fertility Society Registry, and spontaneous conceptions (SC) from the Spanish National Statistics Institute (INE) for the same period. Gestational age at delivery was categorized into three groups: extremely preterm (28 weeks, ePTB), very preterm (32 weeks, vPTB), and preterm (37 weeks, PTB). The study compared prematurity risk among the following groups: spontaneous conception (SC), IVF/ICSI (fresh and cryotransfer), OD (fresh, cryotransfer, vitrified oocytes, and frozen embryo transfer), and PGT-A. Due to the lack of significant differences between fresh and frozen embryo transfers ($p=0.852$, 0.045 , and 0.371), data were aggregated into four main groups: SC, IVF, OD, and PGT-A. Chi-squared tests were used, with a significance threshold of $p \leq 0.01$ due to the large sample size. Odds ratios (OR) were calculated to assess associations. **Results:** The cohort comprised 1,120,322 SC, 51,200 IVF, 9,298 PGT-A, and 41,157 OD deliveries. Women who conceived through OD had significantly higher rates of PTB compared to SC, IVF, and PGT-A. Compared to autologous IVF, OD showed increased risk for PTB (OR=1.71, $p=0.001$), vPTB (OR=1.66, $p=0.001$), and ePTB (OR=1.40, $p=0.001$). IVF was also associated with increased risk versus SC: PTB (OR=1.24, $p=0.002$), vPTB (OR=1.59, $p=0.001$), and ePTB (OR=1.63, $p=0.001$). **Conclusion:** Singleton births resulting from ART are associated with an increased risk of preterm birth, with oocyte donation showing the highest risk across all categories.

CLINICAL BENEFITS OF A PATENTED FOOD SUPPLEMENT WITH 3.6:1 MYO-INOSITOL/D-CHIRO-INOSITOL, ANTIOXIDANTS AND ESSENTIAL VITAMINS IN PCOS TREATMENT: EVIDENCE FROM A SPANISH COHORT

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Problem statement: Polycystic Ovarian Syndrome (PCOS) is a hormonal disorder affecting 6-13% of women of reproductive age, in which 80% of patients have insulin resistance and compensatory hyperinsulinemia: causing hyperandrogenism and anovulation. The specific 3.6:1 Myo-Inositol: D-chiro-Inositol (MYO:DCI) ratio has been shown to improve glycemic, hormonal and lipidic levels and restore the menstrual cycle in PCOS women. **Methods:** This prospective study aimed to evaluate the clinical effectiveness of a food supplement containing Caronositol® (3.6:1 MYO:DCI ratio), antioxidants, and essential vitamins in the management of PCOS in Spanish women. A total of 25 patients (mean age 27.64 years, BMI 22.89 kg/m²) diagnosed with PCOS according to the Rotterdam criteria received supplementation for 3 months. Outcome measures included changes in body weight, glucose and insulin levels, lipid profile, hirsutism, and menstrual cycle characteristics. **Results:** Treatment with the 3.6:1 MYO:DCI-based food supplement resulted in significant improvements in fasting blood glucose (mean difference: 3.6 mg/dL; $p=0.0001$), insulin levels (mean difference: 5.8 mU/L), HOMA-IR score (mean difference: 0.35; $p=0.0063$), HbA1c (mean difference: 0.23 %; $p=0.0402$), and total cholesterol (mean difference: 13.24 mg/dL; $p=0.0002$). After treatment, the proportion of participants with persistent HOMA-IR values ≥ 3.2 , indicative of insulin resistance, decreased markedly from 24% to 4%. Total testosterone (mean difference: 2.84; $p=0.0112$) and SHBG (mean difference: 16.44 nmol/L; $p=0.0371$) levels were also significantly improved. LH and FSH levels showed a reduction after treatment,



although the changes were not statistically significant. On average, participants experienced a 0.96% reduction in body weight over three months, which did not reach statistical significance. Regarding menstrual cycle parameters, supplementation was associated with shorter cycle length (mean difference: 7.84 days; $p=0.0312$), reduced menstrual pain (with severe dysmenorrhea decreasing from 20% to 12%), and lighter menstrual flow. Clinical signs of hyperandrogenism also improved, as reflected by a reduction in hirsutism (mean difference in Ferriman-Gallwey score: 1.08), along with noticeable improvements in acne and alopecia. **Conclusion:** Supplementation with a 3.6:1 MYO/DCI ratio combined with antioxidants and essential vitamins appears to be effective for improving metabolic, hormonal, and clinical outcomes in Spanish women with PCOS.

MORE ULTRASOUND SCANS AND LONGER FOLLICULAR PHASE IN IMMEDIATE VERSUS POSTPONED MODIFIED NATURAL CYCLE (mNC) FROZEN EMBRYO TRANSFER (FET)

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Problem statement: The timing of FET cycles after ovarian stimulation (OS) and oocyte pick-up (OPU) is still debated. Concerns about potential residual effects of OS on the subsequent natural cycle have led clinicians to postpone natural cycle FET by at least one month, thereby delaying time to pregnancy. However, data on immediate FET regarding cycle characteristics are lacking. **Methods:** Data is based on 472 women from a multicenter RCT investigating the optimal timing of mNC-FET. Patients were randomized in a 1:1 ratio to immediate mNC-FET in the first cycle following OPU or postponed mNC-FET performed in the second or subsequent cycle following OPU. Women aged 18-40 years, with a regular menstrual cycle, undergoing autologous single blastocyst transfer in a mNC-FET after either a failed fresh transfer or a freeze-all cycle were included between April 2021 and March 2025 at six public fertility clinics in Denmark. Ovarian morphology was assessed via ultrasound at the beginning of the treatment cycle and on the day of ovulation trigger. **Results:** In immediate FET, the time to develop a pre-ovulatory follicle of 17 mm was longer as compared to postponed FET (Mean (SD), 15.2 (4.5) vs. 13.2 (3.8) days; $p=0.001$). Due to the longer follicular phase more follicular scans were needed in the immediate group (Median (IQR), 3 (2-3) vs. 2 (1-3); $p=0.001$). A higher cycle cancellation rate in the immediate cycles was observed although not reaching statistical significance (10.2% vs. 5.3%; $p=0.070$). More cystic structures ≥ 10 mm in the ovaries were observed in the immediate vs. postponed group at cycle day 2-5 of the treatment cycle (Median (IQR), 3 (1-6) vs. 0 (0-1); $p=0.001$). These changes regressed to some extent at time of ovulation trigger (Median (IQR), 1 (0-2) vs. 0 (0-1); $p=0.001$). **Conclusion:** The findings contribute to the understanding of an immediate natural cycle following OS and OPU. Given the increased need for ultrasound scans and higher cycle cancellations, the clinical feasibility of immediate FET in natural cycles can be questioned.

SECOND TRIGGER IN INTRAUTERINE INSEMINATION (IUI) PROTOCOL: ENHANCING FERTILITY OUTCOMES

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Background: Intrauterine insemination (IUI) is a common fertility treatment. The Second trigger in IUI protocol, involving second dose of recombinant human chorionic gonadotropin (hCG) hormone injections in single session IUI, aims to optimize egg release and timing of insemination. **Objective:** The objective of this study was to evaluate the effectiveness of Second trigger, which is a second dose of recombinant

hCG in Single session IUI for certainty of egg release and timing of insemination, to increase the clinical pregnancy rate. **Methods:** This retrospective observational study was conducted from June 2022 to June 2024 and involved total 1539 IUI cycles at the Kishori IVF and Fertility Center, Bargarh, Odisha, of which 810 were of single session IUI. Out of this 810 cases of single session 110 cases of IUI were done after 36-40 hours of trigger (with unruptured follicles) and 60 cases of IUI were done after second trigger (confirming the egg release by Ultrasonography). Out of 60 cases 2 cases didn't have ruptured follicles so excluded from the study. Controlled ovarian stimulation was performed during IUI cycles. The IUI cases were divided into two groups: group I were inseminated after 36-40 hours of the trigger even if there was no egg release (110 cases), and group II received insemination after second dose of recombinant hCG as a trigger with confirmation of egg release by Ultrasonography (58 cases). The baseline characteristics, and IUI outcomes of both groups were compared.

Results:

1. *Improved Pregnancy Rates*: 21% (single trigger) vs. 34.7% (second trigger) {chi square test value- 4.0183, P value 0.05.

2. Follicular Maturation: 2.2 ± 1.1 follicles (single trigger) vs. 2.2 ± 1.0 follicles (second trigger)

3. Increased Egg Release: 1.3 ± 0.6 eggs (single trigger) vs. 1.9 ± 0.8 eggs (second trigger)

Conclusion: The Second trigger protocol significantly enhances egg release and clinical pregnancy rate in IUI cycles. Moreover the timing of insemination can be adjusted as per the ovulation. **Limitations:** Small sample size, retrospective design, and variability in patient characteristics.

Conflict of interest: There are no conflict of interest.

IN FROZEN EMBRYO TRANSFER (FET) CYCLES WITH PREIMPLANTATION GENETIC DIAGNOSIS (PGD), SHOULD NOT THE NATURAL CYCLE BE CHOSEN?

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Problem statement: In frozen embryo transfer (FET) cycles with preimplantation genetic diagnosis (PGD), should not the natural cycle be chosen? **Methods:** In this case series, patients who underwent FET cycles with PGD-A or PDG-M at the Department of Reproductive Endocrinology, Ankara University, between 2020-2024 were included. These patients underwent artificial or natural cycles, and the pregnancy outcomes of these patients were examined. The records of 88 patients were examined retrospectively. It was observed that 48 of these patients underwent an artificial cycle, while 40 patients underwent a natural cycle. It was reported that PGD-A was performed on 32 of the 40 patients and PDG-M on 8. Patients undergoing a natural cycle have been warned that sexual intercourse is prohibited. **Results:** The records of 88 patients were examined retrospectively. It was observed that 48 of these patients underwent an artificial cycle, while 40 patients underwent a natural cycle. It has been established that four patients who underwent a natural cycle achieved spontaneous pregnancies. PGD-A was performed on 3 patients and PGD-M on one patient. All patients underwent single embryo transfer, and dichorionic diamniotic twin pregnancies were observed in three of these patients. While babies with trisomy 21 were born to patients who underwent PGD-A, a sick baby was born to a patient who underwent PGD-M due to Fahr's syndrome. (Table 1). **Conclusion:** Although patients are advised not to engage in sexual intercourse, natural cycles should not be performed when PGD is performed due to the possibility of spontaneous pregnancy in natural cycles.

Table 1: Features of the patients

			Results
1	PGT-M	28	Dichorionic diamniotic twin- one sick baby (Fahr's syndrome)
2	PGT-A	39	Dichorionic diamniotic twin- Healthy babies
3	PGT-A	40	Ongoing dichorionic diamniotic twin- Normal cell free DNA result
4	PGT-A	38	Singleton pregnancy- Baby with trisomy 21



ORAL PRESENTATION 4:

FETOMATERNAL MEDICINE: MEDICAL COMPLICATIONS IN PREGNANCY PRETERM DELIVERY PREVENTION AND TREATMENT / MULTIFETAL PREGNANCY / FETAL MEDICINE / FMM CASE REPORT (STUDY) / FMM OTHER

MEDICAL COMPLICATIONS IN PREGNANCY PRETERM DELIVERY PREVENTION AND TREATMENT

A RANDOMIZED STUDY TO COMPARE THE EFFICACY AND ACCEPTABILITY OF TWO MICRONIZED PROGESTERONE VAGINAL FORMULATIONS (GELATIN CAPSULE AND EFFERVESCENT VAGINAL TABLET) FOR PREVENTION OF PRETERM BIRTH

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Problem Statement: Progesterone is used to prevent preterm birth (PTB) among women with previous PTB or short cervix. It is administered orally, intra-muscularly or vaginally. Oral route has first-pass metabolism and more side effects. Recent trials of intra-muscular progesterone failed to show a substantial benefit. Vaginal route is preferred due to uterine first-pass effect with minimal systemic side-effects. We compared the efficacy and acceptability of two micronized progesterone vaginal preparations: effervescent tablet and gelatin capsule. **Methods:** The study was conducted in PGIMER, Chandigarh, India (2022-2023) after Ethics approval. Eighty women with singleton pregnancy (16-20 weeks gestation) and prior PTB / mid-trimester abortion were randomized in two groups: Group A received 200mg progesterone gelatin capsule, and Group B received 200mg effervescent tablet, vaginally, every night till 37 weeks or delivery. Two questionnaires assessed the side-effects & acceptability 15 days after initiating treatment. The PTB rate and neonatal outcome was noted. **Results:** The PTB rate at less than 37 weeks was (20.5% and 20%), less than 32 weeks (12.8% and 17.1%), and less than 28 weeks (10.2% and 5.8%), and the difference was statistically not significant. Most women (90% and 91.4%) had healthy neonates. Seven women had fetal or neonatal loss (6 at 28 weeks, and one at 29 weeks) and were similarly distributed (4 in Group A and 3 in Group B). In Group B, vaginal discharge causing discomfort was significantly more common (35% vs 15%, $p=0.039$). Speculum examination 12 hours after progesterone preparation insertion showed minimal discharge in Group A and thick whitish granular discharge coating the cervix and vagina in Group B, indicating that the gelatin capsule had better dispersion than the effervescent tablet (Fig 1). **Conclusion:** These two preparations were similarly effective for prevention of preterm birth, but the gelatin capsule had less side-effects and dispersed better than the effervescent tablet.

EXAMINING THE EFFECTIVENESS OF NURSING CARE GIVEN TO WOMEN WITH ECTOPIC PREGNANCY BASED ON THE ROY ADAPTATION MODEL

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Aim: To examine the effect of nursing care prepared within the framework of the Roy adaptation model given to women diagnosed with ectopic disease. **Method:** The research is a prospective, randomized controlled, pretest-posttest design (4-stage), single-blind and experimental research. The population of the research consisted of patients who were hospitalized for ectopic pregnancy and received methotrexate treatment at Izmir Tepecik Training and Research Hospital between May 2021 and December 2022. The sample of the study consisted of 44 patients, 22 in the intervention group and 22 in the control group, who accepted the research. While routine nursing care was applied to the patients in the control group, nursing care prepared within the framework of the Roy Adaptation Model was applied to the patients in the intervention group in addition to routine care. In order to evaluate the care, VAS pain scale, Beck Anxiety scale, Social isolation survey, Family role performance scale and Coping strategies scale were applied to the participants during hospitalization, after methotrexate administration, at discharge, when BhCG dropped to zero and 3 months later. **Results:** In the study, it was determined that there was no difference in terms of socio-demographic characteristics of the participants such as age, educational level, spouse's education level, family type, and income level ($p>0.05$). It was determined that VAS pain

scores were lower in the intervention group than in the control group ($p=0.05$). It was determined that Beck anxiety scale scores were lower in the intervention group than in the experimental group at the 3rd month ($p=0.05$). When social isolation scores were evaluated, it was determined that the intervention group exceeded the social engagement cut-off point in the 3rd month ($p>0.05$). In the study, Family role performance and Coping strategies scale scores were found to be similar ($p>0.05$). **Conclusion:** It was determined that the care provided within the framework of the Roy Adaptation model was effective in the areas of pain, anxiety and social isolation. The nursing care prepared is effective on women experiencing ectopic pregnancy.

PERIVABILITY: WHERE DO WE DRAW THE LINE? A TWO-CASE REPORT FROM A TERTIARY CARE FACILITY

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Background: Perivable birth represents one of the greatest challenges in obstetrics and neonatology. Outcomes at this threshold remain unpredictable, with survival and long-term morbidity influenced by gestational age, birthweight, antenatal interventions, and access to advanced neonatal intensive care. Management requires careful parental counseling and multidisciplinary decision-making regarding resuscitation, palliative care, and obstetric interventions. **Methods:** We describe two perivable deliveries at 23 weeks + 4 days' gestation managed at a tertiary maternity unit with a level IV NICU, highlighting the role of shared decision-making, antenatal care, and neonatal outcomes. **Results: Case 1:** A 40-year-old primigravida presented with pelvic pain and vaginal spotting. She was admitted with threatened preterm labor and received antenatal corticosteroids and magnesium sulfate. Vaginal delivery occurred in breech presentation. The male infant (490 g, Apgar 1/5/8) required intubation and NICU admission. His course was complicated by respiratory distress, pneumothorax, late sepsis, and multiorgan involvement. He remains hospitalized on day 57 of life. **Case 2:** A 34-year-old woman with a history of one miscarriage presented with pelvic pain. Cervical examination showed dilatation with intact membranes. She was admitted and received a single dose of antenatal corticosteroids, delivering later the same day a male infant (600 g; Apgar scores 8/8/9) by spontaneous vaginal birth. Despite initial stabilization, his NICU stay was marked by severe intraventricular hemorrhage, cerebral infarction, and late sepsis with shock. He died on day 21 of life. **Conclusion:** Perivable birth carries high morbidity and mortality despite maximal care. These cases underscore the importance of early antenatal interventions, multidisciplinary collaboration, and transparent counseling with families. Shared decision-making remains central to tailoring management at the threshold of viability, where each case presents unique ethical and clinical challenges.

ABNORMAL SOLUBLE FMS-LIKE TYROSINE KINASE TO PLACENTAL GROWTH FACTOR RATIO DURING PREGNANCY AS A PREDICTOR OF SUBJECTIVE MEMORY IMPAIRMENT 3-6 YEARS POSTPARTUM

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Problem statement: Preeclampsia is a pregnancy disorder characterized by endothelial dysfunction and angiogenic imbalance, with elevated soluble fms-like tyrosine kinase-1 (sFlt-1) and reduced placental growth factor (PlGF). While preeclampsia has been associated with long-term cardiovascular and cognitive risks, the specific contribution of angiogenic imbalance to postpartum memory impairment is unclear. We aimed to evaluate whether angiogenic imbalance during pregnancy predicts subjective memory impairment 3-6 years postpartum. **Methods:** This cross-sectional study was conducted at a tertiary hospital in Barcelona, Spain. Women were prospectively recruited during pregnancy and re-evaluated 3-6 years later. Preeclampsia was defined per ACOG criteria. Angiogenic imbalance was defined as an sFlt-1/PlGF ratio ≥ 38 . Subjective memory



performance was assessed using the validated Memory Failures of Everyday Life (MFE-30) questionnaire, with impairment defined as a score ≥ 36 . Logistic and linear regression models were applied, adjusting for relevant confounders. **Results:** A total of 266 participants were re-evaluated between August 2023 and February 2025; 81 (30.5%) had a history of preeclampsia. Participants with an elevated sFlt-1/PIGF ratio showed a higher prevalence of memory impairment compared to those without (30.0% vs. 16.2%, $p=0.03$). In multivariable analysis, angiogenic imbalance remained significantly associated with increased odds of memory impairment (OR=2.75, 95% CI [1.08–8.24], $p=0.04$), independently of preeclampsia history. In contrast, preeclampsia alone was not significantly associated with memory outcomes. **Conclusion:** An elevated sFlt-1/PIGF ratio during pregnancy is associated with increased risk of subjective memory impairment 3–6 years postpartum, regardless of preeclampsia diagnosis. Angiogenic biomarkers may serve as early indicators of long-term cognitive vulnerability, supporting the need for follow-up and preventive strategies in women exposed to angiogenic imbalance.

Disclosure of Interest: None declared

PREGNANCY OUTCOMES OF GESTATIONAL DIABETES MELLITUS TREATED BEFORE VS AFTER 24 WEEKS: A COMPARISON OF CARPENTER-COUSTAN AND IADPSG CRITERIA

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Problem statement: To compare pregnancy outcomes between early and standard treatment of gestational diabetes mellitus (GDM) diagnosed using Carpenter-Coustan criteria in Asian pregnancies, and to assess the impact of substituting the IADPSG fasting plasma glucose (FPG) threshold on these outcomes. **Methods:** This retrospective cohort study included singleton pregnancies diagnosed with GDM between March 2013 and January 2023. Cases were categorized as early GDM (diagnosed before 24 weeks' gestation) or standard GDM (diagnosed at or after 24 weeks gestation). Maternal and perinatal outcomes were compared, and the impact of substituting an FPG ≥ 92 mg/dL threshold was evaluated. **Results:** Of 1,291 GDM cases, 357 were early and 934 standard. Early treatment did not increase adverse perinatal outcomes compared to standard treatment, except for a slightly longer neonatal hospital stay (6.4 vs 5.1 days, $p=0.02$). The early group had higher rates of chronic hypertension, family history of diabetes, hypertensives disorders of pregnancy (HDP), and a higher pre-pregnancy BMI, while the requirement for insulin treatment was not significantly different between the two groups. In the standard group, FPG ≥ 95 mg/dL was associated with higher NICU admission (18.5% vs. 12.4%, $p=0.03$) and neonatal hypoglycemia (4.1% vs. 1.6%, $p=0.04$). However, these outcomes were not significantly different when using the FPG ≥ 92 mg/dL threshold. Multivariate analysis confirmed that FPG ≥ 92 mg/dL was significantly associated with NICU admission (adjusted OR 1.67; 95% CI, 1.16–2.39), while early GDM, chronic hypertension, and BMI ≥ 25 kg/m² predicted HDP. **Conclusion:** Early treatment using the Carpenter-Coustan criteria did not increase neonatal risk but also did not lead to improved outcomes. FPG ≥ 92 mg/dL may help identify standard GDM cases at risk for adverse neonatal outcomes.

TRANSIENT OSTEOPOROSIS OF PREGNANCY WITH SEVERE BILATERAL HIP INVOLVEMENT AND COMPLETE POSTPARTUM RECOVERY

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Problem statement: TRANSIENT OSTEOPOROSIS OF THE HIP (TOH) is a rare, self-limiting musculoskeletal disorder predominantly seen in the third trimester of pregnancy. It presents with progressive hip pain and impaired mobility, often mimicking AVASCULAR NECROSIS (AVN). Due to its rarity and nonspecific presentation, diagnosis is frequently delayed, which may increase maternal morbidity and complicate obstetric decision-making. **Methods:** We present the case of a 27-year-old primigravida at 34+6 weeks gestation, who developed progressive bilateral hip pain leading to complete loss of ambulation. Symptoms began at 24 weeks on the right side and became bilateral by

30 weeks. Laboratory tests revealed vitamin D deficiency (12 ng/mL), but were otherwise unremarkable. Pelvic MAGNETIC RESONANCE IMAGING (MRI) without contrast showed bilateral diffuse bone marrow edema, more prominent on the right, consistent with TOH. A multidisciplinary team recommended conservative management with vitamin D supplementation and paracetamol. **Results:** Due to severe pain and functional limitation, an elective cesarean section was performed at 38 weeks. Postpartum care included NON-STEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDs) and early physiotherapy. At one-month follow-up, the patient had regained full independent mobility. Repeat MRI confirmed complete resolution of edema with no progression to AVN. She resumed daily activities without assistive devices and reported full recovery. **Conclusion:** TOH should be considered in pregnant patients presenting with unexplained hip pain and mobility loss, particularly in the third trimester. MRI is the gold standard for diagnosis and can differentiate TOH from AVN. Conservative management with pain control, vitamin D correction, and delivery planning tailored to maternal function leads to favorable outcomes. Early recognition and interdisciplinary collaboration are critical to avoid misdiagnosis, prevent complications, and ensure safe peripartum care.

Disclosure of Interest: The authors declare no conflict of interest.

PRETERM PRELABOR RUPTURE OF MEMBRANES (34 WEEKS): MATERNAL COMPLICATIONS, INPATIENT MANAGEMENT, AND NEONATAL OUTCOMES UP TO ONE MONTH POST-DISCHARGE

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Problem statement: Preterm prelabor rupture of membranes (PPROM) is a major cause of preterm birth and is associated with significant maternal and neonatal morbidity. Despite advances in obstetric and neonatal care, outcomes of PPRM vary considerably across settings. Understanding the clinical profile and outcomes of women with PPRM in our institution is essential to optimize management and improve prognosis. **Methods:** We conducted a retrospective observational cohort study at Unidade Local de Saúde Lisboa Ocidental, a tertiary neonatal care facility, including all women diagnosed with PPRM admitted between January 1 and July 31, 2025. Maternal and neonatal outcomes were assessed during hospitalization and at the first post-discharge outpatient visit. Data collected included maternal characteristics, management strategies, pregnancy outcomes, and short-term neonatal morbidity. **Results:** A total of 15 women with PPRM were included. The mean gestational age at rupture was 28 + 6 weeks, with a mean latency period of 23 days. More than half were primigravida (53.3%), and 46.7% had no identified risk factors. The most frequent maternal complication was endometritis (21.4%). Neonatal outcomes showed a mean gestational age at delivery of 32 + 1 weeks and a mean birthweight of 1,729 g (range 662–2770 g). All newborns required NICU admission, with a mean length of stay of 26 days (range 6–76 days). The most common neonatal complications were respiratory distress syndrome (93.1%), intraventricular hemorrhage (61.5%), neonatal jaundice requiring phototherapy (70.6%), and sepsis (47%). At the first follow-up visit, 35% of infants had a normal evaluation, while the most frequent complication was postural deformities ($n=3$). **Conclusion:** In our cohort, PPRM was associated with maternal endometritis and a significant burden of neonatal morbidity, particularly respiratory distress syndrome, intraventricular hemorrhage, and sepsis. These findings underscore the importance of early recognition, standardized management protocols, and close maternal–neonatal follow-up to improve outcomes. PPRM also appeared to be associated with postural deformities. Further studies are needed to evaluate long-term outcomes.

THE EVOLUTION OF TREATMENT METHODS FOR ECTOPIC PREGNANCY IN THE SCAR ON THE UTERUS AFTER CESAREAN SECTION.

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Introduction: Ectopic pregnancy in a uterine scar after cesarean section can lead to life-threatening conditions requiring emergency medical intervention. The management approach for patients with ectopic



pregnancy in a scar include medical or surgical methods, as well as expectant management; however, the optimal approach for these patients has not yet been definitively established. **Research Purpose and Objectives:** To compare various surgical treatment methods for patients with ectopic pregnancy located in a scar of the uterus after cesarean section during the period from 2016 to 2025, and to analyze morphological data to determine the possible pathogenesis of scar pregnancy. **Materials and Methods:** Study was separated in 2 periods and include 41 patients with scar ectopic pregnancy after C/S. Different surgical pregnancy removing technique were applied. **Results:** Groupe 1- 19 patients laparotomic metroplasty was performed in 14 patients, 2 - vacuum aspiration, 3 hysterectomy. In Groupe 2 - 22 patients with hysteroscopy removing were included. Ultrasound diagnostics revealed that in all patients (100%) signs of COS 1. In five women (22.7%), ultrasound signs of chorionic villus invasion into the scar were observed. The residual myometrial thickness ranged from 0.2 mm to 2.0 mm. Among of 22 patients, vacuum aspiration of the gestational sac combined with D&C of the uterine cavity was performed in 2 women (9.1%), and in combination with hysteroscopic resection in "cold loop" mode – in 5 cases (22.7%). The use of hysteroscopic resection in "cold loop" mode alone was performed in 1 case (4.5%), and vacuum aspiration in 6 cases (27.3%). Laparotomic metroplasty was performed in 6 patients (27.3%), three of whom underwent the procedure as a conversion following complicated hysteroscopic resection with intraoperative bleeding. One patient (4.5%) underwent laparoscopic hysterectomy due to total destruction of the cervix and the lower third of the anterior uterine wall, as well as the patient's lack of reproductive plans and her desire for a radical surgery. **Discussion:** The evolution of surgical management for patients with ectopic pregnancy in a cesarean scar involves the use of minimally invasive methods, which help reduce the duration of hospitalization and recovery in the postoperative period.

OPHTHALMIC ARTERY DOPPLER AND CAROTID INTIMA-MEDIA THICKNESS 3 TO 6 YEARS POSTPARTUM IN WOMEN WITH AND WITHOUT A HISTORY OF PLACENTAL INSUFFICIENCY

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Problem statement: Preeclampsia and fetal growth restriction, clinical manifestations of placental dysfunction, are linked to angiogenic imbalance and increased long-term cardiovascular risk. It remains unclear whether this risk is driven by pre-pregnancy factors, the clinical disease itself, or an elevated soluble fms-like tyrosine kinase-1/placental growth factor (sFlt-1/PlGF) ratio. We aimed to evaluate the association between placental dysfunction and angiogenic imbalance during pregnancy with vascular markers 3–6 years postpartum. **Methods:** This cross-sectional study included women prospectively recruited during pregnancy (2018–2021) and re-evaluated 3–6 years later. Placental dysfunction (preeclampsia and/or fetal growth restriction) and sFlt-1/PlGF values were obtained from pregnancy records. Postpartum vascular assessments comprised ophthalmic artery Doppler and carotid intima-media thickness, performed by a single operator. Multivariable linear regression models were applied, adjusting for maternal covariates. **Results:** A total of 354 participants were included: 148 with and 206 without a history of placental dysfunction. Both placental dysfunction and angiogenic imbalance were independently associated with higher ophthalmic artery peak systolic velocity ratio postpartum. Women with placental dysfunction had higher values than controls [0.75 (0.67–0.81) vs. 0.69 (0.63–0.78), $p=0.03$], as did those with elevated sFlt-1/PlGF during pregnancy [0.76 (0.66–0.82) vs. 0.70 (0.64–0.78), $p=0.03$]. The highest values were observed in participants exposed to both conditions. When analyzed separately, the association persisted for preeclampsia, whereas in the fetal growth restriction group a significant difference was seen only in the right eye. No significant differences were observed in carotid intima-media thickness. **Conclusion:** Both angiogenic imbalance and clinical placental dysfunction (particularly preeclampsia) during pregnancy were associated with increased ophthalmic artery peak systolic velocity ratio 3–6 years postpartum. No differences were found in carotid intima-media thickness.

Disclosure of Interest: None declared.

MULTIFETAL PREGNANCY

THE EFFECT OF COUNSELLATIVE INTERVENTIONS WITH MOTIVATIONAL INTERVIEW TECHNIQUES BASED ON THE HEALTH ACTION PROCESS APPROACH (HAPA) MODEL IN TWIN PREGNANCIES ON BREASTFEEDING DURATION

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Objective: Evaluate the effect of individual counseling interventions based on the Health Action Process Approach Model on breastfeeding duration in twin pregnancies. **Methods:** This prospective, randomized controlled study was conducted with women who had twin pregnancies at Izmir Health Sciences University Tepecik Training and Research Hospital between September 15, 2022, and September 15, 2023. Of 171 eligible women, 68 met the inclusion criteria, but 7 were excluded due to withdrawal or neonatal loss. The final sample included 61 participants—30 in the intervention group and 31 in the control group. The intervention group received breastfeeding education using motivational interviewing based on the Health Action Process Approach Model, while the control group received routine clinical training. **Results:** Prenatal breastfeeding self-efficacy score and subscale; Information gathering, Desire, Breastfeeding Nearby Other People, Skill score averages and breastfeeding intention score averages of mothers in the intervention group were found to be higher than the control group ($p<0.05$). It was found that the mean scores of the intervention group women in the postpartum 1-3 days, postpartum 4-6 weeks, postpartum 4-month postnatal breastfeeding self-efficacy and breastfeeding motivation scores were higher than the control group ($p<0.05$). In the last 24 hours at postpartum 4-6 weeks, all of the intervention group women breastfed their babies while 6.3% of the control group women did not breastfeed their babies at all; at postpartum 4th month, all of the intervention group women breastfed their babies while 38.7% of the control group women did not breastfeed their babies; and at 6th month, all of the intervention group women continued to breastfeed their babies while 41.9% of the control group women did not breastfeed their babies ($p<0.05$). **Conclusion:** According to the HAPA Model, it was found that mothers in the intervention group who were given breastfeeding training with motivational interviewing techniques fed their babies with breast milk for a longer time than the control group. Breastfeeding intention, self-efficacy and motivation of the mothers in the intervention group were found to be higher than the control group.

FETAL MEDICINE

THE ESTIMATED FETAL WEIGHT BY ULTRASOUND: THE NEVERENDING DEBATE

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Problem statement: This study was aimed to compare correlation between prenatal and postnatal diagnosis of small (SGA), average (AGA), and large (LGA) for gestational age fetuses by using the growth charts of the Fetal Medicine Foundation (FMF), INTERGROWTH-21 (IG-21), and the Individualized Growth Assessment Program (IGAP). **Methods:** This was a prospective study conducted on women with singleton fetuses at 34–40 gestational weeks. The last biometric measurements before delivery were recorded. Estimated fetal weight (EFW) centiles were calculated by using softwares of the FMF, IG-21, and IGAP. EFW was classified as small (SGA), average (AGA), and large (LGA) for gestational age if centiles were ≤ 10 , 11–89, and ≥ 90 for gestational age, respectively. BW was recorded and classified as small (SGA), average (AGA), and large (LGA) for birth age if centiles were ≤ 10 , 11–89, and ≥ 90 for birth age, respectively. Weighted kappa coefficient (wkc) was calculated in order to analyse correlation between prenatal and postnatal diagnosis of SGA, AGA, and LGA babies. **Results:** 200 women were enrolled. Interval time from last ultrasound and delivery ranged from 0 to 4 weeks. Growth centiles by FMF identified 17% of SGA, 71% of AGA, and 12% of LGA fetuses by ultrasound and confirmed diagnosis at birth in 8%, 58%, and 3% of cases, respectively (wkc: 0.378). Growth centiles by IG-21 identified 13% of SGA, 78% of AGA, and 22% of LGA fetuses by ultrasound and confirmed diagnosis at birth in 7%, 65%, and 2% of cases, respectively (wkc: 0.358). Growth centiles by IGAP identified 13% of SGA, 86% of AGA, and 1% of LGA fetuses by ultrasound and confirmed diagnosis at birth in 3%, 57%, and 0% of cases, respectively (wkc: 0.213).



Conclusion: Prenatal assessment of fetal growth is poorly correlated with actual birthweight. This finding should be considered whenever close fetal monitoring, timing and mode of delivery are decided according to the EFW by ultrasound.

FMM CASE REPORT / STUDY

ACUTE SUBARACHNOID HEMORRHAGE FROM RUPTURED INTRACRANIAL ANEURYSM IN PREGNANCY: A CASE REPORT

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Introduction: Subarachnoid hemorrhage (SAH) from a ruptured intracranial aneurysm in pregnancy is rare but is a serious complication that can lead to significant maternal and fetal morbidity and mortality. Presentation is similar to eclampsia, and differentiation may be difficult. Thus, a high index of suspicion is needed for early diagnosis and timely intervention. **Case presentation:** A 38-year-old, Gravida 3 Para 2 (2002) at 29 weeks of gestation with history of hypertension was transferred to a tertiary hospital in the Philippines. Two days before admission, she had loss of consciousness followed by seizure, and holocranial headache. She was brought to a nearby hospital, and her blood pressure was 150/100 mmHg. CT scan showed acute subarachnoid hemorrhage from ruptured anterior cerebral artery-anterior communicating artery aneurysm. Upon transfer to the tertiary hospital, BP was 160/100 mmHg with normal neurologic examination and preeclampsia laboratory tests apart from a urine dipstick that showed mild proteinuria. The multidisciplinary team composed of Neurosurgery, Neurology, General Obstetrics and Gynecology, and Perinatology services came up with the consensus of immediate delivery of the fetus for 2 reasons: (1) preeclampsia-eclampsia cannot be fully excluded and without delivery, the risks of acute hypertension, recurrence of seizure and catastrophic rebleed of the aneurysm remain; (2) aneurysmal repair is preferred after the delivery of the fetus to avoid fetal harm from the neurosurgical techniques that necessitate controlled hypotension and induced hyperventilation. After stabilization, she underwent emergency repeat cesarean section with bilateral tubal ligation under general anesthesia. On the 9th day postpartum, craniotomy, clipping of anterior communicating artery aneurysm under general anesthesia - scalp block, lumbar drain was done. The patient was discharged 4 days postoperatively. Meanwhile, the baby succumbed at the 34th day of life due to septic shock from pan-drug resistant Klebsiella pneumonia. **Conclusion:** Due to the limited number of cases, there is no standard of treatment for acute subarachnoid hemorrhage from ruptured aneurysm in pregnancy. Nevertheless, a multidisciplinary approach is paramount for best outcome. This report aims to discuss the diagnosis, treatment, and the role of the multidisciplinary team in the management of SAH from a ruptured intracranial aneurysm in pregnancy.

FMM OTHER

THE EFFECT OF GRAVIDITY ON MATERNAL HEALTH LITERACY LEVEL AND ANTENATAL CARE

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Problem statement: The quality of antenatal care services is determined not only by quantitative but also qualitative characteristics. Socio-demographic and obstetric characteristics of women significantly affect their antenatal care receipt. This study was conducted to examine the effect of gravidity on maternal health literacy level and antenatal care. **Methods:** The population of the study consisted of pregnant women who came to Bitlis Ahlat State Hospital NST Unit as healthy pregnant women. The sample size of the study was calculated as 256 with a test power of 80% and a margin of error of 0.05 according to the Cohen's d effect size value of 0.50. The study was completed with 427 pregnant women due to possible data losses. Personal Information Form, Maternal Health Literacy Scale in Pregnancy (MHLSP), Prenatal Care Scale (PCS) were used to collect the data. **Results:** The mean age of pregnant women was 28.22±4.83 years. The mean number of pregnancies was 2.52±1.70. Of the pregnant women, 41.5% were secondary school graduates, 75.9% were unemployed, 57.1% had an income-income balance, and 56.4% had planned pregnancies. Significant correlations were found between education and income perception and the GMSOÖ and the PCS. The mean score of the

pregnant women was 231.05±15.28 on the GMSOÖ and 166.78±11.83 on the SLIM. It is seen that there is a significant positive correlation between GMSOÖ and PCS. In the linear regression analysis performed to examine the predictive factors affecting gravidity, age, income perception, education level, maternal health literacy during pregnancy and prenatal care levels were found to be significant predictive factors. These variables explained 96.8% of the model. **Conclusion:** Increasing the level of health literacy may have positive effects on maternal and fetal health by increasing the quality and frequency of use of prenatal care services. The findings show that socio-demographic factors (especially education and income level) significantly affect pregnancy experience and health behaviors, and these variables should be taken into consideration. In conclusion, it is recommended to develop and implement multidimensional, holistic and culturally sensitive health policies for women during pregnancy.

ORAL PRESENTATION 5:

ART/IVF/INFERTILITY: CLINICAL ART/IVF

COMPARATIVE ANALYSIS OF RECOMBINANT VS. BIOSIMILAR FSH IN CONTROLLED OVARIAN STIMULATION: A RETROSPECTIVE STUDY OF 12,952 OOCYTE DONATION AND AUTOLOGOUS CYCLES

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Problem Statement: Does the type of FSH preparation used for ovarian stimulation—recombinant human FSH (r-hFSH) or biosimilar—impact reproductive success? **Methods:** This retrospective cohort study compared reproductive outcomes in 8,429 controlled ovarian stimulations (COS) using r-hFSH Gonal-f® (n=5,059) or the biosimilar FSH Bemfol® (n=3,370). January 2015 to December 2022 at a single fertility center. A total of 242,978 mature (MII) oocytes were retrieved. 12,952 ICSI cycles (11,421 heterologous, 1,531 autologous). Primary outcomes included ovarian response, assessed by oocyte retrieval and maturation rates. Secondary outcomes evaluated ongoing pregnancy and live birth rates. Participants: Oocyte donors (6,895 COS, ages 18-35) and patients using autologous oocytes (1,534 COS, ages 20-46). Univariate and multivariate analyses were conducted separately for donors and patients, with further stratification by age in autologous cycles. Regressions were adjusted for r-hFSH dose, antral follicle count (AFC), stimulation days, age, BMI, menotropin use, fertilization rates, and number of embryos transferred. Data were analyzed using linear and logistic regression models to control for confounding variables, ensuring robust comparisons between groups. Statistical significance was set at p<0.05. **Results:** Oocyte donors had similar demographics, though AFC was significantly higher in the biosimilar group (11.31 ± 9.72 vs. 7.63 ± 7.5, p<0.05). Patients showed no demographic differences between groups. On average, 20.5 cumulus-oocyte complexes (COCs) and 15.7 MII oocytes were retrieved, with overall fertilization rates exceeding 75%. In donation cycles, COCs were comparable (22.6, Gonal-f® vs. 22.3, Bemfol®), while Gonal-f® yielded slightly more MII oocytes (17.6 vs. 16.9, p<0.0001). However, adjusted analyses showed higher oocyte retrieval rates with Bemfol® (coeff 0.12, 95% CI: 0.05-0.18, p=0.0006), while maturation rates were similar (80% vs. 77%). In autologous cycles, no significant differences were observed in COCs (13.7 vs. 12.7), MII oocytes (9.6 vs. 9.0), retrieval rates (p<0.05), or maturation rates (p<0.05). Embryo development rates were also comparable, with similar blastocyst formation between groups. Ongoing pregnancy and live birth rates remained equivalent across all 12,952 ICSI cycles (p<0.05), further supporting the interchangeability of both FSH preparations. **Conclusion:** Comparable ovarian response, pregnancy, and live birth rates between Gonal-f® and Bemfol® in heterologous and autologous cycles support the efficacy of biosimilar FSH in fertility treatment.

COMPARISON OF DYDROGESTERONE AND GnRH ANTAGONISTS IN PREVENTING THE LH SURGE DURING IVF/ICSI CYCLES

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Problem statement: Premature LH surge and ovulation during the controlled ovarian stimulation (COS) is one of the main causes of cycle cancellation. Traditionally, during in-vitro fertilization for COS to prevent of premature LH surge GnRH antagonists were used. Recent data



indicates that premature LH surge may be prevented also by progestins. In past, progesterone was not used during COS due to the negative effect on endometrial receptivity, while nowadays advanced techniques give possibility to use it as an alternative to a GnRH antagonists using the freeze-all strategy. **Methods:** In this prospective, randomized study were participated sixty - seven egg donors. Study was conducted on the basis of Clinic Leadermed (Georgia, Tbilisi) from October of 2021 to November 2024. Recombinant gonadotropin and HMG were administered for COS. Intervention group (n=34) received 20 mg of Dydrogesterone from the first day of stimulation till trigger day and the control group (n=33) received GnRH-antagonist when the leading follicle reached 14 mm in diameter till trigger day. Triptorelin acetate 0.3 mg was administered when at least 3 follicles reached ≥ 18 mm in diameter. **Results:** There were no statistically significant differences in the participants age, BMI and AMH levels between groups. None of the participants experienced a premature LH surge and ovulation. There was no statistically significant difference in the number of MII oocytes (23.7 vs 25.9 p=0.3). The duration of stimulation and total dose of gonadotropins was similar in both groups (9.6 vs 9.9 days, p=0.41), (2269.2 IU vs 2423.4 IU, p=0.08) respectively. There was no difference in fertilization rates (85.62% vs 83.94%, p=0.41), as well as blastulation rates and top-quality blastocysts (65.78% vs 69.72%, p=0.17; 54.50% vs 51.75%, p=0.21). Regarding clinical pregnancy rate, the results were similar, with no significant differences between two groups (66.28% vs 68.10%, p=0.8). **Conclusion:** Dydrogesterone and GnRH-antagonist have equal effectiveness for prevention of premature LH surge and ovulation without any adverse effect on laboratory and clinical results. It is a financially profitable and easy to use which can be used as in oocyte donors as well as in patients where embryo transfer is not planned in the current cycle.

ASSOCIATION BETWEEN ENDOMETRIAL POLYPS AND CHRONIC ENDOMETRITIS: A META-ANALYSIS OF PREVALENCE AND CLINICAL SIGNIFICANCE

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Problem statement: Endometrial polyps (EPs) are common intrauterine lesions associated with infertility and abnormal uterine bleeding. Chronic endometritis (CE), defined by stromal plasma cell infiltration, has been hypothesized as a pathogenic substrate for polyp development and recurrence. However, prevalence estimates of CE in women with EPs vary widely due to differences in diagnostic thresholds, study populations, and methodological rigor. Clarifying this association is clinically relevant for reproductive outcomes and post-polypectomy management. **Methods:** We performed a systematic review and meta-analysis of proportions in accordance with PRISMA and JBI guidelines. PubMed, Embase, and Scopus were searched through May 2025.

Eligible observational studies (cohorts, case-control, cross-sectional) reported CE prevalence in women with EPs, mostly using CD138 immunohistochemistry. Data were extracted independently, and methodological quality was assessed with JBI critical appraisal checklists. Random-effects models with restricted maximum likelihood were used to estimate pooled prevalence. Heterogeneity (I^2) and publication bias (funnel plot, Egger test, fail-safe N) were evaluated. **Results:** Eighteen studies including over 4,000 women were analyzed. The pooled prevalence of CE in patients with EPs was 48.6% (95% CI: 38.6–58.7; p<0.001), with substantial heterogeneity ($I^2 = 97.8\%$). JBI appraisal showed that several large prospective cohorts and a robust case-control study provided high-quality evidence, while smaller observational reports contributed with moderate-to-limited quality, mainly due to incomplete reporting or unclear diagnostic thresholds. CE prevalence was higher when defined as ≥ 1 plasma cell/10 HPF versus $\geq 5/10$ HPF, and more frequent in infertile women and in cases with multiple polyps. Fail-safe N (24,407) confirmed the robustness of findings, with no significant publication bias detected. **Conclusion:** Nearly half of women with endometrial polyps also present with chronic endometritis, supporting a strong pathological link. This association suggests that CE may contribute to polyp development and recurrence, particularly in infertile populations. Routine histological evaluation of background endometrium and consideration of targeted antimicrobial or anti-inflammatory therapy should be integrated into clinical practice. Future prospective studies are warranted to determine whether treating CE improves reproductive outcomes and reduces recurrence rates after polypectomy.

ADVANCED ENDOMETRIOSIS AND ART RESULTS: A CASE-CONTROL STUDY INVOLVING 558 FIRST IVF CYCLES

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Problem statement: Endometriosis is associated with an increased risk of infertility. Moreover, severe forms are associated with a reduction in ovarian reserve. Some studies have suggested poorer reproductive outcomes in assisted reproduction (ART), with reduced pregnancy and live birth rates. Previous studies are inconclusive regarding the possible origin of these findings. Factors such as lower oocyte or embryo quality have been proposed as potential contributors. Nevertheless, these results can be confounded by the fact that endometriosis itself—especially severe forms—can reduce ovarian reserve, leading to a reduced ovarian response to gonadotropins, fewer oocytes retrieved, and a higher cancellation rate, particularly after prior surgery. In fact, several systematic reviews with meta-analyses have not consistently demonstrated lower success rates in these patients. The purpose of this study was to evaluate the impact of endometriosis on in vitro fertilization (IVF) outcomes, considering the effects of ovarian reserve, age, and male factor as possible confounders. **Methods:** This retrospective case-control study involved 558 women from the Reproductive Medicine Unit of a Tertiary Academic Hospital who underwent their first IVF cycle between 2009 and 2023. The cases were patients with stage III or IV endometriosis according to the AFS, diagnosed by ultrasound or laparoscopy. Controls, matched 1:1, were selected from patients attending the unit for their first IVF cycle without endometriosis. Groups were matched by age (± 6 months), AMH levels (± 0.3 ng/mL), antral follicle count (AFC; ± 2 follicles), total motile sperm count, gonadotropin dosage, and study period. **Results:** No significant differences were found in clinical pregnancy (adjusted OR, 1.27; 95% CI, 0.28–5.75) or cumulative live birth rate (adjusted OR, 0.97; 95% CI, 0.25–3.73; p=0.95). There were also no significant differences in the number of oocytes retrieved, mature oocytes, embryo quality, miscarriage rate, or other reproductive variables. **Conclusion:** IVF outcomes in women with advanced-stage endometriosis are comparable to those in women without the disease when matched for relevant prognostic factors. Apparent detrimental effects reported previously may primarily reflect confounding by diminished reserve and other prognostic factors rather than a direct deleterious impact of endometriosis on oocyte or embryo competence.



HOW MANY OOCYTES FOR A BLASTOCYST? TOWARD A MORE EFFICIENT, SUSTAINABLE AND PATIENT-CENTERED EGG DONATION PROGRAM

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Problem statement: Oocyte donation ensures the achievement of high-quality gametes, improving reproductive outcomes. However, it may create a surplus of embryos which are often unnecessary for recipients who typically aim to achieve one or two live births, leading to economic, storage and ethical problems. We wanted to determine the efficiency of blastocyst formation depending on oocyte type and sperm source, in order to minimize embryo surplus while maintaining reproductive success rates. **Methods:** Retrospective, multicenter cohort study including 2,918 oocyte-donation cycles performed in 6 Spanish fertility centers between 2021 and 2024. A total of 18,888 MII donor oocytes were inseminated by ICSI. Cycles used either fresh ($n=1,590$) or vitrified ($n=1,328$) oocytes. Sperm sources were from partners (396 fresh samples or 1973 frozen) and from donors (549 cycles). Vitrification was performed following Kitazato protocol, and all the laboratory workflows were standardized following the same internal protocols. Primary outcome was the number of MII oocytes needed per transferable blastocyst. Group comparisons were performed using Mann-Whitney U and Wilcoxon W tests. **Results:** With an overall fertilization rate of 74.1%, we obtained 8,168 blastocysts (58.3% of fertilized oocytes). On average, 2.77 donor oocytes were needed to obtain one good-quality blastocyst. Efficiency was higher with fresh than with vitrified oocytes (2.65 vs. 2.93 oocytes per blastocyst; $p=0.001$). Sperm origin did not significantly affect blastocyst formation (2.82 with partner-fresh, 2.79 with partner-frozen, 2.68 with donor; $p=0.05$). **Conclusion:** In oocyte donation cycles, approximately three oocytes are required to reliably obtain one transferable blastocyst. Fresh oocytes confer a modest efficiency advantage over vitrified, while sperm source shows no statistically significant impact. These data are key to support a patient-centered vision, driven by efficiency and sustainability without compromising success rates.

EFFECT OF DYDROGESTERONE SUPPLEMENTATION ON PREGNANCY OUTCOMES IN FROZEN-THAWED DAY-5 EMBRYO TRANSFERS WITH LOW SERUM PROGESTERONE: A RETROSPECTIVE COHORT STUDY

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Problem Statement: Progesterone is essential for endometrial receptivity and early pregnancy maintenance. Evidence suggests low serum progesterone (P4) at embryo transfer may compromise outcomes, including implantation, clinical pregnancy, and ongoing gestation rates. The optimal supplementation strategy to overcome this risk remains debated. The aim of this study was to compare reproductive outcomes between women with $P4 \geq 12.5$ ng/mL and $P4 < 12.5$ ng/mL who were supplemented with Dydrogesterone 10 mg 3x/day. **Methods:** A retrospective cohort study was performed at CRI Fertilidade, ULS Almada-Seixal, Portugal, between January and December 2023. Only day-5 artificial FET cycles were included. In total, 222 cycles from 177 couples were analyzed. Serum P4 was measured on the transfer morning. Women with $P4 < 12.5$ ng/mL received Dydrogesterone, while those with $P4 \geq 12.5$ ng/mL continued standard luteal support (400 mg micronized vaginal P4 2x/day). Collected variables included maternal age, number of embryos transferred, assisted reproduction technique (IVF/ICSI), endometrial thickness, and serum P4. The primary outcome was ongoing pregnancy (≥ 12 weeks); secondary outcomes were biochemical pregnancy, clinical pregnancy at 7 weeks, miscarriage, ectopic pregnancy, and medical termination. Statistical analysis used chi-square tests, odds ratios, and generalized estimating equations (GEE) adjusting for the above variables and repeated cycles.

Results: Of the 222 transfers, 133 (59.9%) had $P4 \geq 12.5$ ng/mL (mean 16.7 ± 3.7 ; range 12.6–32.3) and 89 (40.1%) had $P4 < 12.5$ ng/mL (mean 10.2 ± 1.8 ; range 4.7–12.4). Biochemical, clinical, and ongoing pregnancy rates were 64.9%, 53.6%, and 42.3%. No significant differences were observed between groups: biochemical (67.7% vs 60.7%, $p=0.285$), clinical (57.1% vs 48.3%, $p=0.196$), and ongoing

pregnancy (42.9% vs 41.6%, $p=0.849$). GEE confirmed no significant differences after adjustment (biochemical OR 1.39, $p=0.25$; clinical OR 1.55, $p=0.11$; ongoing OR 1.27, $p=0.44$). In subgroup analysis of $P4 < 12.5$, outcomes were comparable between $P4 < 10$ ng/mL and slightly higher levels ≥ 10 –12.5, suggesting supplementation neutralized the adverse effect of low P4. **Conclusion:** Women with $P4 < 12.5$ ng/mL with Dydrogesterone supplementation achieved outcomes comparable to those with higher levels. These findings suggest Dydrogesterone supplementation is effective in cases with suboptimal progesterone, supporting its role in luteal phase management in assisted reproduction.

EFFICIENCY OF DUAL TRIGGER WITH COMBINATION OF GnRH AGONIST AND hCG IN FRESH IVF CYCLES: A RETROSPECTIVE STUDY

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Introduction: Despite many studies, it remains unclear whether the simultaneous use of human chorionic gonadotropin (hCG) and gonadotropin-releasing hormone (GnRH) agonist as a “dual trigger” in antagonist protocols for patients with normal or low ovarian response increases the effectiveness of in-vitro fertilization (IVF) / intracytoplasmic sperm injection (ICSI) with fresh embryo transfer. Triggering with a GnRH agonist is considered more physiological since it induces endogenous secretion of luteinizing hormone (LH) and follicle-stimulating hormone (FSH) from the pituitary. However, this approach can later lead to premature luteolysis and corpus luteum dysfunction. In IVF cycles, urinary or recombinant hCG is usually used as a trigger to substitute LH. The combined use of hCG and a GnRH agonist (dual trigger) may be more effective in improving oocyte quality and maintaining adequate corpus luteum function. The aim of this study was to compare laboratory and clinical outcomes between dual trigger and hCG-only trigger. **Methods:** This retrospective study analyzed 309 IVF/ICSI cycles performed at Shengavit Medical Center from 2020 to 2024. Patients were 22–38 years old, with anti-Müllerian hormone (AMH) levels between 0.5–5 ng/mL, and treated with antagonist protocols. In 159 cycles, a dual trigger was used (0.1 mg triptorelin + 250 mcg recombinant hCG), and in 150 cycles only recombinant hCG (250 mcg) was applied, followed by fresh embryo transfer. The following parameters were compared between the two groups: proportion of mature oocytes, fertilization rate, implantation rate, clinical pregnancy rate, miscarriage rate, and live birth rate. **Results:** Proportion of mature oocytes: 72.95% (dual trigger) vs. 70.31% (hCG only)

Fertilization rate: 77.58% vs. 70.25%

Implantation rate: 52.83% vs. 48%

Clinical pregnancy rate: 47.16% vs. 44%

Miscarriage rate (among pregnancies): 14.28% vs. 16.66%

Live birth rate: 45.28% vs. 40%

Conclusion: No significant difference was observed in the proportion of mature oocytes between groups, and both exceeded the 66% threshold. Fertilization rate, implantation rate, clinical pregnancy rate, and live birth rate were slightly higher in the dual trigger group. Notably, the miscarriage rate was lower in the dual trigger group. Since both groups were relatively small, larger studies are needed for definitive conclusions.

MICROBIOTA AND INFERTILITY: THE IMPACT OF VAGINAL AND ENDOMETRIAL MICROBIOTA ON REPRODUCTIVE OUTCOMES

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Problem statement: Infertility affects approximately 10–15% of couples worldwide and remains one of the most important challenges in reproductive medicine. Despite advances in assisted reproductive technologies (ART), implantation failure and early pregnancy loss are still frequently observed, and the underlying mechanisms are not fully understood. In recent years, increasing attention has been directed toward the role of the human microbiota in reproductive health. The term microbiota refers to prokaryotic and eukaryotic microorganisms, including bacteria, fungi, and viruses. The female genital tract (vagina, cervix, endometrium, fallopian tubes, and ovaries) harbors its own microbiome, which accounts for approximately 9% of the total bacterial load in the female body, and Lactobacillus species are reported to be the dominant microorganisms. A Lactobacillus-dominant microbial environment has been shown to support reproductive success, whereas



dysbiosis characterized by Gardnerella, Atopobium, or other pathogenic bacteria is associated with recurrent implantation failure, spontaneous miscarriage, and reduced ART outcomes. **Methods:** This narrative review was conducted through a structured literature search of PubMed, Scopus, and Web of Science databases, focusing on studies published between 2015 and 2025. Keywords included "vaginal microbiota," "endometrial microbiota," "infertility," and "ART outcomes." Both clinical and translational studies were analyzed to evaluate the association between microbial composition and reproductive outcomes. Special emphasis was placed on studies investigating mechanisms such as inflammation, immune modulation, and endometrial receptivity, as well as emerging diagnostic and therapeutic strategies. **Results:** Consistent findings indicate that a Lactobacillus-dominant microbiota increases implantation and live birth rates. The presence of Lactobacillus in ovarian follicular fluid has been associated with embryo maturation and transfer, while dysbiotic profiles have been linked to recurrent implantation failure and spontaneous miscarriage. Although less extensively studied, the endometrial microbiota also appears to influence endometrial receptivity and embryo implantation. **Conclusion:** Vaginal and endometrial microbiota emerge as promising biomarkers and potential therapeutic targets in infertility treatment. While current evidence highlights their significant roles in reproductive success, standardized diagnostic protocols and robust randomized controlled trials are still needed.

Keywords: microbiota, vaginal microbiota, endometrial microbiota, infertility, ART, implantation

ORAL PRESENTATION 6:

ART/IVF/INFERTILITY: REPRODUCTIVE GENETICS / GENETICS & GENOMICS / CASE REPORT / INFERTILITY/ENDOCRINOLOGY/CLINICAL ART/IVF

REPRODUCTIVE GENETICS

AN UNUSUAL PRESENTATION OF UNICORNUATE UTERUS WITH A FUNCTIONAL RUDIMENTARY HORN COEXISTING WITH VACTERL ASSOCIATION

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Problem Statement: VACTERL association is a group of congenital abnormalities that occur together more often than would be expected by chance, affecting approximately 1 in 10,000 to 1 in 40,000 live births. The core anomalies include vertebral defects, anal atresia, cardiac defects, tracheo-esophageal fistula/esophageal atresia, renal anomalies, and limb abnormalities. Other anomalies may be present, including genital anomalies which occur in 21%–28% of affected individuals and typically present later with severe complications (e.g. endometriosis or pregnancy in a noncommunicating rudimentary horn). The occurrence of genital abnormalities, such as a unicornuate uterus with a noncommunicating rudimentary horn (UUNCFRH), is extremely rare. Only three such cases have been reported in the literature, most of which occurred in children. This case study presents a unique instance of a young girl with VACTERL association and UUNCFRH. **Methods:** A 12-year-and-9-month-old girl was referred to us at Universe Clinic for evaluation of severe pelvic pain and dysmenorrhea that began shortly after menarche. A comprehensive gynecological evaluation was conducted, followed by transabdominal pelvic ultrasonography and magnetic resonance imaging (MRI). Definitive management involved laparoscopic resection of the rudimentary horn. **Results:** At birth, the patient exhibited three characteristic components of VACTERL association: bronchoesophageal fistula/esophageal atresia, anal atresia, and polydactyly, which were surgically corrected early in life. Genital anomalies were not diagnosed at that time. After referral to our clinic, ultrasound and MRI examinations revealed the presence of a UUNCFRH. Based on the combination of anomalies, the diagnosis of VACTERL association was first established in our clinic. The rudimentary horn was successfully removed via laparoscopy eight months after the patient's menarche. Endometriosis was not detected. Following the surgery, the patient reported complete resolution of her dysmenorrhea and pelvic pain. **Conclusions:** VACTERL association is a complex disorder that can include genital anomalies, which may be overlooked when clinicians focus on the core defects. This case highlights the importance of considering genital malformations in patients with VACTERL association. Early diagnosis and appropriate intervention are crucial for preventing life-threatening complications.

EXPOSURE TO NON-PERSISTENT ENDOCRINE DISRUPTING CHEMICALS (EDCS) AND ENDOMETRIOSIS: A SYSTEMATIC REVIEW

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Objective: To review and consolidate evidence on environmental exposure to non-persistent endocrine disrupting chemicals (EDCs) and endometriosis. **Methodology:** A published literature search through the following electronic databases was done: PubMed, Google Scholar, Scopus and Cochrane. Studies published through the years 2009-2024 were included. Selected studies were qualitative studies, encompassing case control and cohort studies, where investigators measured blood levels of non-persistent EDCs in participants and the prevalence of endometriosis. The types of EDCs, participant characteristics, correlation or association with endometriosis and confounding variables were analyzed. Quality assessments of the studies included in this review were subject to scrutiny with the aid of Critical Appraisal Skills Programme (CASP) checklists. Risk for bias assessment was done using the Newcastle-Ottawa Scale (NOS), a validated tool for assessing case-control and cohort studies. **Results:** The review of three case-control studies and one matched cohort study showed a positive correlation between exposure to non-persistent EDCs and endometriosis. As to bisphenol exposure, findings suggested a strong relationship with the occurrence of endometriosis. Two studies showed statistically significant association of presence of phthalates with endometriosis – MEHP (OR 1.020, 95%CI 1.003-1.038, p 0.001) and DEHP (OR 1.001, 95%CI 1.000-1.002, p = 0.010), with an increased trend of DEHP values observed in advanced stage disease. Triclosan was likewise significantly correlated with staging of endometriosis (r = 0.596, p 0.0001) more specifically in patients with ovarian type and deep nodular endometriosis. With the use of blood samples, there was no conflicting data as to correlation and association of exposure to non-persistent EDCs and endometriosis. **Conclusion:** Exposure to non-persistent EDCs (bisphenol, phthalates and triclosan) is associated with the occurrence of endometriosis. Statistically significant data also suggests that higher blood levels of EDCs is positively correlated with advanced stage disease.

GENETICS & GENOMICS

IMPACT OF PATERNAL AGE AND DIFFERENT SPERM VARIABLES ON ANEUPLOIDY AND MOSAICISM RATES

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Problem statement: While maternal age is strongly associated with embryo aneuploidy, the influence of paternal age and sperm characteristics remains less clear. Some studies suggest that advanced paternal age may increase sperm DNA fragmentation and aneuploid embryos, but evidence is inconsistent. Moreover, the potential effect of sperm selection techniques or sperm source (fresh vs. frozen) on embryo euploidy rates is still under debate. This study aimed to evaluate the impact of paternal age and sperm variables on embryo ploidy status in egg donation cycles. **Methods:** We performed a retrospective analysis of 312 egg donation cycles with PGT-A testing conducted between 2022 and 2023 at a private fertility unit (Clínica Tambre). Only cycles including PGT-A were analyzed. Variables assessed included paternal age (35, 35–45, 45 years), sperm DNA fragmentation, sperm source (fresh vs. frozen), and sperm selection techniques. Statistical comparisons were made to determine differences in euploid, aneuploid, and mosaic embryo rates between groups. **Results:** Euploid embryo rates were slightly higher when sperm from men 35 years old was used (72.8%) compared with 35–45 (68.1%) and 45 years (68.2%). Aneuploid embryo rates were lower in the 35 group (13.4% vs. 15.5% and 17%). Importantly, none of the couples in the 35 group had zero euploid embryos, whereas this occurred in the older groups. Sperm selection techniques did not improve PGT-A results. In fact, in men ≥35 years, cycles using sperm selection showed higher aneuploidy rates and lower euploidy proportions. The use of fresh versus frozen sperm did not significantly affect outcomes. **Conclusion:** Advanced paternal age appears to modestly reduce euploid embryo rates and increase aneuploidy, while sperm selection techniques did not provide benefit and may even correlate with poorer outcomes in older paternal age groups. These findings underscore the importance of considering



paternal factors alongside maternal variables in assisted reproduction and support further investigation into tailored strategies to optimize reproductive success.

Disclosure of Interest: The authors declare no conflicts of interest.

Keywords: Paternal age; Sperm variables; Euploidy; Aneuploidy; PGT-A

IVF CASE REPORT / STUDY

EFFECT OF PRE-TREATMENT PRIOR TO ANTAGONIST REGIMEN ON CLINICAL OUTCOME OF EXPECTED POOR OVARIAN RESERVES PATIENTS USING POSEIDON CRITERIA

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Introduction: Both oral contraceptive pills (OCPs) and estradiol valerate (E2) have been used to schedule a gonadotropin-releasing hormone antagonist in vitro fertilization (IVF) cycles. **Aims & Objectives:** The study is aimed to analyse the effect of different pre-treatments on the IVF outcome at expected POR (poor ovarian responders) patients according to POSEIDON, criteria at Aarogya hospital in Delhi. **Materials & Method:** A retrospective analysis of 364 cycles of expected POR patient who had IVF-ET at Aarogya hospital Delhi from Jan 23 to Jan 25 according to the pre-treatment prior to gonadotrophins stimulation. The cycle was divided into OCP group A (N=167), estradiol valerate group B (N=56), no pre-treatment group C, (N= 141). OCP (E+P) was given from D3-4 of previous cycle for 21d in group A. In group B the estradiol valerate (2mg) twice daily was given from day 20 of periods in luteal phase till the next cycle commences (D1-2). In group C, no supplement was given in pre-treatment cycle. **Result:** The demographic profile and controlled ovarian stimulation were nearly same for all POR patients were antagonist protocol was used with recombinant HCG in all for trigger and progesterone supplement in luteal phase. The Implantation rate was higher in Group A (26.2%) and in Group B (26.8%) as compared to Group C 14.5% (p value of 0.001). The clinical pregnancy was also higher in Group A 36.1% and in Group B 42% as compared to Group C 21.2 % (p-value of 0.001). The abortion rate was lowest in Group A 11.4% as compared to 28.6% in Group B and 35.5% in Group C. Although the biochemical pregnancy rate was lowest in Group B 19.6% as compared to Group A 31.1% and in Group C 34.0%. **Conclusion:** Pre-treatment prior to GnRH antagonist regimen in expected POR patient with OCP or estradiol valerate in luteal phase can improve the clinical pregnancy outcome of POR patients. Estradiol valerate seems to be more effective than OCP. Although it may be associated with longer stimulation & higher gonadotropin consumption. **Key Words:** IVF, GnRH antagonist, Oral contraceptives, Estradiol valerate

INFERTILITY/ENDOCRINOLOGY

PREVALENCE OF SECONDARY INFERTILITY AND AFFECTING FACTORS IN WOMEN 18-49 AGE

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The data of this case-control study were obtained between 01.07.2021-01.12.2022. The population of the study consisted of all women diagnosed with secondary infertility who applied to the IVF Center of a training and research hospital in Turkey, while the sample consisted of patients diagnosed with secondary infertility between the ages of 18-49 who were registered to the IVF Center between September 2014 and June 2021. Random non-probability sampling method was used to calculate the sample size. The case group of the study consisted of 418 women who met the inclusion criteria, and the control group consisted of 162 women who had not received infertility diagnosis and treatment before. Data were collected from patient files and face-to-face interviews using the Infertility Risk Factor Examination Form developed in line with the relevant literature. 72.1% of the sample was secondary infertile. Of the secondary infertile women, 75.8% were diagnosed as female, 0.5% as male, 12.9% as both female and male, and 10.8% as having secondary infertility of unknown cause. According to the results of logistic regression analysis, place of residence and age of spouse, age at first marriage and number of marriages, FP method use and presence of dysmenorrhea were significant factors between women in the secondary infertile and non-infertile groups.

Age, educational level, employment status, spouse's educational level, abortion, duration of marriage, gravida, parity and number of children, regular drug use, smoking and alcohol use, ovulation disorder, irregular menstruation, hormonal disorder, polycystic ovarian syndrome, Tubal

problems, tubal dysfunction/obstruction, endometriosis, fibroids/polyps, uterine adhesion, systemic lupus disease, genital infections, hirsutism and dyspareunia were not significant factors between secondary infertile and non-infertile women (p>0.05). In particular, individuals should be aware of lifestyle-related and modifiable risk factors. Many women may not be aware of these risks or may be misinformed. Individuals of reproductive age should be made aware through trainings covering topics such as obesity, smoking, marriage at an advanced age, delayed delivery (men and women), early menopause due to family history.

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IMPACT OF ENDOMETRIAL THICKNESS ON PREGNANCY AND PERINATAL OUTCOMES: INSIGHTS FROM 16566 SINGLE BLASTOCYST FROZEN EMBRYO TRANSFER CYCLES

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Problem Statement: Endometrial thickness (EMT) remains a widely utilized yet contentious biomarker in frozen embryo transfer (FET) cycles. Despite its prevalent use in clinical practice, evidence regarding its association with live birth and perinatal outcomes is inconsistent. Critically, the interaction between EMT and key patient characteristics—such as maternal age and BMI—has not been adequately explored, leading to uncertainties in individualized clinical decision-making. This study aims to clarify the complex relationship between EMT and both reproductive and neonatal outcomes in single blastocyst FET cycles, with particular emphasis on effect modification by maternal age and BMI.

Methods: We analyzed a large cohort of 16,566 single blastocyst FET cycles. Using advanced statistical approaches, we employed generalized additive models (GAMs) to capture potential non-linear relationships between EMT and outcomes including live birth, gestational age, birth weight, and obstetric complications. To ensure robustness and minimize unmeasured confounding, we implemented both inverse probability treatment weighting (IPTW) and generalized linear mixed models (GLMMs). Subgroup analyses were conducted to assess effect modification by maternal age and BMI, addressing a significant gap in the current literature. **Results:** Pregnancy outcomes improved with increasing EMT up to 12 mm. Compared to the reference group (8.9 mm), GLMMs with IPTW revealed that EMT ≤7 mm was associated with significantly lower odds of live birth (OR: 0.428, 95% CI: 0.353 to 0.519, p 0.001), shorter gestational age (β: -0.604 weeks, 95% CI: -0.766 to -0.476, p 0.001), and higher odds of preterm birth (PTB) (OR: 1.919, 95% CI: 1.075 to 3.426, p 0.05). Although low birth weight (LBW) rates were higher in the ≤7 mm group, the difference was not statistically significant. Unweighted GLMMs showed similar trends. Stratified analyses suggested attenuated EMT-related benefits in women ≥40 years and distinct trends among those with BMI ≥24 kg/m². **Conclusions:** Pregnancy and perinatal outcomes improved with increasing EMT up to 12 mm, while EMT ≤7 mm was associated with reduced gestational age and elevated risk of preterm birth. EMT ≥8 mm may offer protective benefits. Age and BMI may modify these associations, highlighting the need for personalized approaches in FET management.

CLINICAL ART/IVF

LIVE BIRTH AND EMBRYO EUPLOIDY OUTCOMES AFTER PROGESTIN-PRIMED OVARIAN STIMULATION (PPOS) VERSUS GnRH ANTAGONIST PROTOCOLS IN PGT-A CYCLES: A LARGE COHORT ANALYSIS

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Problem statement: Preimplantation genetic testing for aneuploidies (PGT-A) enables embryo selection based on chromosomal status, but stimulation protocol choice may influence embryological and clinical outcomes. Progesterin-primed ovarian stimulation (PPOS) offers advantages for cycle scheduling and patient convenience, yet its impact on live birth rate (LBR) and embryo euploidy compared to the gonadotropin-releasing hormone antagonist (GnRH-ant) protocol remains uncertain. **Methods:** A total of 2,942 PGT-A cycles were analyzed. Assisted hatching was performed on day 3, followed by



trophectoderm biopsy on day 5 or 6, depending on blastocyst quality and expansion. In total, 4,536 blastocyst transfers were included. Fresh transfers were performed in GnRH-ant cycles when endometrial conditions were optimal (trilaminar, ≥ 7 mm); otherwise, embryos were vitrified. In PPOS cycles, all embryos were cryopreserved for deferred transfer. Endometrial preparation (modified natural or hormonal replacement) was individualized, and luteal phase support (LPS) was provided with vaginal micronized progesterone (5). The primary outcome was LBR per transfer. Secondary outcomes included oocyte yield, maturation rate, blastocyst formation, number of embryos biopsied, euploidy rate, and clinical outcomes (biochemical pregnancy, clinical pregnancy, ongoing pregnancy, biochemical miscarriage, and clinical miscarriage). Analyses were stratified by POSEIDON groups and adjusted for maternal age, body mass index (BMI), antral follicle count (AFC), oocyte yield, and embryo quality. **Results:** Patient demographics and ovarian response parameters were comparable between PPOS and GnRH-ant cohorts across POSEIDON groups. Euploidy rates per PGT-A cycle were overall similar (1–4), and blastocyst formation rates did not differ significantly. Importantly, LBR per embryo transfer showed no significant difference after adjustment for prognostic variables. Miscarriage rates (biochemical and clinical) were also comparable across protocols. Subgroup analysis revealed that while euploidy rates did not differ between protocols in POSEIDON groups 1 and 3, significantly higher euploidy rates were observed with PPOS in groups 2 ($68.98\% \pm 39.01$ GnRH-ant vs. $78.25\% \pm 37.12$ PPOS, $p=0.0001$) and 4 ($71.94\% \pm 41.24$ GnRH-ant vs. $85.07\% \pm 32.30$ PPOS, $p=0.0001$). **Conclusion:** PPOS and GnRH-ant protocols yield similar overall embryological and clinical outcomes in PGT-A cycles, including LBR. However, subgroup analyses suggest a potential advantage of PPOS in improving euploidy rates for POSEIDON groups 2 and 4.

Disclosure of Interest: The authors declare no conflicts of interest.

IMPACT OF ANTIBIOTIC TREATMENT ON PREGNANCY OUTCOMES IN INFERTILE WOMEN WITH CHRONIC ENDOMETRITIS AND EXPLORATION OF DIAGNOSTIC PLASMA CELL THRESHOLDS

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Problem statement: The optimal plasma cell threshold for diagnosing chronic endometritis (CE) remains undefined. Although CE is associated with adverse reproductive outcomes, the impact of broad-spectrum antibiotic treatment on pregnancy outcomes in general infertile women with CE remains inconclusive. This research aims to determine the impact of antibiotic treatment on pregnancy outcomes in infertile women with CE and to investigate the diagnostic plasma cell threshold for CE using immunohistochemical (IHC) detection. **Methods:** Embryo transfer (ET) cycles were categorized based on the plasma cells/ high-power field (HPF): 0, 1–4, 5–19, and ≥ 20 . Pregnancy outcomes were compared across endometrial plasma cell count strata before and after antibiotic treatment. For patients undergoing ET cycles both pre- and post-antibiotic treatment, a McNemar's Chi-squared analysis was performed to determine antibiotic treatment effects. **Results:** Compared to women with plasma cells/HPF = 0 who did not receive treatment, women with plasma cells/HPF 5–19 had a significantly increased risk of biochemical pregnancy before receiving antibiotic treatment (aOR, 2.12; 95% CI, 1.31–3.49), a risk that was eliminated following antibiotic therapy. Analysis for patients who underwent ET both before and after hysteroscopy and antibiotic treatment revealed significant improvements in clinical pregnancy rates (49.5% vs. 17.1% , $P=0.001$) and live birth rates (40.5% vs. 10.4% , $P=0.001$) after antibiotic treatment. After adjusting for potential confounding factors, antibiotic treatment was significantly associated with increased odds of live birth (aOR, 11.60; 95% CI, 8.58–15.67), clinical pregnancy (aOR, 4.49; 95% CI, 3.58–5.62), and decreased odds of biochemical pregnancy (aOR, 0.62; 95% CI, 0.44–0.86). **Conclusion:** Patients with plasma cells/ high-power field (HPF) ≥ 5 demonstrated an increased risk of biochemical pregnancy in ET cycles; whereas antibiotic treatment completely abrogated this risk.

ORAL PRESENTATION 7: GYNECOLOGY: OTHER / GSM/VVA / GYNECOLOGY

GYN OTHER

KNOWLEDGE, ATTITUDE AND PRACTICES ON LONG-ACTING REVERSIBLE CONTRACEPTIVE METHODS AMONG HEALTH CARE WORKERS IN A TERTIARY GOVERNMENT HOSPITAL IN BAGUIO CITY, PHILIPPINES

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Problem statement: The lack of knowledge as well as poor attitude and practice towards long-acting reversible contraceptive (LARC) methods among healthcare workers (HCW) has the potential to dramatically affect providers' ability to provide quality contraceptive care for their patients. This study evaluated the knowledge, attitude and practices towards LARC among HCW in a tertiary government hospital. **Methods:** This cross-sectional study surveyed a total of 150 HCWs in a tertiary government hospital from April to August 2024 using knowledge, attitude, and practices (KAP) survey model to determine the KAP towards LARC and the associated factors. Multivariate regression analysis was employed to determine independent predictors of KAP. **Results:** All participants had good levels of knowledge and attitude (score ≥ 26); however, only 18% had good practices towards LARC. Level of knowledge was significantly associated with age ($p=0.008$), gender ($p=0.034$), religion ($p=0.001$), profession ($p=0.001$), years of experience ($p=0.003$) and attending family planning trainings. Attitude was significantly associated with age ($p=0.036$), marital status ($p=0.051$), religion ($p=0.051$) and educational attainment ($p=0.006$). Finally, practice was significantly associated with age ($p=0.001$), gender ($p=0.013$), marital status ($p=0.001$), profession ($p=0.001$), educational attainment ($p=0.001$), years of experience ($p=0.001$) and attending family planning trainings ($p=0.001$). **Conclusion:** Addressing misconceptions and biases will further support the delivery of patient-centered care, ultimately increasing the adoption of long-acting contraceptive options among patients. Future intervention programs should focus on barriers and facilitators of knowledge, attitude, and practices towards LARC to increase uptake and access to LARC.

THE EFFECT OF MODEL-BASED ANTENATAL AND POSTNATAL MOTIVATIONAL INTERVIEWING ON CONTRACEPTIVE SELF-EFFICACY, ATTITUDE AND METHOD USE: A RANDOMIZED CONTROLLED TRIAL

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Problem statement: Short interpregnancy intervals are associated with adverse fetal, maternal, and neonatal health outcomes. However, there are many factors that influence the use of contraceptive methods to prevent unintended pregnancies in the postpartum period. Initiatives tailored to individuals' needs and aimed at enhancing self-efficacy are effective in promoting contraceptive method use. Therefore, this study aims to evaluate the effect of antenatal and postnatal model-based motivational interviewing on postpartum contraception outcomes. **Methods:** This study was a parallel group, pretest-posttest, randomized controlled trial. The study group consisted of 72 participants, 36 intervention group and 36 control group, stratified according to parity, and the study was completed with 63 participants. The intervention group received a total of three motivational interviewing during the antenatal and postnatal periods. The control group received only routine care. The Information Form, Contraceptive Self-Efficacy Scale, Contraceptive Attitude Questionnaire, Contraceptive Use Form, and Stage of Change Evaluation Form were used to collect the data. Descriptive statistics, chi-square test, mixed ANOVA and Generalized Estimating Equations were used to analyze the data. Ethical approval was obtained, and informed consent from the participants. **Results:** Contraceptive self-efficacy showed a significant increase in the intervention group ($p=0.05$). There was no significant difference between the groups in terms of contraceptive attitude, behavior change stage, and initiation of modern contraceptive use in the postpartum period while consistency in contraceptive use and method satisfaction were



significantly higher in the intervention group ($p=0.036$, $p=0.020$, respectively). **Conclusion:** This study found that antenatal and postnatal motivational interviewing based on the Transtheoretical Model for postpartum contraception was effective in improving contraceptive self-efficacy, consistent use, and method satisfaction. Accordingly, incorporating motivational interviewing into contraceptive counseling can be recommended as an effective strategy for improving postpartum contraceptive outcomes.

EFFECTS OF EDUCATION GIVEN TO WOMEN ON THEIR CERVICAL CANCER KNOWLEDGE AND UNDERGOING PAP SMEAR TESTING: A SINGLE-GROUP QUASI-EXPERIMENTAL STUDY

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Problem statement: Although cervical cancer is largely preventable through screening, detection and treatment of precancerous abnormalities, it remains one of the leading causes of cancer-related morbidity and mortality globally. This study was aimed at investigating effects of education given to women on their cervical cancer knowledge and intention to have Pap smear test. **Methods:** The population of this quasi-experimental study with a single-group pretest-posttest design consisted of 44 women working in a textile company in Turkey. The sample size was calculated as 34 women by using the G*Power 3.1.9.7 program (effect size: 0.50, margin of error: 5%, power: 80%). In the study, the Descriptive Characteristics Questionnaire and Cervical Cancer Knowledge Scale (CCKS) were used to collect data. After the data were collected, the participants were given training on cervical cancer and Pap smear test. One month after the training, the women's knowledge level with the CCKS and intention to have Pap smear test were re-assessed. **Results:** Of the participants, 60% were ≥ 40 years old, 42.9% had higher education, and 57.1% had an income less than their expenses. Before the training, 71.1% and 71.4% were not knowledgeable about cervical cancer and the Pap smear test, respectively and 51.4% had not had Pap smear test. There were statistically significant differences between the mean scores the participants obtained from the overall CCKS before and after the training in terms of the variables such as age, education, income, marital status, having children, having regular gynecological examination, being knowledgeable about cervical cancer and Pap smear test. The mean score they obtained from the overall CCKS was 3.89 ± 2.43 before the training, which increased to 4.37 ± 2.44 after the training. Of the participants, 14.3% did not have a Pap smear test before the training because they were not knowledgeable about it. However, after the training, they all were knowledgeable about it. Approximately 62.5% of women who did not have a PST before the training had this test after the training. **Conclusion:** Education given to the participants significantly increased their cervical cancer knowledge and encouraged them to have a Pap smear test.

THE USE OF HORMONE THERAPY IN THE PREVENTION AND TREATMENT OF OSTEOPOROSIS: RISKS AND BENEFITS

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Introduction: Menopause corresponds to a 12-month period of amenorrhea, due to the loss of ovarian follicular function¹, and generally occurs between 45 and 55 years of age². Estrogen deficiency resulting from menopause is associated with vasomotor symptoms, urogenital atrophy, osteoporosis, among others³. In this scenario, Hormonal Therapies (HT) emerged, aiming to alleviate these conditions. However, the Women's Health Initiative study, which analyzed the use of HT in approximately 27,000 postmenopausal women, demonstrated a higher risk of adverse cardiovascular events, cerebrovascular accident (CVA), venous thromboembolism (VTE) and breast cancer². It is known, however, that estrogen therapy provides important benefits against the loss of bone density, and its use should be considered between doctor and patient, evaluating the risks and benefits of HT. **Methodology:** A narrative literature review was carried out by searching for bibliographies indexed in databases such as UptoDate, PubMed and Scielo. The searches took place between January and April 2024. The inclusion criteria were studies carried out between 2007 and 2024, published in Portuguese and English, with the keywords: Hormone

Replacement Therapy, Osteoporosis, Osteoporotic Fractures and Menopause. In this review category, the authors seek to investigate and elucidate a phenomenon, with the risks and benefits of HT in the prevention and treatment of osteoporosis being the focus of this study. **Results:** The studies demonstrated that HT for the management of vasomotor and genitourinary symptoms is the only one proven to be effective. However, due to the various adverse outcomes observed, such as increased risk of coronary artery disease (2.5 more cases per 1000 women), breast cancer (3 more cases per 1000 women), stroke (2.5 cases per more per 1000 women), pulmonary embolism (3 more cases per 1000 women), the use of HT is still not recommended as a first line of treatment for the prevention and treatment of osteoporosis⁵, as the benefits do not outweigh the risks. **Conclusion:** It is necessary, therefore, to carry out broader studies using varied hormonal doses, different formulations and routes of administration, so that the benefits of use outweigh the risks also in the prevention and treatment of osteoporosis.

EVALUATION OF HEALTH PROFESSIONALS' KNOWLEDGE AND READINESS TO MANAGE VIOLENCE IN INTERVENTION TO WOMEN VICTIMS OF VIOLENCE: A QUALITATIVE RESEARCH

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Objective: Domestic violence is one of the most important public health problems in terms of women's health and creates a significant burden on the health system. It is known that health professionals have an important and key role in identifying violence, but have problems in reporting and managing cases of violence. In this direction, the study was conducted as a qualitative research to evaluate the readiness of health professionals (physicians, nurses and midwives) to recognise and manage violence in their first interventions towards women who are victims of violence. **Method:** In the study, the experiences of physicians, nurses and midwives working in Ege University orthopaedics, ENT, surgery clinics, ophthalmology, obstetrics, gynaecology, emergency department and psychiatry units on violence against women and their knowledge and readiness to recognise and prevent violence were evaluated. The study was conducted in a phenomenological type and the data were collected by face-to-face in-depth interviews with 21 health professionals. After the interviews were recorded on a voice recorder, content and thematic analysis of the data was performed in MaxQDA programme. **Findings:** As a result of the qualitative interview analyses in which we evaluated the readiness of health professionals to recognise and manage violence, five main themes were formed. The main themes are; "Perception of Violence Against Women", "Roles and Responsibilities of Health Professionals", "Difficulties Encountered in the Intervention Process", "Training and Competence Needs", "Clinical Practice Reality". Health professionals emphasised that due to the legal reporting obligation in our country, they performed the steps of reporting this process directly to the police, making reports and keeping records, and that they had inadequate and incomplete knowledge on how to approach the victim of violence, communication, psychological support and support systems. **Conclusion:** As a result of the qualitative research, health professionals stated that they care about the issue of violence against women. They emphasised that violence against women is an important public health problem in our country and in the world and that although they are aware of their professional roles and responsibilities in this regard, they need information and training on process management, legal responsibilities and referral systems. This work was supported by the TUBITAK-2224-A Program for Supporting Participation in International Scientific Events

GS/M/VA

EFFECTS OF ESTRIOL-LACTOBACILLI COMBINATION VERSUS POLYCARBOPHIL-BASED VAGINAL MOISTURIZER ON POST-RADIATION VAGINITIS IN WOMEN WITH CERVICAL CANCER: A RANDOMIZED CONTROLLED TRIAL

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Background: Vaginal atrophy often occurs post-pelvic radiotherapy for cervical cancer, lacking evidence-based treatment. Estrogen is vital for glycogen production and for Lactobacillus predominance. Topical estriol with Lactobacillus acidophilus KS400 (E3/L) enhances vaginal microflora in postmenopausal women; however, its efficacy in radiation-induced vaginitis remains unclear. **Material and Methods:** This is an open-label, randomized controlled trial. Thirty-four women with stage I–III cervical cancer who had completed radiotherapy and developed vaginal toxicity symptoms were recruited. Participants were randomly allocated to receive either E3/L vaginal tablets or polycarbophil-based vaginal moisturizer (PBVM) for one month. Changes in vaginal maturation value (VMV), vaginal pH, and vaginal toxicity symptoms were assessed at baseline and 28-day treatment. **Results:** Baseline characteristics were comparable between the two treatment groups in terms of mean age, body mass index, and median months since no period. E3/L showed a significantly greater improvement in VMV compared with PBVM (19.65 points [IQR 0 – 39.5] vs. 2.08 points [IQR 0 – 20.1]; $p = 0.035$). Changes in vaginal pH, dyspareunia, and vaginal pain scores were similar between two treatment groups. However, improvements in vaginal dryness and inflammation were significantly greater in E3/L group. **Conclusion:** Among women with cervical cancer and radiation-induced vaginitis, E3/L vaginal tablet showed superior outcomes compared with PBVM, particularly in terms of VMV, vaginal dryness and inflammation.

Keywords: Estriol, Lactobacillus, Vaginal Maturation value, Vaginal pH, Vaginal Toxicity, Radiation-induced vaginitis, Cervical cancer

GYNECOLOGY

SOMALI YOUNG WOMEN'S COPING METHODS WITH DYSMENORRHOEA: A PHENOMENOLOGICAL RESEARCH

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Aim: This study aimed to determine the impact of dysmenorrhoea and coping methods in young women living in Somalia. **Method:** The study is a phenomenological research design with qualitative research design. A total of 16 students who complained of dysmenorrhoea and scored 5 or higher on the Visual Analogue Scale were interviewed. The study was reported in accordance with the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines. Data were analysed using Colaizzi's phenomenological analysis method. **Results:** In the analysis of the data, 3 categories were obtained: complaints experienced during menstruation, impact on quality of life and coping methods. In addition, 6 themes were formed as physical complaints, emotional and emotional complaints, psychosocial relations, environmental factors, pharmacological methods and non-pharmacological methods. **Conclusion:** It has been determined that young women living in Somalia experience severe dysmenorrhoea and this process is accompanied by physical and emotional complaints, affecting their quality of life, and they try to cope with this situation with various pharmacological and non-pharmacological methods.

Keywords: Coping, Pain, Dysmenorrhoea, Menstruation

ORAL PRESENTATION 8:

FETOMATERNAL MEDICINE: TECHNOLOGICAL INNOVATIONS / LABOR AND DELIVERY

TECHNOLOGICAL INNOVATIONS

ARTIFICIAL INTELLIGENCE APPLICATIONS IN EARLY PREDICTION OF PREECLAMPSIA: A SCOPING REVIEW

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Problem statement: Preeclampsia (PE) is a major cause of maternal and perinatal morbidity and mortality worldwide, and its pathophysiology remains incompletely understood. Current screening strategies, including the Fetal Medicine Foundation (FMF) risk models, rely on clinical risk scores and regression-based algorithms using predefined features and multiples-of-the-median (MoM) standardization. While these methods modestly improve detection, their performance is inconsistent and suboptimal across populations. Artificial intelligence (AI), with its capacity to identify hidden patterns in complex datasets,

offers a transformative opportunity to personalize PE risk assessment. **Methods:** A scoping review was conducted. PubMed and Web of Science were searched in May 2025 for original studies employing AI models for the early prediction of preeclampsia. Data extraction focused on study design, population, type of AI model, predictors, performance metrics and clinical implications. **Results:** 24 studies published between 2019 and 2025 were identified. Most were retrospective cohort analyses, ranging from small proof-of-concept datasets (360,000 deliveries). Neural networks (NN), Random Forests (RF), Gradient Boosting Machines (GBM), Support Vector Machines (SVM) and Deep Learning (DL) radiomics were the most frequently applied approaches. Predictors included maternal demographics, obstetric history, blood pressure, biomarkers such as PIGF, PAPP-A and β -hCG, complete blood counts, Doppler and MRI radiomics. Performance varied across datasets but consistently exceeded FMF-based models. Large-scale EHR analyses using RF or GBM achieved AUCs of 0.84–0.93 across diverse populations. NN trained on raw maternal and biomarker data improved preterm PE detection to 75% at 10% false-positive rate with AUCs up to 0.91. DL radiomics applied to placental MRI reached AUC 0.92 for PE with fetal growth restriction. Gene-expression panels achieved external validation AUCs between 0.79 and 0.87. Across designs, AI methods outperformed conventional logistic regression and enabled individualized risk profiles. **Conclusion:** AI demonstrates clear superiority over traditional approaches, with several models achieving AUCs above 0.90. These tools can generate individualized risk trajectories, informing aspirin prophylaxis, intensified surveillance and resource allocation. Clinical translation, however, requires prospective multicentre validation, harmonized data standards and explainable AI frameworks to ensure equitable and trustworthy implementation.

Disclosure of Interest: The authors declare no conflicts of interest.

THE EFFECT OF VIRTUAL REALITY INTERVENTION ON LABOR PAIN AND EXPERIENCE IN PREGNANT WOMEN: A RANDOMIZED CONTROLLED TRIAL

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Problem statement: This study was conducted to examine the effects of a virtual reality intervention on labor pain and the birth experience in pregnant women. **Methods:** This is a pretest-posttest, single-blind randomized controlled trial. A total of 34 pregnant women who met the inclusion criteria were included in the study: 16 intervention and 18 controls. Data were collected using the Pregnancy Information Form, Visual Analog Scale (VAS), and the Wijma Childbirth Expectation/Experience Scale, using face-to-face interviews. Pregnant women in the intervention groups watched 6-10 minute videos with virtual reality headset while their cervical dilation was 6 cm and 8 cm, and their pain levels were assessed using the VAS. Pregnant women in the control group received routine care, and their pain was assessed with a VAS when their cervical dilation was 6 cm and 8 cm. All participants were administered the Wijma Childbirth Expectation/Experience Scale, at the end of the 24th hour postpartum. Descriptive statistics and parametric tests were used in data analysis. **Results:** The mean VAS score for the control group with a cervical dilation of 6 cm was 7.89 ± 1.81 , while the mean VAS score for the intervention group before the virtual reality intervention was 6.88 ± 2.15 , with no difference between them. After the virtual reality intervention, the mean VAS score for the intervention group was 4.69 ± 2.15 , and when the pre-post intervention VAS scores of the intervention group were compared, the difference was found to be statistically significant ($p = 0.000$). When the cervical dilation was 8 cm, the mean VAS score in the control group was 9.89 ± 0.47 , while the mean pre-intervention score in the intervention group was 8.81 ± 1.55 and post-intervention score was 7.50 ± 1.89 . A statistically significant difference was found between the pre- and post-intervention scores of the intervention group ($p = 0.05$). These results indicate that the virtual reality intervention led to a significant reduction in pain levels. The total mean score on the Wijma Childbirth Expectation/Experience Scale, which assesses childbirth fear/experience, was 97.33 ± 30.20 in the control group and 79.62 ± 21.14 in the intervention group, and there was no difference in childbirth expectation/satisfaction between the groups. **Conclusion:** Virtual reality has the potential to provide relaxation to



laboring women during the labor process. Non-pharmacological methods such as virtual reality may be preferred for pain management during vaginal birth due to their lack of side effects and affordability.

TRANSFORMING A BASIC BIRTH MODEL INTO A HIGH-FIDELITY, AI-POWERED SIMULATION: A NOVEL APPROACH FOR HEALTH EDUCATION

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Problem Statement: Access to realistic and emotionally engaging birth simulations in health education is limited by the high cost of commercial models and the lack of support for local languages. Furthermore, existing models often lack interactive features and autonomous feedback mechanisms, which can diminish student engagement and reduce learning effectiveness. **Methods:** We enhanced a basic physical birth model by integrating artificial intelligence–driven voice interaction, emotional modeling, and real-time Turkish speech recognition, using open-source technologies. The system delivers stage-specific dialogue for the latent, active labor, and postpartum phases, adapting its verbal responses dynamically based on user input and detected emotional states. All development was carried out in-house, using only open-source tools. System performance was evaluated with health sciences students. **Results:** The system achieved a Turkish speech recognition accuracy of 92%, and 91.4% accuracy in generating appropriate verbal responses. The average system response time was 1.4 seconds. Participants reported a significant improvement in perceived realism and emotional engagement compared to traditional training models. The low-cost design also enabled fully autonomous operation, without the need for instructors or proprietary software. **Conclusion:** This study demonstrates the potential of transforming basic birth models into high-fidelity, interactive simulators through AI integration. This approach enhances health education by providing realistic, language-specific, and emotionally responsive training experiences—especially valuable in resource-limited or non-English-speaking environments.

Disclosure of Interest: The authors declare no conflicts of interest.

ARTIFICIAL INTELLIGENCE APPLICATIONS IN PREDICTING POSTPARTUM HAEMORRHAGE: A SCOPING REVIEW

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Problem statement: Postpartum haemorrhage (PPH) remains the leading cause of maternal mortality globally, responsible for over 20% of maternal deaths and disproportionately affecting low and middle-income countries. In high-resource settings, PPH continues to account for 8–19% of maternal deaths and contributes significantly to transfusion requirements and morbidity. Conventional risk scores to predict the risk of PPH are based on predefined clinical factors, achieve only modest discrimination (AUROC $\approx$ 0.68) and fail to capture complex, nonlinear interactions. Recent advances in artificial intelligence (AI) offers the capacity to integrate hundreds of peri-partum variables and to model intricate relationships that defy traditional regression, enhancing predictive accuracy, and enabling proactive management. **Methods:** A scoping review was conducted. PubMed and Web of Science were searched in May 2025 for original studies employing AI models for PPH prediction. Data extraction focused on study design, population, type of AI model, predictors, performance metrics and clinical implications. **Results:** Seven studies published between 2020 and 2024 were included. Most were retrospective in nature, with sample sizes ranging from small case–control cohorts (n=430) to very large datasets (228,000 deliveries). Ensemble learning techniques, particularly Gradient Boosting (GBM) and Random Forests (RF), were the most frequently applied. Predictors integrated maternal demographics, obstetric history, bloodwork values, intrapartum medication use, facility-level variables and vital signs. Performance consistently surpassed traditional regression-based scores. Models trained on very large electronic health record (EHR) datasets achieved AUROC values around 0.83. In caesarean deliveries, RF algorithms estimated actual blood loss with a mean absolute error of approximately 22 mL, representing less than 6% error. In low-resource case–control cohorts, simplified models using as few as nine readily available admission variables achieved sensitivities

above 80% and specificities above 70%. Mid-sized datasets with hundreds of peripartum variables reached AUROC values close to 0.98, while multicentre cohorts of over 150,000 deliveries demonstrated reproducible C-statistics approaching 0.93. **Conclusion:** AI models consistently outperform conventional risk scores in predicting PPH. These approaches can be embedded in EHR to deliver real-time risk stratification, guide prophylaxis and optimize blood product allocation. Translation into clinical practice requires multicentre prospective validation, harmonized predictors and explainable frameworks to ensure transparency and clinical trust.

LABOR AND DELIVERY

THE EFFECT OF BREASTFEEDING COUNSELING WITH SMART PHONE APP ON BREASTFEEDING SELF-EFFICACY, BREASTFEEDING DURATION AND PROBLEMS

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Aim: The aim of the study is to investigate the effect of breastfeeding counseling given via a smart phone application on breastfeeding self-efficacy, breastfeeding duration and problems. **Method:** It is a randomized controlled prospective study. It was completed with 60 primiparous women in the postpartum period in the gynecology service of a Training and Research Hospital in Turkey. In the study, which consisted of four stages: the creation of video content, the development of the smartphone application, the implementation of the developed application in the field, and the analysis stage, data were collected through online questionnaires (by academics) in the development of the smartphone application and determination of its adequacy, and in the field, a questionnaire form answered by women, the Postnatal Breastfeeding Self-Efficacy Scale-Short Form and the Breastfeeding Problems Assessment Scale Form. Lawshe method was used to collect expert opinions and content validity analyses were conducted for the adequacy of the content of the videos. **Results:** It was determined that the self-efficacy of women in the intervention group was higher than that of the control group (p0.05) and that 93% of women in the intervention group and 75% of women in the control group did not stop breastfeeding at six months (p0.05). Additionally, it was found that women in the intervention group experienced fewer breastfeeding problems (p0.05). **Conclusion:** Considering these search results, it can be said that the breastfeeding counseling provided through the developed smart phone application increased the self-efficacy level of women in the intervention group, they experienced fewer breastfeeding problems than the control group, and the application can also be used in the field for successful breastfeeding.

INDUCTION OF LABOR IN TERM BREECH PRESENTATIONS: MATERNAL AND NEONATAL OUTCOMES IN A RETROSPECTIVE COHORT

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Problem statement: Few studies have assessed the impact of induction of labor on breech presentation at term. This study aimed to evaluate the feasibility and safety of labor induction in breech presentation compared to spontaneous vaginal labor. **Methods:** This retrospective observational study included all women with singleton term breech pregnancies who attempted vaginal delivery between January 2017 and December 2024 at Hospital de la Santa Creu i Sant Pau, Barcelona, Spain. The primary outcome was mode of delivery. Secondary outcomes included maternal and neonatal morbidity and mortality. Multivariate logistic regression was used to adjust for relevant covariates. **Results:** A total of 231 women were included, 78 underwent labor induction and 153 spontaneous labor. The vaginal delivery rate was significantly lower in the induction group (55.1% vs. 79.7%, p 0.001), a finding that remained significant after adjustment for parity and breech type (aOR 0.31, 95% CI 0.17–0.57; p 0.001). Among those who delivered vaginally (n = 165), no significant differences were observed in maternal or neonatal outcomes, including postpartum hemorrhage, NICU admission, or metabolic acidosis. Induction methods included mechanical (42.3%), prostaglandins (39.7%), and oxytocin (17.9%). Oxytocin was associated with higher odds of vaginal delivery compared to mechanical methods (OR 5.67, 95% CI 1.07–29.96; p = 0.041).



Conclusion: Labor induction in term breech presentation is associated with a higher risk of cesarean delivery, but not with increased neonatal or maternal morbidity. Induction can be considered a viable option for selected women when performed in experienced centers.

ELECTIVE INDUCTION OF LABOR AFTER CESAREAN DELIVERY: MATERNAL AND NEONATAL OUTCOMES

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Problem statement: Cesarean delivery (CD) rates have risen markedly in developed countries, currently accounting for approximately 20–25% of all births. The most frequent indication for CD is a history of previous cesarean, a factor that strongly contributes to the overall upward trend. Trial of labor after cesarean (TOLAC) represents a key strategy to curb repeat cesarean deliveries, with vaginal birth after cesarean (VBAC) success rates reported between 60%–83%. The aim of this study was to assess obstetric and neonatal outcomes following elective induction of labor after cesarean delivery in a Southern European population, and to identify clinical factors associated with successful VBAC. **Methods:** A retrospective observational study was conducted including 977 women with one previous low-transverse cesarean, with a singleton pregnancy of cephalad position, who underwent spontaneous versus elective induction of labor at term in a secondary care center between 2020 and 2025. Maternal demographic data, induction methods, labor progression, mode of delivery and neonatal outcomes were analyzed. **Results:** Among women with one prior cesarean delivery, the overall vaginal birth rate was 49.8%. In cases of labor induction, the VBAC rate was 50.5%. When stratified by induction method, oxytocin was associated with the lowest cesarean rate (~32%), followed by dinoprostone (~48%) and Foley catheter (~56%). Induction duration differed significantly between methods (Kruskal–Wallis $p < 0.001$). Oxytocin achieved the shortest median time to delivery (~11 h), while Foley catheter resulted in longer durations (~23 h). Rupture of membranes was associated with significantly shorter induction times (multiplier 0.52). Independent predictors of VBAC included prior vaginal birth (OR 3.79; 188–7.63) and lower pre-pregnancy BMI (OR 0.95; 0.91–0.99). Interval since previous cesarean was not significantly associated with VBAC success. Neonatal outcomes were similar across induction methods. **Conclusion:** The VBAC rate in our cohort lies at the lower end of those reported by other countries. In patients with a first cesarean delivery, a history of vaginal delivery positively correlated with a VBAC, while pre-gestational body mass index negatively affected VBAC rates in subsequent delivery. Identifying correlates of TOLAC and VBAC success is key to informing national guidelines and individualized care.

ANTIBIOTIC PROPHYLAXIS IN PRELABOR RUPTURE OF MEMBRANES AT TERM? ADDRESSING PREGNACIES WITH HIGHER RISK OF INFECTION

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Problem statement: Although clear guidelines exist for antibiotic prophylaxis in preterm prelabor rupture of membranes (PROM) and in cases of positive screening for Group B Streptococcus, no consensus has yet been reached for the overall management in term PROM. We aim to analyse maternal infection within a population submitted to immediate induction of labor (IOL) after term PROM. **Methods:** Retrospective cohort study of pregnant women with term PROM, between January 2020 and July 2023, at a Portuguese reference hospital. The primary outcome was intrauterine maternal infection, defined by a diagnosis of chorioamnionitis and/or endometritis. A comparative analysis was conducted between groups with regards to latency to deliver. **Results:** Included 759 patients diagnosed with term PROM, representing a prevalence of 9.7% of term pregnancies. Forty (5.3%) patients were diagnosed with chorioamnionitis and/or endometritis. The average time between rupture of membranes and birth was 21.26 ± 14.83 hours. IOL was required in 53% cases after admission. Maternal infection rate was higher in the group with increased latency (12h), 7.3% vs 0.9% ($p < 0.01$). On multivariate analysis, three factors were independently linked to maternal infection: latency 12 hours (OR 4.9 CI95% 1.1–21.8), intrapartum fever, and cesarean

delivery. **Conclusion:** Our findings highlight the infectious risks of longer latency after term PROM even after IOL. Current IOL protocols do not appear to be sufficiently efficient to waive infection. In selected cases of term PROM longer than 12h, antibiotic prophylaxis could prove beneficial in decreasing maternal morbidity. Their use should be further considered in cases of intrapartum fever and cesarian section after term PROM.

WOMEN'S EMOTIONS, EXPECTATIONS AND COPING STRATEGIES DURING THE PERINATAL GRIEF PROCESS: A QUALITATIVE STUDY

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Problem statement: This study was conducted to identify the emotions, expectations, and coping strategies of women experiencing the perinatal grief process. **Methods:** In determining the study group, criterion sampling, one of the purposeful sampling methods, was used, and in this context, women who had experienced perinatal loss formed the sample of the study ($n=15$). The 'Introductory Information Form' and the 'Semi-Structured Interview Form,' prepared with expert consultation, were used for data collection, and MAXQDA 2022 was utilized for content analysis of the data. **Results:** The average age of the women participating in the study was 30.53 ± 14.24 years. Participants reported experiencing emotions such as sadness (86.6%), fear (13.3%), anxiety (13.3%), shock (6.6%), and regret (6.6%) after the loss. The coping strategies of women who experienced loss were categorized into two groups: 'inability to cope,' which included letting things take their course (13.3%) and struggling (13.3%); and 'coping strategies,' which included spending time with loved ones (46.6%), sharing their experiences (33.3%), adopting a fatalistic approach (26.6%), being alone (13.3%), working (13.3%), and engaging in hobbies (6.6%). The majority of the women indicated satisfaction with the time spent in the hospital and expressed no expectations (86.6%), while some participants mentioned expectations from healthcare professionals, such as showing empathy (19.9%), allowing time (6.6%), and improving the follow-up process (6.6%). **Conclusion:** This study determined that women who experienced perinatal loss faced emotional challenges and developed their own strategies to cope with the process. It is recommended that their psychosocial status be assessed and that they receive professional support to ensure a successful navigation of the grieving process.

Keywords: Perinatal loss, Expectation, Emotion, Coping strategies

ORAL PRESENTATION 9:

GYNECOLOGY: HPV / PMS/PMDD / POI/ GYNECOLOGICAL ONCOLOGY

HPV

DILEMMAS ON THE DIRECT RELATIONSHIP BETWEEN UREAPLASMA AND HPV INFECTION IN NULLIPAROUS PATIENTS WITH UREAPLASMA-HPV POSITIVE - A CASE STUDY IN ALBANIA

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Problem statement: In recent years, a close relationship has been observed between young nulliparous patients with ureaplasma and HPV infection. According to these studies, Ureaplasma parvum and Ureaplasma urealyticum frequently colonize the genital tract and may influence mucosal inflammation. Furthermore, persistent human papillomavirus (HPV), especially high-risk types (hrHPV), drives cervical carcinogenesis. The association between Ureaplasma carriage and HPV infection has raised many questions about their mutual influence. Our paper aimed to make an assessment at a group of patients in Albania. **Methodology:** We used the cross-sectional study method of 2,670 sexually active women (18–45 years) at a reproductive health clinic (May 2023–May 2025). Cervicovaginal swabs underwent PCR-based HPV genotyping and quantitative PCR for U. urealyticum. Demographics and covariates such as age, parity, condom use, number of partners, age at sexual debut, smoking, hormonal contraception, etc. were obtained through questionnaires. **Results:** According to the analysis, it turns out that HPV infection was detected in 28.5% of participants, while Ureaplasma urealyticum was present in 30.4%. The prevalence of U. urealyticum was higher among HPV-positive women



(42.1%) compared to HPV-negative women (25.7%), a statistically significant difference. The analysis suggested that women carrying U. urealyticum had more than twice the odds of HPV infection (OR = 2.10), and this association remained significant after adjusting for potential confounders (aOR = 1.75). The association was even stronger for high-risk HPV types (aOR = 1.92). **Conclusion:** The study showed that Ureaplasma colonization is independently associated with HPV infection, particularly hrHPV. Results show the role for genital tract microbiota in HPV acquisition/persistence. Also, the study concludes that genital tract Ureaplasma may play a role in HPV acquisition or persistence.

EFFICACY OF A MULTI-INGREDIENT CORIOLUS VERSICOLOR-BASED VAGINAL GEL FOR HIGH-RISK HPV CLEARANCE: 6-MONTH FINAL RESULTS FROM THE PALOMA 2 CLINICAL TRIAL

Cristina Centeno, Orlando Valenzuela, Margarita Riera, Sabrine Rehkugler, Gabriel Fiol, María Ángeles Calderón, Alfonso Quesada, Mario Ruiz, Belén López - Cavanillas, Arantxa Lekuona, José Antonio López, Antonia Enriquez, Immaculada Rodríguez, José Ángel Monserrat, **Patricia Sanmartín**

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Problem statement: The PALOMA 2 trial evaluated the efficacy of a multi-ingredient Coriolus versicolor-based vaginal gel for High-risk Papillomavirus (HR-HPV) clearance in women with low-grade cervical lesions. **Methods:** Randomised, multi-centre, prospective, open-label, parallel-group, watchful waiting-controlled clinical trial. Unvaccinated HR-HPV positive women aged between 30 to 65 years, with Atypical Squamous Cells of Undetermined Significance (ASCUS) or low-grade squamous intraepithelial lesions (LSIL) cytology and concordant colposcopy were randomised (1:1:1:1) into: A) Standard regimen: once daily for one month, followed by every other day for five months; B) Intensive regimen: once daily for three months, followed by every other day for three months; C) Very Intensive regimen: once daily for six months; D) Control group. The study assessed HR-HPV clearance after 6 months, categorised as total clearance (negative HR-HPV test or no detectable baseline genotypes) or partial clearance (disappearance of at least one genotype, along with normal cytology and concordant colposcopy). Ethical approval was obtained, all participants gave informed consent. Results of arm A, B and C vs D on HR-HPV clearance after 6-month treatment are presented. **Results:** 124 patients with a mean age of 41.13 years were evaluated. The 46.8% were current or former smokers. HPV16 was homogeneously distributed. From 109 patients (A= 26; B= 26; C= 29; D= 28) who completed the 6-month treatment, 57.7% (A), 88.5% (B), 75.9% (C) vs 53.6% (D) obtained HR-HPV clearance (pAvsD= 0.7607, pBvsD= 0.0050 and pCvsD= 0.0779). A subgroup of 56 patients positive for HPV 16 and/or 18 and/or 31 (A=14; B=15; C=14; D=13) (mean age: 42.52 years) clearance rates after 6 months were 57.1% (A), 93.3% (B), 64.3% (C) and 30.8% (D) (pAvsD= 0.1682, pBvsD= 0.0011 and pCvsD= 0.0816). **Conclusion:** The Coriolus versicolor-based vaginal gel significantly improves HR-HPV clearance compared to watchful waiting approach, with the intensive regimen emerging as the minimum most effective dose to achieve clinically and statistically significant HR-HPV clearance at 6 months. These results support its use as a proactive, non-invasive option for HR-HPV positive women with low-grade cervical lesions.

Disclosure: This study was supported by Procure Health. Patricia Sanmartín is a Medical Advisor at Procure Health.

EFFICACY OF A MULTI-INGREDIENT CORIOLUS VERSICOLOR-BASED VAGINAL GEL ON HIGH-RISK HPV CLEARANCE AND REPAIR OF LOW-GRADE CERVICAL LESIONS: FINAL RESULTS FROM THE PALOMA 2 CLINICAL TRIAL

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Problem statement: The PALOMA 2 Clinical Trial was designed to assess the efficacy of a Coriolus versicolor-based vaginal gel in the repair of low-grade cervical lesions and High-risk Papillomavirus (HR-HPV) clearance. **Methods:** Randomised, multi-centre, prospective, open-label, parallel-group, watchful-waiting-controlled clinical trial. Unvaccinated HR-HPV positive women aged 30 to 65 years, with Atypical Squamous Cells of Undetermined Significance (ASCUS) or Low-grade Squamous Intraepithelial Lesions (LSIL) cytology and concordant colposcopy were randomised (1:1:1:1): A) Standard regimen: once daily for one month, followed by every other day for five months; B) Intensive regimen: once daily for three months, followed by every other day for three months; C) Very Intensive regimen: once daily for six months; D) Control group. Repair of HPV-dependent low-grade cervical lesions and HR-HPV clearance were assessed after the six-month treatment. Repair of cervical lesions was considered when there was cytology normalization with concordant colposcopy. Clearance was categorized as complete (negative HR-HPV test or no detectable baseline genotypes) or partial (disappearance of at least one baseline genotype with normal cytology and concordant colposcopy). IRC approval was obtained, and all participants gave informed consent. Results of arm A, B and C vs D are presented. **Results:** 124 patients (mean age 41.1 years) were evaluated for efficacy; 46.8% were current/former smokers, no significant group differences. Among the 109 who completed the 6-month treatment, lesion repair and HR-HPV clearance were achieved in 46.2% (A), 84.6% (B), 62.1% (C) vs 53.6% (D) (pAvsD=0.5860, pBvsD=0.0141, pCvsD=0.5160). The subgroup of 56 patients positive for HPV16 and/or 18 and/or 31 (mean age 42.5 years), regression and clearance rates were 42.9% (A), 93.3% (B), 64.3% (C) vs 30.8% (D) (pAvsD=0.6946, pBvsD=0.0011, pCvsD=0.0816). **Conclusions:** These findings indicate that the intensive regimen of Coriolus versicolor-based vaginal gel significantly enhances HR-HPV clearance and repair of low-grade cervical lesions compared to watchful waiting approach. These results support the potential of the Coriolus versicolor-based vaginal gel as a proactive management option for HR-HPV positive women with low-grade cervical lesions.

Disclosure: This study was supported by Procure Health. Patricia Sanmartín is Medical Advisor at Procure Health.

The authors declare no other conflicts of interest.

COLPOSCOPIC DIAGNOSTICS CERVICAL GLANDULAR INTRA-EPITHELIAL NEOPLASIA AND NEW THERAPY

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Problem Statement: The strongest disagreement that exists between the Pap test and histopathological finding is in glandular intraepithelial neoplasia. The first reason is anatomic - histological position of endocervical glands. The second reason is the two-fold way of emergence (HPV and non HPV-mutation of p 53 gene). **Method:** My study includes 100 patients between the ages of 18 and 45 years with a



diagnosis of cervical intraepithelial neoplasia and adenocarcinoma in situ. In 70% of patients, the Pap test was normal. In 20%, the Pap test was ASCUS and in 15%, there was accompanying squamous intraepithelial neoplasia SIL). In 10% of cases, the Pap test was IIIa. HPV typing was positive in 80% and negative in 20%. Due to the anatomic position of cervical glands, the biopsy doesn't provide any diagnostic safety. **Result:** The first step towards the exact diagnostics is colposcopy examination, not the Pap test. Here, histopathological changes in the stroma dominate in the form of increased vascularization with edema, which is directly reflected in the pathological colposcopic images and one year before the changes in the Pap test. From the pathological colposcopy images, abnormal vascular pattern dominates within which areas with AW epithelium can be seen. In younger patients with HPV genesis, there are images of coarse mosaics and punctations. Radio wave LOOP excision gives absolute diagnostic therapeutic safety which I perform for 2 minutes in local anesthesia. The change is excised completely and the lumen of cervical glands is removed entirely. **Conclusion:** The education of gynecologists that is directed towards colposcopy and not towards the Pap test and HPV typing, is necessary for diagnostics of glandular intraepithelial neoplasia. Relying on the biopsy as the safest diagnostic procedure, leads to a mistake in over 50%. The method which I invented (RF LOOP excision) involves, as the most significant part, a complete removal of the lumen of cervical glands. The most important thing is that the above-mentioned method doesn't lead to narrowing and shortening of the cervical canal in young girls that didn't give birth.

LESSONS FOR HPV VACCINE ADMINISTRATORS FROM A FOLLOW-UP CONSULTATION CLINIC—DO THE ATTITUDES OF PHYSICIANS IMPACT PATIENTS OUTCOMES?

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Problem statement: To investigate the status of a consultation clinic following HPV vaccination and inform future physician practices. **Methods:** Retrospective study of patients at the clinic (Apr 2015-May 2024). Mandatory referrals, phone appointments within 2 weeks, insurance covered, designated physicians. Initial ~1hr consultation: attentive listening, communication, trust-building. Examinations/referrals as needed, tailored explanations. **Results:** 23 patients (Junior high school 26%, high school 43%, university 22%, working adults 9%). Referrals: internal medicine 48%, pediatrics/gynecology 22% each, psychiatry/otolaryngology 4% each. Time from vaccination to visit: 3-7 days (3), 8-14 days (3), 15-28 days (4), 1-6 months (6), 6 months (4). Time from vaccination to onset: 0-1 day (1), 3-7 days (1), 8-14 days (4), 15-28 days (1), 1-6 months (1), 6 months (1). Pre-vaccination screening questionnaire absent (83%), key info missing (39%). No trend in vaccine/doses, site unknown (50%). Pre-existing conditions (57%): psychotropics, hypnotics, hormones, thyroxine common). New/added prescriptions (22%); analgesics 3). Visits: 1 (14), 2 (4), 3 (3); 80% ≤2 visits. **Referrals:** general medicine 1, neurology 1, mental health 2. Outcome: recovery/resolution (91%), lost to follow-up (9%). Case classification: immunization stress-related reaction 12, inappropriate medical care 6, psychological/psychiatric conditions 6, coincidental events 2, expected adverse reactions 2. Adverse events/reactions background: social factors, inappropriate explanation/care (4), vaccination errors (2), ISRR/maternal link (4), coincidental (infectious mononucleosis, herpes zoster). **Conclusion:** Examined referral process/clinic response post-HPV vaccination. Social immunization stress-related reaction, coincidental events, expected adverse reactions observed. All cases (excluding lost) recovered (78% within 1-2 visits). Frequent inappropriate initial care suggests misunderstanding of "post-HPV vaccination syndrome," deviating from basic clinical practice (inadequate referrals, insufficient consideration of pre-existing conditions).

SUSTAINED EFFICACY OF A CORIOLUS VERSICOLOR-BASED VAGINAL GEL FOR HIGH-RISK HPV CLEARANCE :12-MONTH FINAL RESULTS FROM THE PALOMA 2 CLINICAL TRIAL

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Problem statement: The PALOMA 2 clinical trial evaluated the efficacy of a Coriolus versicolor-based vaginal gel in promoting high-risk Human Papillomavirus (HR-HPV) clearance at 6 and 12 months. **Methods:** Randomised, multi-centre, prospective, open-label, parallel-group, watchful-waiting-controlled clinical trial. Unvaccinated HR-HPV positive women aged between 30 to 65 years, with Atypical Squamous Cells of Undetermined Significance (ASCUS) or low-grade squamous intraepithelial lesions (LSIL) cytology and concordant colposcopy were randomised (1:1:1:1): A) Standard regimen: once daily for one month, followed by every other day for five months; B) Intensive regimen: once daily for three months, followed by every other day for three months; C) Very Intensive regimen: once daily for six months; D) Control group. HR-HPV clearance was evaluated at 6 and 12 months, defined as total (undetectable baseline genotypes) or partial clearance (≥1 genotype loss plus normal cytology and concordant colposcopy). Participants maintained their regular lifestyle, including sexual activity, throughout the study. Ethical approval and informed consent were obtained. At 6 months, regimen B showed the highest clearance rate compared to control group (88.5%vs 53.6%, p=0.005). We present the 12-month clearance data for this group. **Results:** From the 109 patients completing the 6-month treatment, 102 completed the subsequent 6-months follow-up (A=27, B=22, C=27, D=26). At 12 months, the intensive regimen (B) achieved 77.3% HR-HPV clearance vs. 50.0% in control group (p=0.05). Notably, all women in the intensive group who cleared the virus at 6months, maintained clearance at 12 months. **Conclusions:** The 12-month follow-up results confirm the efficacy and long-term durability of the Coriolus versicolor-based vaginal gel in promoting HR-HPV clearance, particularly with the intensive regimen. Despite minor reductions over time, likely due to reinfection and dropouts, the data confirm a long-lasting therapeutic benefit and clinically meaningful difference in terms of HR-HPV clearance. This reinforces the gel's potential as a non-invasive, evidence-based option for active management of low-grade HPV-related cervical abnormalities within the watchful waiting approach.

Disclosure of interest: This study was supported by Procure Health. The authors declare no other conflicts of interest.

Patricia Sanmartín is Medical Advisor at Procure Health.

PMS/PMDD

INVESTIGATING THE EFFECT OF AN ACUPRESSURE MAT ON PERCEIVED STRESS, SLEEP QUALITY, AND PREMENSTRUAL SYMPTOMS IN INDIVIDUALS WITH PREMENSTRUAL SYNDROME: A RANDOMIZED CONTROLLED TRIAL

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Problem Statement: This study aimed to evaluate the effect of an acupressure mat on perceived stress, sleep quality, and premenstrual symptoms in individuals diagnosed with premenstrual syndrome (PMS). **Methods:** A parallel-group, single-center randomized controlled trial was conducted with 41 participants experiencing PMS symptoms. The intervention group lay on acupressure mats for 15 minutes per day, three days per week, while the control group lay in the same position on a flat yoga/exercise mat concurrently on the same days and durations. The intervention lasted for three menstrual cycles. Data were collected at three time points: baseline (T0), immediately after the intervention period (T1), and one month post-intervention (T2) using an Introductory Information Form, the Perceived Stress Scale, the Visual Analog Scale



(VAS) for Sleep Quality, and the Premenstrual Syndrome Symptom Scale (PSS). Ethical approval and institutional permission were obtained, and all participants provided written informed consent. **Results:** The mean age of participants was 21.70 ± 1.36 years, with no significant difference between groups ($p=0.162$). All participants were single. Post-intervention and follow-up Perceived Stress Scale scores were significantly lower in the intervention group compared to the control group ($p<0.01$). Both groups demonstrated significant intragroup differences across T0, T1, and T2 ($p<0.05$). At posttest, the intervention group had significantly lower total PMS scores and subscale means compared to controls ($p<0.05$), whereas these differences were not significant at follow-up ($p<0.05$). Intragroup analysis showed no significant changes in the control group, while the intervention group showed significant differences between T0-T1 and T0-T2 ($p<0.05$). No significant intergroup differences were observed for mean VAS sleep quality scores at any time point ($p=0.05$). However, intragroup analysis revealed a significant improvement in sleep quality between T0 and T1 in the intervention group only. **Conclusion:** The use of an acupuncture mat significantly reduced perceived stress and PMS symptoms compared to a control group. Although no significant differences in sleep quality were found between groups, intragroup improvements suggest potential benefits of acupuncture on sleep quality. These findings indicate that acupuncture mats may be an effective complementary approach for managing stress and PMS symptoms.

Keywords: Premenstrual Syndrome, Sleep Quality, Stress, Acupuncture, Mat

CLINICAL CARE FOR MENOPAUSAL WOMEN

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Abstract: Menopause is the physiological cessation of female hormones production from ovaries which occurred naturally or artificially. The patients suffered from climacteric symptoms due to lack of female hormones. Menopausal women should have good clinical care for better physical and psychological health making good quality of life

Materials and Methods: The data collection was made from 258 patients with provisional diagnosis of menopause who attended OB-GYN department of Pattana Medical Clinic in Bangkok, the 3-year period starting from January 1, 2022-December 31, 2024. Menopause score, pelvic examination with Pap smear, blood for hormonal assay, mammography and bone marrow density will be done. Hormonal replacement therapy will be prescribed and follow up. **Results:** The maximum Age range was 51-55 years. The most common climacteric symptoms were hot flashes, insomnia, mood instability, sweating. Scattered Menopause score was found. Few abnormal Pap smear result was found. Hormonal level was correlated to symptoms. Few abnormal Mammographic results was detected. Approximately 50% of the studied patients was found to have abnormal bone density. **Summary:** The high number of patient's age was 51-55 years. The most common symptom of menopausal women was hot flashes. The Menopause score was not a good predictor for diagnosis of menopause. Pap smear and Mammography should be performed along with hormonal therapy and Bone marrow density should be done during follow up period.

POI

MITOCHONDRIA AND TELOMERES IN HUMAN PREANTRAL FOLLICLES: IMPACT OF AGE ON EARLY FOLLICULOGENESIS DYNAMICS

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Problem statement: Mitochondria and telomeres appear to be critical players in the later stages of follicle growth and oocyte maturation, as revealed by a number of studies investigating oocytes and cumulus cells in women of late reproductive age, or those classed as poor responders or at higher risk of premature ovarian insufficiency (POI). However, little is known about their dynamics during initial follicle growth, and how these are influenced by reproductive age. **Methods:** We conducted a prospective study on ovarian cortex biopsies and peripheral blood samples from 21 women undergoing elective oophorectomy. Subjects were grouped by age: young (20–26, $n=7$), mid (27–36, $n=6$), and advanced (37–46, $n=8$). Follicles were isolated and analyzed for active mitochondria (MitoTracker Deep Red), mitochondrial reactive oxygen species (ROS) generation (MitoSOX), and telomerase expression via droplet digital PCR. Histological analyses included follicle density and classification (H&E), mitochondrial mass (TOMM20), and telomere length (FISH). Leukocyte telomere length was also assessed by flow-FISH. **Results:** Mitochondrial mass (TOMM20) increased significantly during early follicle growth in younger patients, while remaining unchanged across age groups. Active mitochondria content was stable between groups, but ROS generation was lower in isolated follicles from younger women compared to older groups. Telomere length in peripheral leukocytes followed an age-related decline but did not correlate with ovarian cell telomere length. In ovarian tissue, telomere length in granulosa cells and oocytes was stable in primordial follicles but increased during follicle growth, mainly in younger patients. Telomerase subunit expression was detected in preantral follicles across all groups, without significant age or size differences. **Conclusions:** Early follicle growth in younger women is characterized by increased mitochondrial mass and reduced ROS generation, suggesting enhanced oxidative stress control. Signs of telomere elongation were detected in granulosa cells, especially at younger age, possibly yielding safer and more efficient proliferation during follicle growth. Characterization of early folliculogenesis dynamics in a normal population provides a crucial baseline for future studies aiming to identify potential deviations in women at higher risk of POI. Moreover, it may guide future strategies to mitigate reproductive aging by targeting early follicle development.

The authors declare no competing interests.

PREMATURE OVARIAN INSUFFICIENCY – A CASE SERIES SEEN IN A TERTIARY CHILDREN'S HOSPITAL PAEDIATRIC AND ADOLESCENT GYNAECOLOGY SERVICE

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Problem: Premature ovarian insufficiency is a life-long condition and is estimated to occur in 1% of the population, while reported to be 0.01% in women under 20. The long-term clinical sequelae are well established, however the cause is only known in 25% of adult cases. Paediatric and adolescent gynaecology (PAG) is a relatively new discipline. Interest in this field is emerging, and PAG services are increasing. An understanding of the presentation, aetiology and management of POI in the PAG population is crucial to ensure these girls receive evidence-based high-quality care. **Methods:** We retrospectively collected clinical information from patients seen in a tertiary children's hospital between 2019-2025. These girls were managed within a stand-alone PAG clinic (PAG gynaecologist), in a joint PAG/paediatric endocrinology clinic (PAG gynaecologist and paediatric endocrinologist) or in a Differences of Sexual Development Multidisciplinary Team (paediatric urologists, paediatric endocrinologist, PAG gynaecologist, paediatric psychologist and geneticist). Diagnosis was made through hormonal and genetic blood tests, and in some cases ultrasound or MRI imaging. **Results:** A total of thirty-seven patients were identified (presentation age range 2 weeks to 18 years). Eleven were diagnosed with Turner syndrome (45XO), Turner mosaic 45XO/46XX and X-chromosome microdeletion), seven had 46XY DSD (NR5A1 mutation, Frasier's Syndrome, complete androgen insensitivity syndrome), seven had idiopathic POI, six suffered from galactosaemia, three had atypical Turner syndrome (45XO/46XY), two were affected by Blepharophimosis syndrome (under surveillance) and one had 46XX ovarian dysgenesis and concomitant Rokitsky Syndrome. All girls with 46XY DSD and atypical Turner (45XO/46XY) had or are due for bilateral gonadectomy. Of the girls who have reached pubertal age ($n=33$), 78.8% required/will require pubertal induction. Of those who have completed pubertal



induction, all remain on HRT. **Conclusion:** Although long-term management of patients with POI are well known, clinical presentation in PAG services is less well-documented. We have confirmed that POI is a heterogeneous condition. A cause was identified in 78% of the cases. A large proportion of the girls required pubertal induction and many required surveillance prior to this. Therefore, it is imperative that these patients are managed through a multi-disciplinary approach with expert clinical and psychological input.

MITOCHONDRIAL MEDIATED ENDOPLASMIC RETICULUM STRESS: LINK TO IDIOPATHIC PREMATURE OVARIAN INSUFFICIENCY

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Problem statement: Premature Ovarian Insufficiency (POI) affects 1% of women before 40 years, yet the molecular mechanisms underlying this condition remain unknown. Mitochondria and Endoplasmic reticulum (ER) maintain a dynamic structural and functional crosstalk during folliculogenesis, primarily through mitochondria-associated ER membranes (MAMs). Mitochondrial energy production, calcium signalling, lipid metabolism maintains oocyte and follicular health. However, the role of Mitochondria & ER related genes in POI remains unexplored. This study aims to elucidate role of Mitochondrial and ER functional pathways that affect follicular dynamics in POI. **Methods:** This study aimed to: (1) identify Mitochondria and ER related gene variants in idiopathic POI patients (n=30), (2) compare Mitochondrial, ER stress, and β -oxidation (ATP) markers between POI and fertile controls (n=30), and (3) validate findings in POI mouse models using Mitochondrial inhibitors. Whole Exome Sequencing (WES) and in-silico modelling were used to assess genetic variants. RT-qPCR, immunofluorescence, and ATP assays evaluated mRNA & protein expression. Variants with known pharmacological inhibitors were selected for in vivo validation. C57BL/6 mice (3–5 weeks old, n=4 each group) were administered Cyclophosphamide, Etomoxir, Omeprazole, L-amino Carnitine, Etoposide & Mildronate. Post-treatment, ovaries, liver, kidneys, and spleen were examined via H&E staining, and serum FSH levels were quantified using ELISA. **Result:** WES revealed multiple genetic alterations in key genes involved in mitochondrial fatty acid transport and metabolism. Several variants of uncertain significance were identified in both nuclear and mitochondrial genes associated with energy production. Significant difference in mRNA expression of mitochondrial genes, ER stress markers, and ATP was observed between POI patients and fertile controls. In vivo, mitochondrial inhibitor-treated mice showed reduced body weight, ovarian shrinkage, decreased follicle count, and increased follicular atresia. Histopathological changes were also reflected in liver, kidney, and spleen tissues. Elevated serum FSH levels confirmed successful induction of the POI phenotype in the animal model. **Conclusion:** Our findings highlight the critical role of mitochondrial fatty acid metabolism and ER homeostasis in maintaining ovarian function. Disruptions in mitochondrial function impair β -oxidation, trigger ER stress, and contribute to POI pathogenesis. The identified genetic alterations serve as promising biomarkers and potential therapeutic targets for early diagnosis and intervention in POI.

GYNECOLOGICAL ONCOLOGY

ROUTINE BLOOD TESTS IDENTIFY PATIENTS WITH ADVANCED CANCER AND UNMET NEEDS LIVING 1-2 EXTRA YEARS

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Background: New regimens prolong the survival of patients with resistant gastrointestinal cancers. Routine blood tests identify the patients' chances of survival. **Methods:** Eligibility: platinum-resistant ovarian cancer (ROC), 3 or more prior lines of chemotherapy a performance status of 0-2, consent with Helsinki criteria. Treatment: rechallenging with 1/3 (1/4-1/2) of each cytotoxins' standard dosage - Bevacizumab and cyclophosphamide (day1) and recombination of gemcitabine, Fluorouracil, leucovorin, irinotecan, and (day2) carboplatin. Docetaxel is added (day2) at the time of progression.

Personalized dosages prioritizes safety, and minimizing use of granulocyte colony stimulating factor. Kaplan Meier and Cox multivariable regression analyses examine often published cut-points associated with short median survival (MSTs): serum albumin (SA) 3.5 g/dL, neutrophil-lymphocyte ratio (NLR) 3.0, absolute neutrophil count (ANC) 8,000/mm³, and lymphocyte-monocyte ratio (LMR) 2.1. and retrospective ideal cut points. **Results:** The 102 patients 82 failed 4(3-7) lines of treatment. 20 refused primary treatment, half of 4-7 line advised against all standard treatment as futile. Overall MST is 14.2 (13-17) mos. with, 0, 1- 2 or 3-4 suboptimum PBTs MSTs are 16.5, 16.2(33%2(2-7)-yrs) and 6.8 mos (HR =2.9, P = 4x10⁻⁴). High NLRs HR 1.53, P = identify ... patients with MSTs of 14.4 mos, Low LMRs, HR..2.37, P= 4.5x 10⁻³ or SA serum albumins HR 1.68, P= 0.08 identify patients with MSTs of 8.1 mos, and 40 and 38.%, respectively, alive 14 mos. The net rate of complications that limit or delay treatment is less than 5%. **Conclusion:** unmet needs, resistance, age frailty prior limiting events require new criteria PBTs and routine reporting. Of such patients, ~80% overall, have chances to survive years. PBTs' relationship to treatment options, effective low -dosages and rechallenge - recombination warrant investigations

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AWANERESS OF GYNECOLOGICAL CANCER IN THE WOMEN RELATIVES OF CANCER PATIENTS AND ITS AFFECTING FACTORS

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Objective: This research was conducted to identify the awareness of gynecological cancer and the factors influencing it among women who are relatives of cancer patients. **Method:** The research is descriptive in nature, and its sample consisted of 268 female relatives, aged 18 and above, of patients receiving treatment at a university hospital. Data were collected using a Participant Information Form and the Gynecological Cancer Awareness Scale (GICAS), which were prepared by the researcher. The data were analyzed using the SPSS program, with a significance level set at 0.05. **Findings:** The average age of the participants was 38.96 $\pm$ 12.89 years. The average age at menopause was 48.39 $\pm$ 1.93, and the average body mass index (BMI) was 24.07 $\pm$ 3.90. The total GICAS score of the participants was calculated as 149.43 $\pm$ 17.68, which is above the average. However, significant differences were found in the participants' total GICAS scores based on their education levels, places of residence, occupations, income levels, use of family planning methods, having children, regular doctor visits, menopausal status, balanced diet, presence of chronic illnesses, relationship with the cancer patient, history of cancer screening, awareness of cancer screening centers (KETEM), and belief in the effectiveness of early diagnosis and treatment (p 0.05). A weak negative correlation was found between the participants' age, BMI, age at menopause, the age of the cancer patient, and their total GICAS score (p 0.05). **Results:** In conclusion, the total GICAS score of the participants was above average, which was considered a result of being a caregiver for a cancer patient. It was concluded that nurses and other healthcare professionals should assess both the patient and their relatives holistically, as this would increase awareness and contribute to early diagnosis and treatment among risk groups.

Keywords: Awareness, Cancer, Gynecological Cancer, Cancer Awareness

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ORAL PRESENTATION 10: GYNECOLOGY

ZERO BLIND PROCEDURES: THE ROLE OF TISSUE REMOVAL SYSTEMS IN A NEW ERA OF GYNECOLOGY, NO MORE D&C FOR RPOC

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Problem statement: To evaluate the reproductive outcomes and clinical effectiveness of the tissue removal system (TRS), as a first-line surgical technique for retained products of conception (RPOC) in patients with subfertility or pregnancy intentions following miscarriage. **Methods:** A retrospective, single-centre study was conducted including 368 patients who underwent operative hysteroscopy with IBS® (Intra uterine BIGATTI shaver) for RPOC between December 2013 and March 2025. All surgeries were performed by the same operator. Patient history included 338 early miscarriages, 23 pregnancy terminations, 2 vaginal



deliveries, and 5 caesarean sections. RPOC classifications were: 129 type 0, 204 type 1 or 2, and 35 type 3. Diagnoses were confirmed via transvaginal ultrasound and Doppler imaging. **Results:** The median time to conception postoperatively was 47 days (range: 15 to 80). Mean operative time was 5 minutes, with an average fluid deficit of 200 ml. No intraoperative or postoperative complications occurred. Ultrasound follow-up confirmed complete uterine clearance in all cases. Pregnancy occurred in 342 patients: 254 through IVF (234 deliveries, 20 ongoing), and 88 through natural conception (77 deliveries, 11 ongoing). 26 patients had not conceived after six months. One patient with type 3 RPOC developed Asherman syndrome and did not conceive post-adhesiolysis. Uterine anomalies were identified in 24 cases and treated during the same session. Polyps were removed in 18 patients concurrently with RPOC. **Conclusions:** Tissue removal system offer a safe, accurate, and fertility-preserving solution for managing RPOC. The method ensures complete evacuation under direct visual control, reduces the risk of complications associated with blind curettage, and supports improved reproductive outcomes. It is a valuable option for patients seeking conception.

DIRECT TROCAR INSERTION - SAFE METHOD FOR THE CREATION OF PNEUMOPERITONEUM

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Problem statement: The aim of this study was to present data of single institution experience using direct trocar insertion (DTI) for establishing pneumoperitoneum in gynecological laparoscopic surgery. Half of all complications in laparoscopy in gynecology occur during laparoscopic entry. The most common used laparoscopic entry techniques are Veress needle technique, DTI and open (Hasson) technique. **Methods:** This is a case series of 3091 gynecological laparoscopic surgeries, scheduled and emergencies, performed in General hospital Uzice, Serbia. Pneumoperitoneum was established with DTI in the umbilicus. **Results:** There were no major complications. Complication rate associated with DTI were solid organ injury 0,097%, trocar site bleeding 1,1% and trocar site infection 0,3%. All complications were solved by gynecologist and did not prolonged the hospitalisation time. **Conclusions:** Direct trocar insertion was associated, in our study, with no failed entries, no insufflation complications and more quickly obtaining pneumoperitoneum. Comparing to the data from literature, it has lower incidence of complications. When perform by skilled laparoscopic surgeons, DTI could be used as laparoscopic entry techniques of choice.

CASE REPORT: RARE CASE OF GIANT ENDOMETRIAL POLYP IN A REPRODUCTIVE AGE WOMAN

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Problem statement: Endometrial polyps is one of the causes of abnormal uterine bleeding and a measurement greater than 4 centimeters are labeled as giant endometrial polyps. It is a unique female genital tract pathology, and is confounded with cervical or endometrial malignancy which may lead to diagnostic dilemmas and unnecessary aggressive interventions. **Methods:** Endometrial polyps in asymptomatic, low-risk patients may be managed conservatively, as some regress spontaneously—especially in premenopausal women—with periodic ultrasound monitoring. Larger polyps (greater than 1.5 centimeters) or those causing symptoms may require removal for symptom relief. Our patient underwent hysteroscopic polypectomy, targeted endometrial biopsy and endometrial curettage and was sent home on postoperative day 1 with no subjective complaints. **Results:** Surgical removal through hysteroscopic polypectomy has been shown to significantly improve intermenstrual bleeding, with low recurrence rates especially in patients with fewer polyps. Some studies report increased spontaneous pregnancy and full-term delivery rates post-polypectomy, with no significant differences in fertility or miscarriage rates based on polyp size or number. The patient had a follow up check up 1 week postoperatively for which histopathologic results showed endometrial polyps. She was advised to monitor her symptoms thereafter and to consult if with any recurrence of vaginal bleeding. **Conclusion:** This case demonstrates a rare occurrence of a giant endometrial polyp in a 26-year-old woman without typical risk factors.

Despite giant polyps being more common in postmenopausal women, this case emphasizes that they can also occur in younger, reproductive-aged individuals. The patient was successfully managed with hysteroscopic polypectomy, targeted biopsy, and curettage, with histopathology confirming an endometrial polyp. Hysteroscopic removal remains the preferred treatment, offering symptom relief and low recurrence, while further studies are needed to clarify their pathogenesis and long-term outcomes.

VAGINAL MICROBIOME AWARENESS: 2025 RESULTS FROM THE INTERNATIONAL MICROBIOTA OBSERVATORY IN 11 COUNTRIES

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Problem statement: The International Microbiota Observatory (IMOB) aims to assess awareness, knowledge, and behaviors related to the human microbiome worldwide, with a focus on the vaginal microbiome. In its third wave, the 2025 edition continues to track the evolution of these indicators across a broader population sample. **Methods:** Between January 21 and February 28, 2025, a representative sample of 7,500 adults aged 18 and over was surveyed online in 11 countries (France, Portugal, Poland, Finland, Germany, Italy, USA, Brazil, Mexico, China, Vietnam). Quota sampling ensured balance by gender, age, employment status, and region. This abstract focuses on data from 3,862 women who responded to a dedicated module on the vaginal microbiome. Awareness, beliefs, behaviors, and access to healthcare professional (HCP) information were analyzed using descriptive statistics. **Results:** In 2025, awareness of the term “vaginal microbiome” rose slightly, with 56% of women stating they have heard of it (+8 pts since 2023), yet only 21% report knowing exactly what it means. While 88% recognize the term “vaginal flora,” confusion remains: only 6.2/12 questions related to vaginal microbiome were answered correctly on average. Women under 25 and those from France, Germany, and Mexico showed the lowest knowledge levels. Misconceptions persist: 45% wrongly believe smoking has no impact on the vaginal microbiome, and 78% are unaware of the protective role of oestro-progestative pills. Just 32% of women report receiving information from their HCPs on the vaginal microbiome, with older women less informed (27% over 60 vs. 47% for 25-34 yo). Despite this, 85% of respondents express a strong desire to learn more. Behaviorally, cotton underwear is widely used (86%), but protective behaviors like avoiding vaginal douching (62%) or sleeping without underwear (47%) are less adopted. Women with health conditions adopt more protective behaviors but also express greater need for guidance. **Conclusion:** Despite slight progress since 2023, significant knowledge and behavior gaps remain. Strengthening HCP involvement appears crucial, especially for younger and older women. Given that HCPs are considered the most reliable information source by 78% of respondents, integrating vaginal microbiome education into clinical practice is urgently needed.

INVENTION OF MENOPAUSE: THE POLITICS OF THE PERFORMATIVE

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Problem statement: Menopause is increasingly discussed in the context of ageing Western populations and rising life expectancy. Beyond its biomedical dimension, menopause can be viewed as a socio-scientific construct serving to perpetuate gender inequalities. This review explores the historical, scientific and political foundations of menopause as a performative category. **Methods:** A non-systematic review of scientific and non-scientific literature was conducted without date restrictions on PubMed, Google Scholar, Google with the keyword's menopause, steroid hormones, adrenal puberty, dehydroepiandrosterone, neurosteroids, the sex of hormone, molecularization of gender, myokines. **Results:** The neologism menopause was coined in 1816 by Parisian physician Charles de Gardanne. From the 19th century onwards almost any symptom in middle-aged women was attributed to the cessation of menstruation. The biomedical definition of menopause reinforced stereotype legitimizing the exclusion of women from education and civil rights, which persisted in France until women's suffrage in 1945. The discovery



of endocrine mechanisms by Staring in 1905 and then the subsequent isolation of estrone by Allen and Doisy initiated the hormone-centered model of ageing. The attribution of a gender to steroid hormones, although challenged by Bernhard Zondek, would be the cornerstone of future sexual discrimination. The legitimization of women's fragility is enshrined in biological norms, which take the sex hormones' values of youth as a reference point and apply them to all women regardless of age. However, emerging research highlights alternative perspectives: the role of adrenal steroids present in both sexes since adrenarche, and the discovery of myokines, positioning skeletal muscle as an active endocrine organ. **Conclusion:** Menopause liberates women from reproductive constraints and associated pathologies. In a context where women possess equal civil rights and qualification, this transition challenges patriarchal norms within professional and political spheres. The decline in ovarian sex steroids may have a limited impact on health compared to the influence of social determinants and given especially the discovery of myokines and their role in overall health. Reconceptualizing menopause in this light invites a shift away from reductionist, ovary-centered models towards a broader understanding of ageing that integrates biological diversity, gender politics and social context.

EFFECTIVENESS OF TRANSTHEORETICAL MODEL-BASED EDUCATION SUPPORTED BY MOTIVATIONAL INTERVIEWS GIVEN TO WOMEN WITH URINARY INCONTINENCE: A RANDOMIZED CONTROLLED TRIAL

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Problem statement: Lifestyle changes be applied as the first choice in individuals with urinary incontinence (UI), regardless of the type and severity of incontinence. It is stated that the use of nursing models is an appropriate approach to achieving lifestyle changes. It is recommended to use the Transtheoretical Model (TTM) to facilitate the adaptation of individuals to lifestyle changes and increase their motivation and motivational interviewing (MI) is an effective method for facilitating change. The research was conducted to evaluate the effectiveness of online education based on TTM was supported by MI to women with UI.

Methods: The research is a pretest-posttest, parallel group randomized controlled study. The study was completed with 59 women with UI; 29 in the intervention group and 30 in the control group. Women in the experimental group received UI training in the first week. In the 2nd, 4th, 6th, 8th, and 10th weeks, MI were conducted with women in accordance with the stages of change determined according to the Evaluation Form for Stages of Change. In the 3rd, 5th, 7th, 9th, and 11th weeks, women were encouraged to make lifestyle changes and Kegel exercises by phone calls. No application was made to the women in the control group. Data were collected using Personal Information Form, International Consultation on Incontinence Questionnaire Short Form, Incontinence Severity Index (ISI), Incontinence Quality of Life Scale (I-QOL), Evaluation Form for Stages of Change. **Results:** There was no difference between the groups in terms of UI-related characteristics ($p = .05$). The mean score of I-QOL in the intervention group is higher than in the control group ($p = 0.024$, CI: [1.21-16.93]). There was a difference between the groups in terms of stages of change ($p = 0.000$). There was no difference between the groups in terms of UI frequency ($p = 0.390$). In the intervention group, the mean score of ISI at the final evaluation is lower than the initial evaluation ($p = 0.287$, CI: [-0.66-0.91]). **Conclusions:** Online nursing education based on the TTM supported by MI had a positive effect on women's quality of life and stages of change.

ESTABLISHMENT AND AUDIT OF A PAEDIATRIC AND ADOLESCENT GYNAECOLOGY SERVICE IN A TERTIARY CHILDREN'S HOSPITAL

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Problem Statement: Paediatric and adolescent gynaecology (PAG) is a relatively new discipline and is gaining interest as evidenced by the increase in PAG publications. The British Society of PAG state that each hospital should have a PAG lead. However, there is a paucity of

standardised national and international guidelines for the management of many PAG conditions. Furthermore, there is a lack of training for gynaecologists, paediatricians and general practitioners. An understanding of the conditions encountered in a PAG clinic is crucial to guide training requirements as well as patient care. **Methods:** We retrospectively collected clinical information in a tertiary children's hospital between 2018-2025. All girls were all managed within a stand-alone PAG clinic, in a joint PAG/paediatric endocrinology clinic or in a Differences of Sexual Development (DSD) Clinic (paediatric urologists, paediatric gynaecologist, paediatric psychologist and a geneticist). **Results:** A total of 595 girls were identified (age range 2 days to 18 years). Girls with menorrhagia/dysmenorrhoea accounted for 40.5% of presentations, of which 8.6% were emergency admissions with haemoglobin levels below 50g/dL. 8.9% of girls were diagnosed with PCOS while 8% had premature ovarian insufficiency (POI). Other endocrine conditions (including amenorrhoea, congenital adrenal hyperplasia and precocious puberty) accounted for 12.3%. Vulval conditions (including lichen sclerosis, labial adhesions and labial dysmorphism) accounted for 8.6% of cases. A DSD was identified in 7.3% of girls seen. Adnexal cysts were identified in 6.3% of girls while 2% of girls suffered an adnexal torsion. A foreign body was identified in three girls and only one girl had a gynaecological-malignancy. There were 2 cases of factitious disease. Of note, 9.7% of the girls had complex medical issues including congenital heart disease, renal transplant recipient, severe learning difficulties and life-limiting genetic syndromes. **Conclusion:** This analysis has highlighted the variety of conditions encountered in a tertiary hospital PAG service, and thus training needs for clinicians. The concept of PAG is often skewed by DSD, when in reality, many types of gynaecological problems are evident from birth onwards. A woman's gynaecological journey might commence in childhood and it is imperative that evidence-based high-quality care is provided from the start.

LASER IN GYNECOLOGY – ETHICAL ISSUES

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The demand for cosmetic surgery in the female genital area is increasing. Recently, supported by the media, aesthetic procedures have become an unavoidable topic. Motivations for cosmetic genital surgery are physical, psychological and sexual. Vaginal laxity usually remains underreported, although most female patients consider this condition as bothersome with significant impact on their relationship. The visual aspect and functionality of the introitus are most commonly marked as responsible for a sexual disorder and reduced quality of life. Surgeons in this field should adhere to the fundamental ethical principles. Non-invasive treatment is recommended as first-line for urinary incontinence (UI) and genitourinary syndrome of menopause (GSM). However, surgical procedures are more likely to be implemented to cure vaginal relaxation syndrome (VRS) and UI but are associated with serious adverse effects. Less invasive operative mesh techniques are relatively effective, but not immune to complications such as bleeding, bladder perforation, urethral injury, infection, and retention requiring mesh resection. Additional financial costs and extended recovery downtime after mesh/sling surgery have induced a growing trend in noninvasive procedures. Also, in patients in whom the risks of anesthesia and surgery are too high, a minimally invasive approach is recommended and further research is needed in terms of more compliant, less invasive and low-cost methods for the treatment of stress UI and pelvic floor dysfunction. Contemporary scientific and technological breakthroughs have led to better clinical outcomes with minimally invasive procedures with shorter recovery times and lower associated costs. In that sense, recent evidence supports energy-based devices (EBD), mostly Er:YAG and CO2 laser and radiofrequency (RF) treatment, as an effective and compliant intervention for stress UI and lower stage vaginal and vulvar relaxation. The most important ethical issue in laser treatment in gynecology is a transparent process of decision-making with clear predictions of outcomes based on evidence.



THE EFFECTS OF EMOTIONAL FREEDOM TECHNIQUE ON DEPRESSIVE AND MENOPAUSAL SYMPTOMS IN POSTMENOPAUSAL WOMEN

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Problem statement: This study is conducted to determine the effects of emotional freedom technique on depressive and menopausal symptoms in postmenopausal women. **Methods:** This randomized controlled study was conducted with 70 postmenopausal women in Türkiye (34 experimental, 36 control). The data were collected with personal information form, Beck Depression Inventory (BDI) and Menopause Rating Scale (MRS). Women in the experimental group applied emotional freedom technique at least once a day for eight weeks, and the control group did not receive any intervention. **Results:** Before intervention the two groups had no statistically significant differences in terms of mean depression and menopausal symptoms scores ($p = 0.05$). Intervention group showed a significant difference in terms of mean depression scores before and after the intervention ($p = 0.000$), but the control group did not show a significant difference in terms of BDI scores ($p = 0.05$). Additionally, the intervention group showed a significant difference in terms of the mean MRS total score before and after the intervention ($p = 0.000$), but the control group did not show a significant difference in terms of MRS total scores ($p = 0.05$). **Conclusions:** The results of this study showed that emotional freedom technique decreased depressive and menopausal symptoms in postmenopausal women.

Keywords: Menopause, emotional freedom, technique, menopausal symptoms, depressive symptoms.

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BENCH TO BEDSIDE: UTILIZING miRNA BIOMARKERS FOR EARLY DIAGNOSIS OF ENDOMETRIOSIS – A MULTI-CENTER STUDY

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Problem Statement: Endometriosis is a chronic inflammatory condition affecting 10-15% of reproductive-aged women, leading to significant pain and infertility. Despite its prevalence, the average delay in diagnosis is 6.6 years, with some women experiencing delays of up to 10-11 years. This study investigates the efficacy of miRNA biomarkers as a non-invasive diagnostic tool for early detection of endometriosis.

Methods: In this multi-center observational study, 206 women aged 18-49 presenting with mild to severe pelvic pain and abnormal bleeding were enrolled. Blood samples were collected and processed while ensuring patient de-identification. The miRNA test was utilized to identify endometriosis, with results compared to the gold standard of diagnostic laparoscopy. **Results:** Of the 206 patients, 98 were diagnosed with endometriosis based on final pathology, leading to a diagnosis rate of 47.6%. Among those diagnosed, 60 patients had stage 2 endometriosis, 20 had stage 3, and 18 had stage 4. The concordance rate between the preoperative miRNA test and final pathology report was 90%, indicating strong sensitivity and specificity. The median age of patients was 39 years (range: 19-49), with most reporting common symptoms, including pelvic pain, dysmenorrhea, and menorrhagia. **Conclusion:** The use of miRNA biomarkers represents a promising approach for the early diagnosis of endometriosis. The strong concordance between miRNA test results and final pathology supports the potential for non-invasive diagnostic methods in clinical practice. Early diagnosis not only improves management options but also alleviates the emotional and psychological burdens faced by patients, leading to better healthcare outcomes. This study highlights the necessity for continued research to validate the clinical utility of miRNA biomarkers in diagnosing endometriosis and optimizing patient care.

Disclosure of Interest: The authors have no disclosure or conflict of interest to report.

RELATIONSHIP BETWEEN ENDOMETRIOSIS SYMPTOMS, POST-TRAUMATIC STRESS DISORDER, AND QUALITY OF LIFE

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Endometriosis is a chronic gynaecological condition characterized by pain and impaired functioning. Beyond physical symptoms, Endometriosis-related stressors may act as trauma-like events, predisposing women to post-traumatic stress disorder (PTSD) and disturbances in self-organization (DSO), expressed in emotion dysregulation and negative self-concept. Although distinct, these constructs are interconnected and together define Complex PTSD (CPTSD). Although PTSD is traditionally linked to discrete external traumas, frequent stressors related to Endometriosis may include pain, repeated invasive procedures, social stressors, and intimacy problems. These stressors may trigger threat responses, elevate the risk for PTSD, DSO, and reduce Quality of Life (QoL). Nonetheless, current evidence on the prevalence of PTSD and DSO in Endometriosis remains limited. Since this information is significant for improving intervention programs, knowledge about the prevalence of PTSD/DSO and their relation to QOL of women with Endometriosis should be elaborated. This study aimed to (1) compare PTSD/ CPTSD, DSO characteristics between women with Endometriosis and healthy controls. (2) examine correlations between PTSD, DSO, pain and QoL among women with Endometriosis.

Methods: Participants were 94 women aged 18–35: 34 with Endometriosis and 60 healthy controls. Participants completed questionnaires which included: The International Trauma Questionnaire (ITQ) to assess PTSD and DSO; the WHOQOL-BREF to assess physical, emotional, social and environmental QoL. Between-group differences analyzed using general linear models and chi-square tests. Correlations between variables were examined by Pearson correlation.

Results: Women with Endometriosis showed significantly higher PTSD prevalence than healthy controls (82.4% vs. 21.7%, $\chi^2=32.5$, $p<0.001$), DSO (85.3% vs. 21.7%, $\chi^2=35.5$, $p<0.001$), and CPTSD (76.5% vs. 23.5%, $\chi^2=40.9$, $p<0.001$). Most significant differences were expressed in greater re-experiencing, heightened threat perception, emotional dysregulation, negative self-concept, and relational difficulties, all linked to functional impairment. QoL across all domains was significantly lower among women with Endometriosis. Their PTSD and DSO severity correlated with pain intensity, pain catastrophizing and with reduced QoL. **Conclusion:** Women with Endometriosis demonstrate substantially elevated PTSD and DSO, reframing the condition as trauma-related. As PTSD, DSO negatively impact daily function and QOL, they should be screened and targeted in interventions, integrating gynaecology, pain management, and mental health to optimize treatment efficiency and improve women's QoL.

PREVALENCE AND CLINICAL CORRELATIONS IN PATIENTS WITH ENDOMETRIOSIS WHO UNDERWENT LAPAROSCOPIC SURGERY AT SIRIRAJ HOSPITAL ACCORDING TO THE ENZIAN CLASSIFICATION (2020)

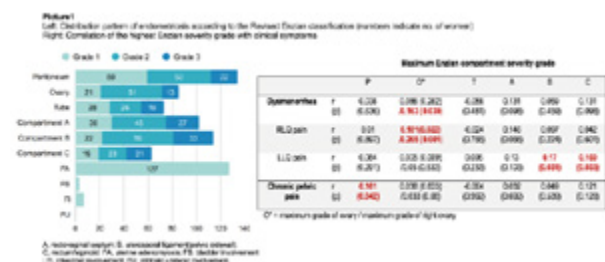
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Problem statement: Endometriosis affects up to 18% of women of reproductive age, with pain as the predominant symptom impairing quality of life. The updated Enzian classification reflects disease extent and supports treatment planning. However, its correlation with preoperative symptoms remains unclear. This study aims to assess the prevalence of endometriosis and its clinical correlations using the Enzian 2020 classification in Thai women. **Methods:** A prospective study was conducted on 160 patients over 18 years of age who diagnosed with endometriosis and underwent laparoscopic surgery at Siriraj Hospital, Thailand. Demographic data, symptoms, and treatment details were collected. Disease extent was assessed intraoperatively using the Enzian 2020 classification. Patients without histological confirmation were excluded. Data were analyzed for prevalence and clinical correlations based on the Enzian classification. **Results:** The median age was 39.9 ± 8.1 years. Dysmenorrhea was the most common symptom (96.25%), followed by chronic pelvic pain (40%). Most patients (71.2%) had received prior medical treatment, and 10% had undergone previous endometriosis surgery. Intraoperative findings classified according to the Enzian 2020 system showed peritoneal involvement as most common (134/160), followed by adenomyosis (FA; 127/160), as



illustrated in Picture 1. Among cases of deep endometriosis, compartment B was most frequently affected (114/160). For clinical correlation, adenomyosis was significantly associated with heavy menstrual bleeding (odds ratio [OR] = 4.598, $p = 0.014$), and right ovarian endometriosis with dysmenorrhea ($r = 0.163$, $p = 0.039$), particularly right-sided pain ($r = 0.265$, $p = 0.001$). No correlation was found between left ovarian endometriosis and left lower quadrant pain. Peritoneal involvement showed a borderline correlation with chronic pelvic pain ($r = 0.161$, $p = 0.042$). Among deep endometriosis compartments, only compartments B and C were associated with left lower quadrant pain during menstruation, as shown in Picture 1. No clear association was identified between Enzian grades and overall symptom severity; however, trends were observed for severe dysmenorrhea (pain score ≥ 7) with compartment A, and low back pain with compartment C. **Conclusion:** The Enzian 2020 classification effectively describes disease extent and shows partial correlation with symptoms; however, Enzian grades do not reliably predict overall symptom severity.



THE RELATIONSHIP BETWEEN WOMEN'S CLIMATE CHANGE ANXIETY AND THEIR ATTITUDES TOWARDS PROTECTING REPRODUCTIVE HEALTH

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Problem statement: This study aimed to examine the relationship between women's anxiety about climate change and their attitudes toward protecting reproductive health. **Methods:** This descriptive and relational study included a sample of 789 women who were admitted to a hospital in the Central Anatolian region between July 2023 and March 2024. Data were collected using the Personal Information Form (PIF), the Climate Change Worry Scale (CCWS), and the Married Women's Reproductive Health Protective Attitudes Determination Scale (RHPAS). Descriptive statistics, independent samples t-test, one-way ANOVA, and multiple linear regression analysis were used to analyze the data. **Results:** The mean age of the women participating in the study was 32.65±7.83 years. The mean scores of the RHPAS and CCWS were 141.64±21.58 and 29.77±10.49, respectively. Factors such as education level, family type, employment status, smoking status, use of family planning methods, following news about climate change, and CCWS score influence women's attitudes toward protecting reproductive health. In addition, perceived income level, following news about climate change, and RHPAS score are among the factors influencing women's anxiety levels about climate change. **Conclusion:** In conclusion, a positive and significant relationship exists between women's anxiety about climate change and their protective attitudes toward reproductive health.

ORAL PRESENTATION 11: GYNECOLOGY: GYNECOLOGICAL ONCOLOGY

CERVICAL CANCER PREVENTION, TREATMENT, AND SURVIVORSHIP IN SOUTHEAST ASIA: HETEROGENEOUS POLITICAL DETERMINANTS OF HEALTH AND BARRIERS TO CARE

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Problem statement: Cervical cancer remains a major public health burden in Southeast Asia (SEA), with the region projected to experience a 41.9% increase in incidence and 63.5% increase in mortality by 2050. While global efforts to eliminate cervical cancer have focused on HPV vaccination and screening, these strategies alone are insufficient without addressing the political determinants of health (PDH) that shape disparities in access, treatment, and outcomes of cervical cancer.

Methods: This policy review draws on published literature and country-specific data to evaluate the PDH contributing to cervical cancer disparities across all 11 SEA nations. Country-specific analyses were conducted, including contextual information on health financing, infrastructure, political governance, and sociocultural influences. We identify common regional themes and propose targeted strategies to improve cervical cancer control. **Results:** Substantial heterogeneity exists across SEA in the implementation of HPV vaccination, screening programs, treatment availability, and palliative care services. While countries like Singapore and Thailand have well-established national programs, lower-income countries face fragmented health systems, workforce shortages, and high out-of-pocket (OOP) expenditures. Even in settings with universal health coverage, disparities persist due to geography, ethnicity, and socioeconomic status. Limited access to radiotherapy, brachytherapy, and essential cancer medicines, compounded by centralization of services in urban areas, continues to hinder timely care. Moreover, cervical cancer is disproportionately underdiagnosed and undertreated among rural, indigenous, and migrant populations. **Conclusion:** Cervical cancer disparities in SEA reflect broader structural inequities and require multi-sectoral responses beyond biomedical interventions. Political commitment to equitable cancer care—including investments in infrastructure, human resources, and financial protection—is critical. Strengthening regional collaboration and adopting intersectional approaches to policy design will be key to eliminating cervical cancer as a public health problem in SEA.

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NODULOCYSTIC BASAL CELL CARCINOMA ARISING WITHIN THE BENIGN FOLLICULAR NEOPLASM OF VULVA: A RARE CASE

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Problem Statement: Basal Cell Carcinoma is the most common skin cancer but rarely occurs in Vulva. Its diagnosis can be challenging when arising within benign follicular neoplasms, especially given overlapping histopathological features. Recognition is essential to ensure accurate management and appropriate followup. **Methods:** A 64 years old woman was referred with a broad-based vulval lesion (3-4cms), initially presumed benign. The lesion was excised under General anaesthesia and histopathological analysis was performed. Immunohistochemistry included Ber-EP4, CK-20, EMA and CEA. MRI pelvis and groin was arranged to exclude deeper invasion or nodal disease. The case was subsequently discussed at the Regional Gynaecology Cancer MDT meeting. **Results:** Histopathology revealed mixed lesion; Predominantly benign follicular neoplasms (Trichoblastoma, Tumour of follicular infundibulum, Cystic panfolliculoma) with areas of nodulo-cystic BCC showing significant Basaloid atypia and 10 mitosis/mm2 including atypical forms. No Perineural invasion, infiltrative growth or high risk features were seen. The lesion measured 15mm with a narrow deep margin (0.9mm). MRI demonstrated no residual tumour or nodal disease. MDT consensus confirmed a diagnosis of Nodulo-cystic BCC of the vulva (pT1), completely excised and low risk for progression. No adjuvant therapy was recommended. MDT recommended annual surveillance in Vulva Clinic for 5 years. **Conclusion:** We report a rare case of Vulval Nodulo-cystic BCC arising within a benign follicular neoplasm. Despite the atypical histological architecture, this tumour exhibited indolent behaviour and favourable outcome after complete excision. Careful histopathological assessment, Multidisciplinary review and radiological confirmation were pivotal in guiding management.

Disclosure of Interest: I declare no conflicts of interest.



CLINICAL SIGNIFICANCE OF HUMAN PAPILLOVIRUS CO-INFECTION WITH SEXUALLY TRANSMITTED INFECTIONS WOMEN OF KAZAKHSTAN IN REPRODUCTIVE - AGE WITH CERVICAL PRECANCEROUS CONDITIONS

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Introduction: Human papillomavirus (HPV) is the main cause of cervical cancer. Cervical-vaginal infection with pathogens such as bacterial vaginosis, mycoplasmosis, and vaginal candidiasis may be a cofactor. This study aimed to assess the impact of co-infection with human papillomavirus and sexually transmitted infections on the development of cervical precancerous conditions in reproductive-age women of Kazakhstan. **Materials and Methods:** In the study, 402 women had smears taken for cytological examination and cervical scrapings taken for sexually transmitted infections (STIs). The samples were analyzed by polymerase chain reaction. **Results:** In the study, the incidence of STIs was 77.8%, with rates being two times lower in the HPV-positive group (33.9% versus 66.1% among HPV-negative women, $p = 0.4$). Notably, all women with mild and severe dysplasia had a combination of HPV and STIs. A typical combination was HPV 16, 58, and 33 with *Gardnerella vaginalis*, cytomegalovirus, or *Candida albicans*. Consequently, vaginal infections do not always precede HPV infection. Sexually transmitted infections were associated with NILM in 150 (47.9%) examined patients, ASCUS in 73 (23.3%), LSIL in 79 (25.2%), and HSIL in 11 (3.5%) patients. Out of 396 patients, 20% had two HPV genotypes, and 10.0% had multiple genotypes. **Conclusion:** Women positive for HPV and STIs had abnormal Pap smears. Women with cervical precancerous lesions and vaginal infection were less likely to have HPV, except in high-grade squamous intraepithelial lesions. Women with high grade squamous intraepithelial lesions HPV were combined with *Gardnerella*, mycoplasmosis, and candidiasis.

GYNECOLOGIC PERIVASCULAR EPITHELIOID CELL TUMORS (PECOMAS): A COMPREHENSIVE ANALYSIS OF 48 CASES

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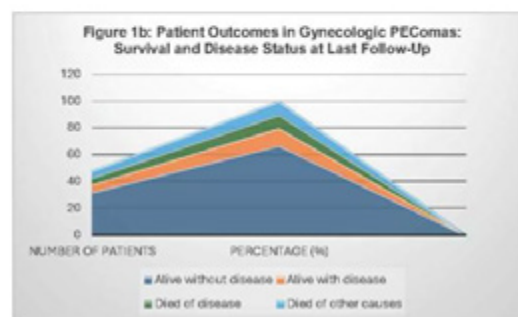
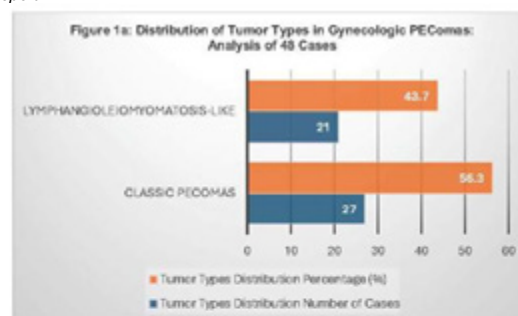
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Problem Statement: Gynecologic perivascular epithelioid cell tumors (PEComas) are rare neoplasms in the female reproductive tract, exhibiting varied clinical behavior. This case series analyzes 48 patients diagnosed with gynecologic PEComas, focusing on clinical presentation, histopathological features, treatment outcomes, and prognostic factors. **Methods:** A retrospective analysis of 48 patients with confirmed gynecologic PEComas was conducted across multiple institutions from [insert date range]. Data on clinical presentations, histological findings, treatment modalities, and follow-up outcomes were collected. Patients were categorized into two groups based on tumor characteristics: classic PEComas and those with lymphangioleiomyomatosis (LAM)-like features. **Results:** The median age at diagnosis was 50 years (range 28–77). Classic PEComas accounted for 56.3% (27 cases), while LAM-like features were seen in 43.7% (21 cases). Uterine tumors were the predominant site (70.8%, $n=34$), followed by adnexal (12.5%, $n=6$) and vaginal (10.4%, $n=5$) locations (Figure 1a). All tumors expressed HMB-45, with 92% positive for microphthalmia transcription factor (MITF), and Melan-A expression in 88%. S100 protein was detected in 20%. All tumors showed smooth muscle markers, with 100% positivity for desmin, 93% for smooth muscle actin (SMA), and 92% for h-caldesmon. The median follow-up duration was 24 months, with 67% of patients alive without disease, 13% alive with disease, and 10% dead of disease. Recurrence was noted in 30%, with poor prognostic features including tumor size ≥ 5 cm ($p=0.05$), high-grade nuclear atypia, necrosis, lymphovascular invasion, and mitotic rate $1/50$ high-power fields. (Figure 1b). **Conclusion:** This case series underscores the importance of thorough diagnostic evaluation and individualized treatment for gynecologic PEComas. The correlation between aggressive histological features and poor outcomes emphasizes the need for standardized reporting and multicenter collaborations. Targeted therapies, especially mTOR inhibitors, may provide effective options for advanced cases. Continued research and

an international registry for PEComas are essential for advancing our understanding of these tumors.

Disclosure of Interest: The authors have no disclosure or conflict of interest to report.



INCORPORATING COMORBIDITY INDEXES AND PERFORMANCE STATUS INTO ROUTINE GERIATRIC BREAST CANCER ASSESSMENT

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Problem Statement: Chronological age alone does not fully capture functional status, comorbidities and treatment tolerance in a newly diagnosed breast cancer. Charlson Comorbidity Index (CCI) quantifies comorbidities independently predicting mortality (score 0-37). Performance Status (PS) quantifies functional capacity (0-5). For both, higher scores are associated with higher burden of disease and less tolerance to treatment. We aimed at studying if there is an interplay between CCI and PS and breast cancer in women ≥ 75 years old. **Methods:** We conducted a retrospective cohort study of women aged ≥ 75 years old diagnosed with breast cancer at a Portuguese center between 2012 and 2020. The primary endpoint was to understand if the CCI and PS impacted treatment decisions, particularly type of surgery and the use of chemotherapy versus hormone and radiotherapy. The secondary endpoints were to understand if there was any association between women's age, CCI and PS with metastatic disease; and any association between CCI and PS with women's age and follow-up duration. **Results:** 228 women (mean age 82.8 ± 5.8 years old) were included. 65% of women were subjected to breast surgery. 83% were treated with hormone therapy, 23% with chemotherapy and 42% with radiotherapy. By the time this study was concluded, 27% of women were alive. The mean follow-up was 46.6 ± 35.6 months. The mean CCI was 6.47 ± 2.3 and the mean PS was 1.9 ± 1.3 . There was no statistically significant impact of CCI ($p = 0.653$) or PS ($p = 0.736$) on the type of surgery conducted. Conversely, CCI and PS significantly impacted the decision to opt for less aggressive modalities versus chemotherapy – women with lower CCI or PS were more likely to be submitted to chemotherapy ($p = 0.002$ and $p = 0.001$). Older age and higher CCI and PS were associated with presence of metastatic disease ($p = 0.004$ and $p = 0.001$). Higher CCI and PS were associated with older age and a shorter follow-up period ($p = 0.001$). **Conclusion:** These findings underscore the importance of incorporating CCI and PS into routine

geriatric oncology assessments, as they provide insights beyond chronological age to individualize treatment in this population.

CERTIFICATION DOES NOT EQUAL IMPLEMENTATION: EDUCATION AS THE KEY DRIVER FOR ERAS ADHERENCE IN GERMAN GYNECOLOGIC ONCOLOGY – A CROSS-SECTIONAL STUDY

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Problem statement: Enhanced Recovery after Surgery (ERAS) protocols improve perioperative outcomes, reduce morbidity, and enhance patient satisfaction. Despite international acceptance, implementation remains inconsistent. It is widely assumed that certification of oncological centers ensures adherence. Whether certification translates into improved ERAS implementation in gynecologic oncology in Germany, however, remains controversial.

Methods: An anonymous web-based survey was distributed to German gynecologic departments between June–September 2024. The questionnaire included prehabilitation, perioperative, and postoperative ERAS measures, barriers, facilitators, and strategies of implementation. Logistic and ordinal regression analyses assessed the impact of working in a German Cancer Society (DKG)-certified center and being well informed about ERAS protocols on adherence. **Results:** Of 420 accesses, 116 surveys were initiated and 72 completed. Compliance with several ERAS recommendations was high: preoperative fasting (≤ 2 h liquids: 66%; ≤ 6 h solids: 67%) and multimodal pain management (60%). However, prehabilitation was limited to smoking cessation (44%) and anemia evaluation (44%), with psychosocial and physical interventions rarely applied. Bowel preparation remained predominantly mechanical (73%), contrary to guidelines. Knowledge of ERAS strongly increased adherence to carbohydrate loading (OR=6.99, $p=0.001$), multimodal pain management (OR=9.71, $p=0.001$), and ileus prevention with chewing gum (OR=3.77, $p=0.01$). Certification status had no significant effect on these measures. Barriers most frequently cited were limited knowledge (41%) and lack of personnel (41%). Patient-centered benefits were the strongest facilitators. Interestingly, 65% of respondents reported that ERAS improved their professional life, with knowledge again being the strongest determinant (OR=9.0, $p=0.001$). **Conclusion:** Contrary to expectations, certification of oncological centers did not significantly improve ERAS implementation, while education markedly increased adherence across key domains. These findings highlight a critical controversy: investing in certification alone may not translate into clinical change without structured education and training. Future strategies should prioritize comprehensive, interactive education to achieve consistent ERAS adherence and maximize benefits for patients and professionals.

Disclosure of Interest: None declared.

AN IMMUNO-HORMONAL READOUT FOR EVERYDAY PRACTICE: ESTROGEN/PROGESTERONE RECEPTOR PHENOTYPES AND STROMAL TUMOR INFILTRATING LYMPHOCYTES FLAG ADVERSE PATHOLOGY PRIMARY ENDOMETRIAL CARCINOMAS

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Problem statement: Early, low cost risk signals help clinicians decide on endometrial carcinoma treatment. Estrogen/progesterone receptor (ER/PR) testing is available but not uniformly reported, and discordant patterns (ER+/PR– or ER–/PR+) are seldom analyzed. The immune contexture on routine H&E-stromal tumor-infiltrating lymphocytes (TILs) and tertiary lymphoid structures (TLS) is also underused. We asked whether combining ER/PR phenotypes with a simple stromal TIL readout identifies pathologically aggressive disease at diagnosis.

Methods: One hundred consecutive resections were reviewed.

Variables: age, histotype, grade, FIGO stage, myometrial invasion (50% vs $\geq 50\%$), lymphovascular space invasion (LVSI), and cervical stromal involvement. ER and PR were H-scored; positivity prespecified as $\geq 10\%$ tumor nuclei. Four phenotypes were defined a priori: double positive (ER+/PR+), double negative (ER–/PR–), ER+/PR–, ER–/PR+. Stromal TILs were estimated on H&E within tumor borders (excluding necrosis and artifacts) and categorized as low (10%), intermediate (10–40%), or high (40%); TLS were recorded as present/absent. Statistics: chi-square/Fisher, trend tests, and multivariable logistic regression adjusted for age and histotype. **Results:** Most tumors were endometrioid. PR-negative profiles were linked to higher grade, deeper invasion, and more frequent LVSI. Discordant ER+/PR– tumors showed adverse features. High TIL levels correlated with aggressive pathology. **Conclusions:** ER/PR phenotype plus H&E stromal TILs flags adverse pathology at diagnosis. PR loss, coincides with deep invasion and LVSI; TIL-rich tumors skew toward higher grade and deeper infiltration. Reporting ER/PR phenotype with a TIL/TLS note can refine surgical staging decisions, guide endocrine therapy conversations, and prompt timely molecular work up in inflamed cases.

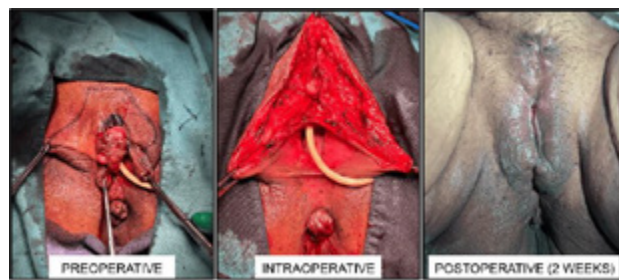
Funding: Research project, University of Prishtina, Kosovo 2/963. 15.11.2023.

VULVAR MELANOMA IN AN IMMUNOCOMPROMISED PATIENT: A CASE REPORT AND SURGICAL PERSPECTIVE

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Background: Vulvar melanoma is a rare and aggressive malignancy, constituting approximately 2–3% of melanomas in women and around 10% of vulvar cancers. Management is particularly challenging in patients with complex comorbidities, where immunologic compromise may influence both disease progression and surgical risk. **Case Report:** We report the case of a 65-year-old postmenopausal woman with a 2-month history of a progressively enlarging vulvar mass. She presented with significant comorbidities, including type 2 diabetes mellitus, hypertension, heart failure (ACC/AHA Stage C, NYHA III), prior cerebrovascular disease, pulmonary and cervical tuberculosis, and a subhepatic abscess. Physical examination revealed asymmetric black hyperpigmented lesions on the labia minora measuring 2.5 cm on the left with well-delineated borders and 1 cm on the right with diffuse borders. A 4 x 3 cm exophytic lesion was also noted at the 11 o'clock position on the right labia minora. Biopsy and immunohistochemical profiling confirmed a diagnosis of vulvar melanoma. Imaging ruled out distant and nodal metastases. The patient underwent wide local excision of the vulva. **Discussion:** This case highlights the probable role of immunosuppression in melanomagenesis. The patient's cumulative comorbidities — including chronic infections, endocrine dysfunction, and cardiovascular disease — likely contributed to an immunologically permissive environment for melanoma development. Diabetes and hypertension may have contributed via inflammatory, hormonal, and angiogenic pathways. Heart failure is increasingly recognized for its role in tumor progression through systemic inflammation and neurohormonal dysregulation. Despite her poor operative fitness, oncologic control was achieved through individualized, multidisciplinary surgical planning and perioperative optimization. **Conclusion:** This case illustrates the link between immune dysfunction and oncogenesis. It also underscores how strategic surgical intervention, guided by multidisciplinary insight, can achieve meaningful oncologic outcomes even in severely immunocompromised patients.



CURRENT PRACTICE PATTERNS, RATIONALE, AND SAFETY CONSIDERATIONS IN POWER MORCELLATION: RESULTS FROM A NATIONAL SURVEY OF GYNECOLOGIC SURGEONS

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Problem Statement: The use of power morcellation in gynecology remains controversial due to concerns about occult uterine malignancy dissemination, balanced against the benefits of minimally invasive surgery. Despite regulatory advisories from the US Food and Drug Administration (FDA) and European bodies, clinical practice varies widely, and contemporary data on surgeons' attitudes, techniques, and safety strategies are scarce. Understanding current practice is essential to inform guidelines, align safety measures, and address knowledge gaps. **Methods:** A cross-sectional, anonymized online survey was distributed nationally to practicing gynecologic surgeons. The questionnaire addressed demographics, surgical volume, frequency of power morcellation use, preoperative diagnostic protocols, rationale for morcellation, containment strategies, alternative surgical approaches, patient counseling practices, and views on regulatory restrictions. Logistic and multinomial regression analyses evaluated associations between institutional and surgeon characteristics (e.g., hospital type, gynecologic oncology subspecialization, and laparoscopic volume) and morcellation practice patterns. **Results:** A total of 192 respondents completed the survey. Regular power morcellation use was reported by 58.3% of surgeons; 31.3% used it occasionally, and 9.9% never used it. Most (62%) performed fewer than 10 morcellations per month; however, a higher laparoscopic case volume (50 cases/month) was strongly associated with more than 10 morcellations/month (OR 9.90; 95% CI 3.88–25.30; $p < 0.001$). Preoperative endometrial sampling, imaging, or Pap smear were inconsistently adopted, with statistically significant but limited associations between training/certification and use of certain tests. Containment bags were used by 58% of surgeons performing morcellation, though no significant predictors of adoption were identified. The most frequently cited rationales included avoidance of laparotomy complications (74%), rarity of malignant tumors (72%), patient preference (61%), and improved cosmetic results (55%). Alternatives such as removal without morcellation (96%) and MRgFUS (89%) were reported as available by most respondents. Notably, 54% did not support stricter guidelines. **Conclusion:** Despite safety concerns, power morcellation remains widely practiced, particularly among high-volume minimally invasive surgeons. Preoperative screening and containment strategies are variably implemented, underlining the need for standardized protocols that maintain minimally invasive benefits while minimizing oncologic risk. These findings highlight the ongoing debate and suggest a gap between regulatory recommendations and clinical adoption.

Disclosure of Interest: None declared.

AN ONLINE SURVEY OF CANCER SURVIVOR'S VIEWS ON ACCESS TO INFORMATION AND SUPPORT FOR MENOPAUSE FOLLOWING CANCER

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Objective: Menopause following treatment of cancer can be difficult for many due to significant menopause symptoms (systemic and/or genitourinary) which adversely impact quality of life and limitations to the treatment options available on the background of cancer history. Careful consideration of benefits versus risks of each approach (lifestyle, non-hormonal, and hormonal) and shared decision making between the woman and her health professional are important aspects of long-term care. We conducted an online survey of cancer survivors asking them about their views on availability of information and support for menopause following cancer. **Methods:** Individuals who had experienced menopause because of cancer treatment were offered to take part in a short anonymous online survey to answer 6 questions including Do you feel that you received adequate information about menopause resulting from cancer treatment as part of pre-treatment discussions? Do you feel that you received adequate support from your healthcare professionals for menopause resulting from cancer

treatment? The survey was open to individuals across the UK and participants were invited through various online and social media platforms over a period of 12 weeks between June to August 2025.

Results: Over 1200 women participated in the survey over a period of 12 weeks making it one of the biggest surveys focussing on this topic. 3 out of 4 women did not receive adequate information about menopause resulting from cancer treatment as part of their pre-treatment discussions with the healthcare team. 9 out of 10 participants said that menopause related symptoms which followed cancer treatment, had a significant impact on their quality of life. More than 3 out of 4 women felt that they did not receive adequate support from their healthcare professionals for menopause resulting from cancer treatment. 3 out of 4 women felt that their healthcare professionals team did not have up-to-date knowledge of menopause management. **Conclusion:** Majority of cancer survivors in our survey were not satisfied with the information and long-term care and support that was offered to them for menopause management following cancer treatment. There is certainly more that needs to be done in this space to support individuals better.

REASSESSING MISSED OPPORTUNITIES IN OVARIAN CANCER PREVENTION: A MULTI-INSTITUTIONAL STUDY

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Problem Statement: The effectiveness of salpingectomy in preventing high-grade serous cancer (HGSC) remains underexplored at the population level. This study aims to quantify the missed opportunities for salpingectomy among patients diagnosed with HGSC. **Methods:** This mixed-methods, multi-institutional retrospective study was conducted at two academic medical centers from 2014 to 2023. We reviewed clinicopathologic data from 2,134 patients diagnosed with HGSC. Additionally, we administered an electronic survey to 920 members of a national ovarian cancer organization who self-reported HGSC diagnoses, with 368 confirmed cases. Data analysis occurred between May and August 2023. **Results:** In our retrospective cohort, 480 patients (25.7%) experienced missed opportunities for salpingectomy. Among these, 288 underwent bilateral tubal ligation or hysterectomy (54.2%), while 232 had other abdominal-pelvic surgeries (45.8%), with procedures like cholecystectomy, hernia repair, and bowel surgeries being more frequently performed in patients aged 45 and older. From the survey cohort of 480, 68 respondents (15.5%) reported missed opportunities. Furthermore, our analysis identified a 42.1% missed opportunity rate for germline genetic testing and risk-reducing surgeries among patients with affected first-degree relatives. **Conclusion:** A significant number of patients diagnosed with HGSC experienced missed opportunities for both risk assessment through genetic testing and preventive surgical options. Given the challenges of effective screening and limited treatment for HGSC, addressing these missed opportunities is crucial for enhancing prevention strategies.

Disclosure of Interest: The authors have no disclosure or conflict of interest to report.

EXTRAUTERINE ENDOMETRIAL STROMAL SARCOMA IN A NULLIGRAVID: A CASE REPORT

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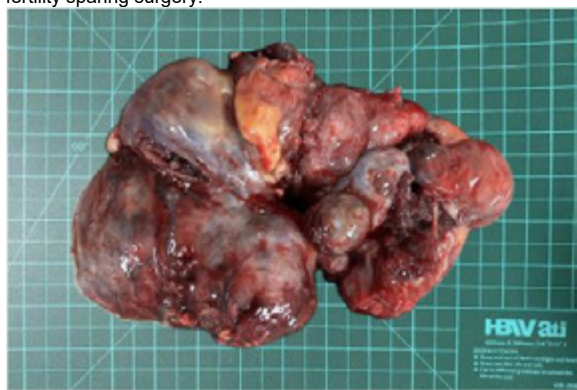
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Problem statement: Endometrioid Stromal Sarcoma (ESS) is a rare reproductive tract tumor with non-specific symptoms that lead to misdiagnosis. This study examines the diagnostic challenges and clinical course of a 27-year-old woman initially diagnosed with fallopian tube cancer, later confirmed to have Extrauterine ESS. The research aims to highlight the clinical presentation, diagnostic difficulties, and treatment strategies for ESS. **Methods:** This case report presents a 27-year-old nulligravid woman diagnosed with Extrauterine ESS, initially diagnosed as fallopian tube cancer. She presented with persistent epigastric pain and a Computed Tomography (CT) scan revealed a multiloculated pelvoabdominal lesion (Figure 1). A pelvic laparotomy identified an irregular mass on the right fallopian tube and tumor implants on the rectosigmoid colon, suggesting Stage IIB fallopian tube



cancer. Seven months later, a follow-up positron emission tomography (PET) CT scan showed pelvic ascites and nodules, suggesting recurrence. Transvaginal ultrasound confirmed neoplastic growth, leading to a second pelvic laparotomy, where histopathology confirmed ESS. Patient received 6 cycles of chemotherapy, with 2 additional cycles due to persistent soft tissue nodules. This case highlights the diagnostic challenges of ESS and underscores the importance of imaging, histopathology, and multidisciplinary care in managing rare gynecological tumors. Ethical guidelines were followed, and informed consent was obtained. **Results:** Surgical resection is the primary treatment, with extensive lymph node dissection needed for extrauterine ESS. Recurrence is common, and survival depends on residual disease after surgery. Chemotherapy is standard for high-grade ESS. Radiation therapy can reduce pelvic recurrence but doesn't improve survival. Hormonal therapy is used for low-grade ESS but not high-grade cases. Non-hormonal options, like SSRIs or gabapentin, can manage menopausal symptoms. The patient is currently on calcium and vitamin D supplements and scheduled for bone mineral density testing. **Conclusion:** Diagnosis poses a challenge to physicians due to lack of diagnostic criteria and scant literature concerning symptomatology, diagnosis and treatment. It is usually misdiagnosed since presentation is non-specific. Definitive diagnosis is only made during surgery. This is treated by aggressive cytoreductive surgery followed by adjuvant chemotherapy and menopause non-hormonal treatment options should be taken into consideration. In a young patient, there is an option of fertility sparing surgery.



COMPARATIVE EFFICACY OF WEEKLY METHOTREXATE VERSUS 8-DAY METHOTREXATE-FOLINIC ACID REGIMEN IN LOW-RISK GESTATIONAL TROPHOBLASTIC NEOPLASIA: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Problem Statement: Methotrexate (MTX) is a cornerstone chemotherapeutic agent in the management of low-risk gestational trophoblastic neoplasia (GTN). However, the optimal dosing regimen—weekly MTX versus the 8-day methotrexate-folinic acid (MTX-FA) protocol—remains under debate due to differences in efficacy and toxicity. **Methods:** A systematic review and meta-analysis were conducted to compare the efficacy and safety of weekly MTX versus 8-day MTX-FA regimens in low-risk GTN. Databases searched included PubMed, Scopus, Web of Science, and EMBASE up to April 2025. Eligible studies were randomized controlled trials or retrospective cohorts reporting outcomes such as complete remission (CR) rates and treatment-related toxicities. **Results:** Four studies encompassing 362 patients were included. The 8-day MTX-FA regimen was associated with significantly higher complete remission rates than weekly MTX (RR 1.10; 95% CI: 1.00–1.21; $p = 0.04$). Additionally, the 8-day MTX-FA regimen showed higher although not statistically significant, odds of hepatotoxicity (OR 1.50; 95% CI: 0.10–22.53), neutropenia (OR 1.80; 95% CI: 0.55–5.92), thrombocytopenia (OR 3.67; 95% CI: 0.40–33.76), and stomatitis (OR 0.86; 95% CI: 0.21–3.55) compared to weekly MTX.

Conclusion: The 8-day MTX-FA regimen offers superior efficacy over weekly MTX in achieving complete remission in low-risk GTN, but this benefit may come at the cost of increased toxicity. Treatment selection should be guided by individual patient factors, including tolerance, comorbidities, and resource availability.

ORAL PRESENTATION 12:

FETOMATERNAL MEDICINE: HIGH RISK PREGNANCY / MEDICAL COMPLICATIONS IN PREGNANCY PRETERM DELIVERY PREVENTION AND TREATMENT

HIGH RISK PREGNANCY

OBSTETRIC AND PERINATAL OUTCOMES OF PATIENTS DIAGNOSED WITH DEPRESSION: A 20 YEARS STUDY

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Problem statement: Pregnancy and the puerperium involve profound psychological and physiological changes, representing a period of increased vulnerability to psychiatric disorders, particularly depression, which is often underdiagnosed during pregnancy, limiting accurate estimates of incidence and its impact on obstetric and perinatal outcomes. This study aimed to evaluate risk factors and complications in pregnant women with depression, compared to those without the disorder. **Methods:** An observational, retrospective, comparative study was conducted in a tertiary hospital, including women with singleton intrauterine pregnancies and gestational age ≥ 20 weeks at admission. The study group comprised women with a clinical diagnosis of depression, while the control group included those without psychiatric or relevant clinical comorbidities. Clinical complications, prenatal care, delivery, and neonatal outcomes were assessed. Categorical variables were expressed as absolute and relative frequencies and compared with Pearson's chi-square or Fisher's exact test. Continuous variables were described as means with standard deviations or medians with interquartile ranges, according to distribution, and analyzed with the Kruskal-Wallis test. A significance level of 5% ($p < 0.05$) was adopted. **Results:** The sample included 1,196 women aged 14 – 46 years, of whom 315 (26.3%) had depression (DG) and 881 (73.7%) did not (CG). Depressed women showed higher prevalence of comorbidities: anemia (4.1% vs. 1.2%; $p = 0.002$), hypertensive disorders (5.8% vs. 1.9%; $p = 0.001$), and gestational diabetes (15.8% vs. 3.4%; $p = 0.001$). The DG group had lower spontaneous labor rates (52.5% vs. 69.3%), higher cesarean rates (60.2% vs. 49.3%; $p = 0.001$), mainly due to contraindication for induction and iterativity (52.9% vs. 20.8%; $p = 0.001$) and lower rates of premature amniorrhexis (23.9% vs. 32.1%; $p = 0.012$). Postpartum hospital stay was longer among depressed women (5 vs. 3 days; $p = 0.001$). **Conclusion:** Depression in pregnancy was associated with greater burden of obstetric comorbidities, particularly anemia, hypertensive disorders, and gestational diabetes, as well as longer puerperal hospitalization. The higher cesarean rate among depressed women supports previous findings linking depression to greater operative delivery. These findings highlight the importance of early detection, multidisciplinary management, and psychosocial support during prenatal care to reduce risks.

GESTATIONAL DIABETES IN HIV-POSITIVE PREGNANCY: A TERTIARY HOSPITAL STUDY

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Problem statement: Gestational diabetes mellitus (GDM) represents a major health issue among pregnant women worldwide, with an estimated prevalence of 13.9% in Europe. Established risk factors include advanced maternal age, high body mass index (BMI), and certain ethnic backgrounds. In addition, the use of protease inhibitor-based antiretroviral therapy (ART) in Human Immunodeficiency Virus (HIV) positive women has been associated with an increased risk of GDM, possibly through effects on insulin resistance. Nevertheless, the overall prevalence of GDM in HIV-positive pregnancies has been reported to be relatively low, around 4–5%. This study aims to characterize the population of HIV-positive pregnant women and to assess the prevalence of GDM within this group, in the setting of a



tertiary referral hospital. **Methods:** A retrospective cohort study was carried out, including all HIV-infected pregnant women who received prenatal care and delivered at a tertiary hospital between January 2020 and September 2025. **Results:** A total of 66 women accounting for 71 pregnancies were included, with a mean maternal age of 32.9 ± 6 years. The mean BMI of the 71 participants was 26.04 ± 5.86 (median 24.80; range 16.10–39.80). Regarding ethnicity, 38 women (57.6%) were of African descent, 26 (39.4%) were Caucasian, and 1 (1.5%) was Asian. In total, 11(15.5%) of the participants were diagnosed with GDM. In 38 (53.5%) cases, protease inhibitor-based-ART was used. GDM occurred in 7 (18.4%) women using protease inhibitors and in 4 (12.5%) women not using them. No significant association was found ($\chi^2 = 0.460$; $p = 0.498$; Fisher's $p = 0.533$). **Conclusion:** Although the proportion of GDM was slightly higher among women using protease inhibitor-based ART (18.4% vs. 12.5%), no statistically significant association was observed. Further studies with larger sample sizes are needed to confirm these results and explore additional risk factors.

PLACENTAL SIZE: A MARKER OF FETAL WELLBEING

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Problem statement: Fetal size is used as a marker of fetal wellbeing, and small for gestational age fetuses are considered at increased risk of perinatal death or impaired health later in life. However, many newborns with adverse health have adequate size for gestation and many small babies are small by constitution. We have explored whether placental size relative to fetal size could improve the identification of fetuses who are truly at risk. **Methods:** We used the Medical Birth Registry of Norway that includes all births in Norway after 16 weeks of gestation. Information about placental weight at birth has been available since 1999. We studied the associations of placental weight and placental weight/birthweight ratio with fetal death, neonatal death, low Apgar score at birth and cerebral palsy. **Results:** In pregnancies with fetal death, neonatal death, low Apgar score or cerebral palsy the placenta was disproportional relative to birthweight. The patterns were similar for the different outcomes, and both relatively small and relatively large placentas were associated with adverse outcome. In preterm deliveries with adverse outcome, relatively large placentas were predominant. **Conclusion:** Disproportional placental weight relative to birthweight is likely to be an indicator of unfavorable intrauterine fetal conditions. A small placenta may be dysfunctional, whereas a relatively large placenta could represent a compensatory angiogenic response to insufficient maternal oxygen supply to the placental-fetal unit. If placental weight relative to birthweight is disproportional at birth, inadequate obstetric care may not be the cause of low vitality of the newborn.

CAN NT-PROBNP ENHANCE ACCURACY OF ANGIOGENIC FACTORS IN THE SHORT-TERM PREDICTION OF PREECLAMPSIA?

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Problem statement: Preeclampsia (PE) is a hypertensive disorder affecting 2–4% of pregnancies worldwide and remains a major cause of maternal and perinatal morbidity and mortality. Certain proangiogenic and antiangiogenic factors, such as placental growth factor (PlGF) and soluble fms-like tyrosine kinase-1 (sFlt-1), respectively, which circulate in the maternal blood system, are altered in pregnancies complicated by PE. Angiogenic biomarkers aid in short-term prediction of PE but are often limited by false-positive results. N-terminal pro-B-type natriuretic peptide (NT-proBNP), elevated in PE due to cardiovascular dysfunction, may enhance diagnostic precision. This study evaluated whether adding NT-proBNP to the sFlt-1/PlGF ratio improves prediction of PE and associated complications within one week. **Methods:** We performed a prospective multicenter case-control study in pregnancies with suspected PE between 24+0 and 41+0 weeks. Three models evaluated the addition of NT-proBNP (cut-off ≥ 116 pg/mL) to the sFlt-1/PlGF ratio using thresholds 38, ≥ 85 , and 38–84. All models were assessed for early-onset, preterm, term, and overall PE prediction using ROC

analysis, predictive metrics, and Kaplan–Meier survival curves. **Results:** A total of 316 women (424 serum samples) were included. PE occurred in 23.4% of cases, including 8.5% early-onset PE. NT-proBNP levels were significantly elevated in PE cases. The addition of NT-proBNP improved early-onset PE prediction, particularly in intermediate-risk cases (sFlt-1/PlGF 38–84), achieving an AUC of 0.949 (95% CI: 0.896–1.000) and NPV of 99.5%, outperforming sFlt-1/PlGF alone. Survival analysis revealed a shorter median time to delivery when both biomarkers were elevated (1.3 vs. 4.0 weeks; $p < 0.001$). For term PE, NT-proBNP increased PPV when combined with sFlt-1/PlGF ≥ 38 . In complicated PE, the combined model improved specificity (77.4%) and AUC of 0.770 (95% CI 0.661–0.880) with an NPV of 91.1%. **Conclusion:** NT-proBNP enhances the short-term predictive performance of the sFlt-1/PlGF ratio, particularly in intermediate-risk cases, where clinical decisions are more complex. This multimarker approach may refine risk stratification and support timely clinical intervention in pregnancies at risk of PE.

PERIMENOPAUSAL PREGNANCIES - PERINATAL COMPLICATIONS AND OUTCOMES OF SPONTANEOUS VS. ASSISTED REPRODUCTION

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Problem Statement: With modern assisted reproduction techniques (ART), pregnancies near and beyond menopause are possible and becoming more common. In rare cases spontaneous pregnancies at age approaching menopause can occur. This study presents an analysis of complications and outcomes of spontaneous perimenopausal pregnancies compared to perimenopausal pregnancies conceived by assisted reproductive techniques including in vitro fertilization (IVF) and egg donation (ED). **Methods:** Medical records of all pregnancies of patients aged 49 years and older were reviewed and analyzed during an eight-year period. Perinatal complications of spontaneous pregnancies were compared to those of pregnancies achieved by ART. Six patients with spontaneous pregnancies and 29 with pregnancies achieved by ART aged 49–56 years were included in the analysis. Pregnancy complications, mode of delivery, perinatal and neonatal complications were compared between the two groups. **Results:** All spontaneous pregnancies were of grand multiparous women in their 8th–15th(!) delivery. All of the spontaneous pregnancies were singletons. Five (17%) of the ART pregnancies were twins. In both groups there was a high incidence of diabetes mellitus and hypertensive disorders. Five (83%) of the spontaneous pregnancies were delivered vaginally and only one (17%) was by Cesarean delivery (for non-reassuring fetal monitor). Five (17%) of the ART pregnancies were delivered vaginally and 24 (83%) by Cesarean section. None of the patients who conceived spontaneously had serious postpartum complications. Three (10%) of the ART patients were hospitalized in ICU after delivery due to severe pre-eclamptic toxemia or pulmonary embolism. All of them recovered completely and were discharged within ten days. **Conclusions:** Perimenopausal pregnancies are almost exclusively conceived by ART and are always considered high risk pregnancies. Spontaneous perimenopausal pregnancies can occur and may involve serious maternal and fetal complications similar to those achieved by ART. In this study no long term irreversible maternal or fetal complications were found in patients who conceived either spontaneously or by ART although a much higher rate of Cesarean deliveries was noted in ART pregnancies.

SUCCESSFUL TERM PREGNANCY IN A PATIENT WITH SEVERE REFRACTORY IMMUNE THROMBOCYTOPENIC PURPURA: A CASE REPORT

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Problem statement: Immune thrombocytopenic purpura (ITP) is an autoimmune disorder causing premature destruction and clearance of platelets in the spleen secondary to autoantibodies formed from platelet membranes. According to the American Society of Hematology (ASH) 2019, refractory ITP is defined as a total lack of response to one or more single-agent therapies. ITP during pregnancy usually can be controlled with medical management. First line options include glucocorticoids and intravenous immunoglobulin (IVIG) and second line options are



Rituximab, and Eltrombopag. For severe refractory cases, a splenectomy may be warranted. This is a case of a 26 years old Gravida 2 Para 1 (1001) with severe refractory ITP in pregnancy complicated by early onset fetal growth restriction. The patient was transfused a total of 38 units platelet concentrate and received 4 cycles of dexamethasone pulse therapy, 3 cycles of Rituximab infusion, Eltrombopag for 27 days and immunoglobulin infusion and subsequently underwent laparoscopic splenectomy in the second trimester. **Methods:** The patient underwent laparoscopic splenectomy in the second trimester with minimal blood loss. **Results:** The patient delivered at 37 weeks age of gestation via elective primary low transverse cesarean section with estimated blood loss of 300 cc and delivered a full term live baby girl, weighing 1945 grams, (1st percentile), small for gestational age with an APGAR Score 9 remaining 9. Both mother and baby were discharged stable. **Conclusion:** This case presented a successful management of refractory immune thrombocytopenic purpura in pregnancy. ITP in pregnancy is a complex case that necessitates a multidisciplinary management involving General Medicine, Hematology, General Surgery, Anesthesia, Obstetrics and Gynecology, Maternal Fetal Medicine, Newborn Medicine and Ethics committee. The several multidisciplinary meetings involving the patient and the family greatly contributed to the success of this case. In addition, the availability of the second line therapies such as the IVIG, Rituximab and Eltrombopag and the capability to do laparoscopic splenectomy during pregnancy in our institution greatly made a difference in ensuring the successful outcome in this case.

PREVALENCE AND PREDICTORS OF MATERNAL NEAR-MISS AND MORTALITY ASSOCIATED WITH ACQUIRED CARDIAC DISEASES

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Problem statement: Heart disease is a leading cause of maternal mortality in developed countries and at our institution in Southern Thailand. At Songklanagarind Hospital, it accounts for approximately one-quarter of maternal deaths. Although several risk stratification models—such as CARPREG II, the modified WHO classification, and ZAHARA—have been established, these tools focus primarily on cardiac-specific parameters and do not adequately incorporate maternal demographic or obstetric factors that may also contribute to adverse outcomes. To address this gap, this study aimed to determine the prevalence and predictors of maternal near-miss and mortality in pregnancies complicated by acquired cardiac disease. **Methods:** We conducted a retrospective study of 197 pregnancies complicated by acquired cardiac disease and delivered at Songklanagarind Hospital between January 2011 and December 2024. Eligible women were those with a gestational age ≥ 24 weeks. Cases with incomplete or missing cardiac data were excluded. Clinical characteristics, obstetric complications, and cardiac parameters were retrieved from hospital databases. Multivariate logistic regression was performed to identify predictive factors of maternal near-miss and mortality, with a p-value 0.05 considered statistically significant. **Results:** Maternal near-miss or mortality occurred in 80 cases (40.6%), including two maternal deaths. Independent predictors of maternal near-miss and mortality were: maternal age ≥ 30 years (aOR 4.11, 95% CI 1.15–14.66), nonvalvular heart disease (aOR 9.85, 95% CI 1.38–70.23), medical comorbidities (aOR 12.56, 95% CI 3.09–51.03), left ventricular ejection fraction 55% (aOR 9.33, 95% CI 1.80–48.33), left ventricular outflow tract obstruction (aOR 23.64, 95% CI 3.57–156.60), and WHO class III–IV (aOR 3.61, 95% CI 1.27–29.38). The six-factor predictive model showed excellent discrimination with an area under the receiver operating characteristic curve of 0.946 (95% CI 0.917–0.974). **Conclusion:** The prevalence of maternal near-miss and mortality among pregnancies complicated by acquired cardiac disease was high. A six-factor predictive model was developed, which requires external validation before clinical application.

TREATMENT OF HETEROTOPIC CERVICAL PREGNANCY WITH AN ONGOING INTRAUTERINE TWIN PREGNANCY: A CASE REPORT

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Heterotopic cervical pregnancy (HCP) is a rare and potentially life-threatening condition involving the coexistence of an intrauterine and ectopic cervical gestation. Although its incidence is approximately 1 in 30,000 spontaneous conceptions, it is more common in assisted reproductive technology (ART) pregnancies. Managing HCP is particularly challenging when the intrauterine pregnancy is viable, requiring a delicate balance between preserving the pregnancy and minimizing maternal risks. **Methods:** A 29-year-old woman, gravida 2, para 1, with a history of infertility treated with IVF, presented at 7 weeks of gestation with mild vaginal bleeding and no significant abdominal pain. She had previously undergone a frozen embryo transfer of three blastocysts. Transvaginal ultrasound confirmed a viable intrauterine dichorionic-diamniotic twin pregnancy coexisting with a viable cervical pregnancy. Given the high risk of hemorrhage and pregnancy loss, a multidisciplinary team opted for ultrasound-guided potassium chloride (KCl) injection into the cervical gestation sac to arrest its growth while preserving the intrauterine twin pregnancy. The procedure was performed successfully under transvaginal ultrasound guidance using a 17G double-lumen OPU needle with the administration of 2 mL of KCl. Given the story of cervical cerclage was intervention and twin pregnancy, a prophylactic cervical cerclage was placed at 12 weeks+2 days. Although no funneling or dilation was noted at the time of cerclage placement, the procedure was recommended due to the high risk of cervical insufficiency. The cerclage was performed uneventfully under intravenous anesthesia, and the patient was prescribed 400 mcg vaginal micronized progesterone for ongoing support. **Results:** Serial ultrasounds confirmed the resolution of the cervical pregnancy without complications. The intrauterine twin pregnancy progressed normally. At 36 weeks of gestation, the patient underwent an elective cesarean section, delivering two healthy twins. Postoperative findings showed an intact uterine segment with no signs of rupture or placental abnormalities. **Conclusion:** This case emphasizes the importance of early diagnosis and individualized management in heterotopic cervical pregnancy. Ultrasound-guided KCl injection effectively terminated the cervical pregnancy while preserving the intrauterine twin gestation. The addition of prophylactic cervical cerclage contributed to a successful outcome. Clinicians should remain vigilant for HCP, particularly in ART-conceived pregnancies, to ensure timely intervention and optimal outcomes.

LIFE OUTSIDE THE WOMB: A SUCCESSFUL CASE OF ADVANCED SECONDARY ABDOMINAL PREGNANCY

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Problem Statement: Abdominal pregnancy is a rare form of ectopic pregnancy in which the pregnancy implants within the peritoneal cavity, rather than the fallopian tube, ovary, broad ligament, or cervix. It accounts for approximately one percent of all ectopic pregnancies, with successful live births being exceptionally uncommon in clinical practice. Diagnosis is difficult due to nonspecific symptoms, often leading to delayed detection and increased maternal morbidity. Complications typically arise from placental attachment to abdominal organs or major vessels. In the absence of standardized guidelines, management is usually individualized. **Methods:** This is a case of an advanced secondary abdominal pregnancy in a multigravida without known risk factors. Diagnosis was made in the second trimester through ultrasound, which demonstrated a viable fetus within the abdominal cavity. The patient underwent exploratory laparotomy, fetal extraction, evacuation of hemoperitoneum, adhesiolysis, total hysterectomy with bilateral salpingectomy, left oophorectomy, enterolysis, bowel run, repair of serosal tear (ileocecal), and Jackson-Pratt drain insertion. A multidisciplinary team—comprising maternal-fetal medicine specialists, neonatologists, gynecologic oncologists, general and vascular surgeons, anesthesiologists, and blood bank support—was assembled for perioperative planning and management. **Results:** Intraoperatively, the omentum enveloped the fetus in transverse lie. The placenta was



densely adherent to the omentum and bowel serosa. A live female infant, 27 weeks by pediatric assessment, weighing 910 g, was delivered with APGAR scores of 6 and 9. She required neonatal intensive care for prematurity-related complications and was discharged on day 85 at 38 weeks postconceptual age, weighing 1.6 kg, breastfeeding well, and hemodynamically stable. At 16 months, she was healthy with normal growth and development. Maternal recovery was uneventful.

Conclusion: Advanced abdominal pregnancy can present without predisposing factors, underscoring the need for high clinical suspicion and early imaging in atypical obstetric cases. Optimal management relies on individualized surgical planning, careful intraoperative decision-making regarding placental handling, and delivery in specialized centers with comprehensive multidisciplinary resources. Ethical considerations play a pivotal role in balancing maternal safety with fetal prognosis. This case illustrates that, even in rare and high-risk scenarios, favorable maternal and neonatal outcomes are achievable when expertise and resources are effectively integrated.

OBSTETRIC CHALLENGES IN MOYAMOYA DISEASE: ELECTIVE CESAREAN VERSUS INDUCTION OF LABOUR—A CASE REPORT

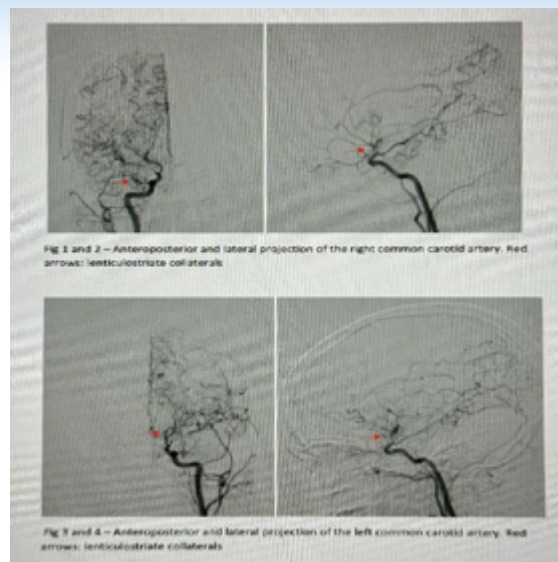
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Problem statement: Moyamoya disease (MMD) is a rare vasculopathy characterized by a chronic and progressive bilateral stenosis of the intracranial internal carotid arteries and the formation of compensatory collateral vessels, which can result in cerebral infarction or intracranial hemorrhage. Management of pregnancy and mode of delivery in affected women remains controversial, with concerns regarding the risk of ischemic or hemorrhagic events during pregnancy, labor, and postpartum period due to the rarity of the disease. Recent evidence indicates that the mode of delivery does not significantly impact neurologic outcomes when appropriate precautions are taken.

Methods: This case was conducted based on patient history and complementary diagnostic tests before and during pregnancy. **Results:** A 29-year-old African gravida 2 para 1 with a previous history of chronic hypertension and anxiety disorder was diagnosed with MMD at the age of 27 years after an episode of ischemic stroke. During pregnancy, she was followed by a multidisciplinary team and was treated with aspirin, methyldopa, and sertraline. At 36 weeks of gestation, she presented to the emergency department with preterm premature rupture of membranes (PPROM). Cervical ripening was initiated with 2 doses of misoprostol, epidural anesthesia was administered, and she progressed to fully dilated with oxytocin augmentation. She delivered a 2585 g infant with Apgar's scores 8 and 9 at one and five minutes, respectively via eutocic vaginal delivery. No maternal neurologic events occurred during the intrapartum or immediate postpartum period, and both mother and infant were discharged in stable condition. **Conclusion:** This case demonstrates that vaginal delivery with epidural anesthesia can be a viable option in women with MMD when supported by meticulous multidisciplinary care. It is speculated that optimal blood pressure and ventilation control are more critical than the delivery mode itself, supporting individualized planning based on obstetric and neurological factors.



INVESTIGATION OF RELATIONSHIP BETWEEN CYBERCHONDRIA, DEPRESSION, ANXIETY AND STRESS IN PREGNANT WOMEN

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Problem Statement: Depression, anxiety and stress are the most common distressing situations that women face during pregnancy. Anxiety and depression experienced during pregnancy increase pregnancy and birth complications, can cause preterm labor, low birth weight, intrauterine growth retardation, and can negatively affect the health of the newborn. Cyberchondria is defined as trying to diagnose or treat one's own illnesses by searching for information, documents, and treatment methods on the internet. This study was conducted to examine the relationship between cyberchondria, depression, anxiety and stress in pregnant women. **Methods:** The sample of the descriptive and cross-sectional study included 329 pregnant women who applied to the obstetrics outpatient clinics and pregnancy school of a district state hospital in the Aegean region of Turkey and agreed to participate in the study. The data were collected between June 5, 2023 and September 29, 2023 using the Personal Information Form, Depression Anxiety Stress Scale (DASÖ-21) and Cyberchondria Severity Scale Short Form (CSS-12). **Results:** Stress was at "severe" in 18.2%, and "very severe" in 4% of pregnant women. Anxiety was at "severe" in 12.5%, and "very severe" in 32.5% of them. Depression was "severe" in 9.1%, and "very severe" in 6.1% of them. The mean stress score of pregnant women was 7.98 ± 4.86 , the mean anxiety score was 7.46 ± 5.03 and the mean depression score was 5.36 ± 4.49 . The pregnant women's Cyberchondria Severity Scale total mean score was 33.97 ± 8.84 . There were moderate positive correlations between the Cyberchondria Severity Scale and stress, anxiety and depression score averages. In multiple regression analysis, anxiety, stress, and the frequency of visiting a doctor during pregnancy were found to be important predictors of cyberchondria severity. **Conclusion:** It shows that cyberchondria severity scale scores are moderately positively correlated with stress, anxiety and depression. It is recommended to increase the awareness of health personnel about monitoring pregnant women in terms of stress, anxiety, depression and cyberchondria severity.



EFFECT OF ORAL AND INTRAVENOUS HYDRATION THERAPY ON AMNIOTIC FLUID INDEX, MATERNAL AND PERINATAL OUTCOME IN BORDERLINE OLIGOHYDRAMNIOS

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Aim: To determine whether oral route of maternal hydration is advantageous over intravenous route in terms of increasing AFI and improving maternal and perinatal outcome in women having borderline oligohydramnios. **Material & Method:** 150 women in third trimester with borderline oligohydramnios (BO) AFI 5.1-8cm, were divided randomly into two groups, oral hydration group (OG) and intravenous hydration (IVG). Each case was studied on OPD basis. After 2 hours, 48 hours and 1 week of oral or iv hydration. AFI was reassessed by same sonographer. Pre-delivery AFI and various outcome measures were recorded for both groups. **Result:** There was an increase in AFI by 44.5% in OG from 0 hour till delivery as compared to 30.7% increase in IVG. MSL occurred in 8 (10.7%) women in OG compared to 17 (22.6%) in IVG. FD was found in 4 (5.3%) in OG requiring LSCS compared to 16 (21.3%) in IVG. Total of 59 (78.7%) patients in OG has spontaneous vaginal delivery as compared to 42 (56%) in IVG. Perinatal outcome was better with OG than IVG 67 (89%) had APGAR at 1 min 8 in OG than 58 (77%) in IVG. APGAR score 8 at 1 min was seen in 8 (10.7%) in OG while 17 (22.7%) in IVG. Overall 7 (9.3%) required NICU admission in OG to 12 (16%) in IVG. **Conclusion:** AFI increment persisted longer in OG as compared to IVG. Maternal and perinatal outcome were better with oral hydration therapy than IV hydration.

Keywords: AFI, Hydration, Oligohydramnios, IVG

ORAL PRESENTATION 13: GYNECOLOGY

DOES COPPER INTRA UTERINE DEVICE PROMOTE ENDOMETRIOSIS?

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We aim to highlight the possible role of copper intra-uterine devices (CIUD) in promoting endometriosis through two mechanisms: increased uterine bleeding and the endocrine-disrupting action of high-dose copper. The endocrine-disrupting action of copper at supraphysiological doses could be involved in other gynecological pathologies, such as premature ovarian failure. **Literature review:** this works draws on both foundational studies and a non-systematic literature search (2020–2025), conducted via PubMed, Google Scholar, Google. Keywords : copper, copper in farming, CIUD and endometriosis, copper endocrine disruption, endocrine disruptor, metalloestrogen, cuproptosis, endometriosis and endocrine disruptors, heavy metals in gynecological diseases, heavy metals and ovarian function. Endometriosis can be defined as a systemic estrogen-dependent inflammatory disease characterized by symptomatic or non-symptomatic active ectopic endometrial-similar tissue. It was first described as a benign process in the early 20th century. Concerns about the link endometriosis endocrine disruptor chemicals seem to be asked in 1995 and are now the focus of numerous studies. Cuproptosis is a copper-induced cell death mechanism. Its involvement in endometriosis and several gynecological diseases is now investigated, raising further concerns about CIUD. Two mechanisms could be involved in iatrogenic endometriosis due to CIUD: increased menstrual flow, copper toxicity due to massive, intimate contact with endometrium. CIUD insertion in nulliparous women may represent an additional risk factor for the onset of endometriosis. CIUD was launched in the 1970s, in unwanted pregnancies context, women's desire for emancipation and devastating consequences of clandestine abortions. CIUD has clearly saved the lives of many women, sparing them the mutilation and sometimes death that result from unsafe abortions. But remember that at first, CIUD was placed after pregnancies, thus potential impact of copper on fertility went unnoticed. Endometriosis was then an almost unknown disease, masked by sex taboos. Infertility, painful periods were women's burden. New findings on copper toxicity in endometriosis and other gynecological diseases

could call into question the benefit-risk balance of CIUD. Women's reproductive health deserves better than a 1970s contraceptive cure, many new and safe therapeutic alternatives are world-wide available.

THE FUNDAMENTAL ROLE OF HYSTEROSCOPY IN INFERTILITY

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Problem Statement: Infertility affects approximately one in six couples worldwide, and uterine cavity abnormalities such as endometrial polyps, intrauterine adhesions (Asherman's syndrome), submucous fibroids, or congenital anomalies are estimated in up to 10% of subfertile women, rising to nearly 50% in those with recurrent implantation failure. Conventional imaging (TVS, HSG, SIS, 3-D ultrasound) often misses subtle pathology. This diagnostic gap may contribute to unexplained infertility or failed IVF cycles, and thus there is debate about whether routine hysteroscopy prior to IVF improves outcomes. **Methods:** We conducted a comprehensive literature review, drawing from systematic reviews, meta-analyses, randomized trials and cohort studies up to mid-2024. Key sources include meta-analyses of 14 RCTs showing impact of hysteroscopy before IVF/ICSI on live birth and clinical pregnancy rates, and large observational cohorts of pre-IVF hysteroscopy between 2019–2023. **Results:** Meta-analytic data consistently indicate that outpatient or operative hysteroscopy performed prior to IVF/ICSI is associated with a statistically significant increase in clinical pregnancy rate (e.g. RR ~1.22–1.49; OR up to 1.62 in RCT-only sensitivity analysis). Live birth rates also show improvement in several analyses (RR ~1.22; OR ~1.24 though some meta-analyses found non-significant trend). Miscarriage rates do not significantly increase (RR ~1.06; non-significant) and complications are rare (e.g. one case of endometritis in over hundreds of patients across trials). Retrospective comparisons found that pre-IVF patients especially those with previous failed cycles had significantly more intra-uterine pathologies and operative procedures compared to controls, without increase in anesthesia time, complications or hospitalization length. **Conclusions:** Hysteroscopy is the gold standard for uterine cavity evaluation and allows direct diagnosis and immediate treatment of lesions that impair endometrial receptivity. Evidence supports that adopting hysteroscopy prior to IVF and embryo transfer increases clinical pregnancy and in many analyses live birth rates, particularly when subtle pathologies are missed by imaging. Miscarriage risk is not elevated, and procedure safety and tolerability are well established. Thus, all IVF centers should strongly consider routine pre-IVF hysteroscopy, especially in women with prior implantation failures or suspected uterine abnormalities, as a means to enhance IVF success and optimize infertility outcomes.

LAPAROSCOPIC MANAGEMENT OF INVASIVE RETAINED PRODUCTS OF CONCEPTION: A COHORT STUDY

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Problem statement: This was ambidirectional cohort study. The main objective was to evaluate the effectiveness and safety of laparoscopic resection of invasive retained products of conception (iRPOC) as a fertility sparing management. **Methods:** All eligible patients (with intramural location of iRPOC with minimal lesion diameter 2.5 cm) who had a laparoscopic resection for iRPOC in a single center between January 2012 and March 2025. All patients had hysteroscopy (to verify predominantly intramyometrial presence of the lesion) followed by ultrasound guided laparoscopic removal of iRPOC and reconstruction of the uterine cavity and muscularity. Second-look hysteroscopy was performed from 2 to 5 months post-procedurally. All patients were prospectively followed with focus on symptoms, complications and pregnancies. **Results:** 19 women with the mean age of 35 years (from 22 to 44) were enrolled: 11 with the history of induced or missed abortion including D&C, 7 after term, and 1 after preterm delivery. Fifteen patients (79%) were symptomatic (bleeding and/or pelvic pain) prior to treatment; blood concentrations of hCG were negative in all. We performed successful laparoscopic resection of iRPOC with mean blood loss 272mL, uneventful post-operative course and histological verification of benign necrotic chorionic villi in all cases. Adhesiolysis of minimal or mild intrauterine synechiae was performed by second-look hysteroscopy in 4



women (21%). No re-intervention (for iRPOC) was needed in any of the patients. Four uncomplicated pregnancies with term elective Caesarean deliveries have been recorded so far. **Conclusion:** Laparoscopic management of iRPOC seems to be effective, feasible, and minimally invasive alternative of fertility sparing treatment. To our best knowledge this is the largest such series of patients described in literature. Larger prospective studies are needed to verify the benefits and risks of laparoscopic approach in compare with conservative management. *This academic work was supported by funding of the Ministry of Health of the Czech Republic (NU23-06-00327) and by Charles University in Prague (UNCE/24/MED/018).*

RELEASING THE FROZEN PELVIS IN ADVANCED ENDOMETRIOSIS: STANDARDISED STEPS

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Introduction: Endometriosis is described as the presence of endometrial glands and stroma-like lesions outside of the uterus. Endometriosis is a condition of adolescents and reproductive-aged women marked by the presence of endometrial tissue outside the uterine cavity. Endometriosis affects 10–15% of all women of reproductive age. It has been highlighted that more than 176 million women globally suffer with endometriosis, and The clinical manifestation of endometriosis differs among women. Patients frequently exhibit symptoms including intermenstrual haemorrhage, dysmenorrhea, dyspareunia, dyschezia, and dysuria. Pelvic pain may present before menstruation begins. Often, endometriosis can be asymptomatic, only coming to a clinician's attention during assessment for infertility. Endometriosis is divided into peritoneal endometriosis, ovarian endometriosis cysts (endometriomas), and deep endometriosis. **Aim:** This presentation seeks to inform and motivate laparoscopic surgeons to follow standardized surgical processes, which will lead to complete endometriosis clearance and reduce disease recurrence and additional subsequent surgeries. Initial surgery should be the best procedure. **Material and method:** We established a surgical protocol for the therapy of deep infiltrating endometriosis and created a mnemonic for it. We have consistently adhered to the SUOP-PC protocol at our centre for the past two years. S - SIGMOID ADHESIOlysis U- UTEROLYSIS O - OVARIAN DISENGAGEMENT FROM THE POSTERIOR UTERUS WALL. P - PARA-RECTAL SPACE DISSECTION. P - PERITONECTOMY C - CYST REMOVAL. **Result:** Inadequate treatment from experienced laparoscopic surgeons who are inexperienced in endometriosis excision resulted in recurrence of the disease. If a surgeon is not doing endometriosis operations very regularly, there is a high probability that some steps are missing; hence, after designing these surgical protocols of {SOUP-PC}, there is increased potential of surgical completion and subsequent recurrence. The route taken is from familiar to foreign anatomy and from lateral to medial side, as endometriosis is a medicalizing condition. So, in conclusion, if endoscopy follows these methods, it will assist in accomplishing the endometriosis clearing.

BIOCHEMICAL PROFILING OF ENDOMETRIOSIS TYPES USING FTIR SPECTROSCOPY AND ADVANCED CLASSIFICATION MODELS

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Problem statement: Endometriosis is a heterogeneous gynecological condition characterized by ectopic endometrial tissue, classified into ovarian, intestinal, and peritoneal types. Despite interest in its molecular basis, biochemical differences among lesion types remain insufficiently understood. **Methods:** Fourier-transform infrared (FTIR) spectroscopy combined with machine learning techniques (Deep Learning, Support Vector Machine, XGBoost) and Boruta feature selection were employed

to analyze biochemical differences between endometriotic lesion types. **Results:** Spectral analysis revealed progressive increases in lipid-associated vibrational signals, particularly the ester carbonyl (C=O) band at 1749 cm⁻¹, from ovarian to intestinal to peritoneal lesions. Boruta identified key spectral features, including C=O, C-O stretching, and N-H bending vibrations. Among classifiers, XGBoost achieved the highest accuracy (up to 0.98) with balanced sensitivity and specificity. Machine learning models improved performance with Boruta-selected features. Decision tree analysis highlighted the 1752 cm⁻¹ ester C=O band as a critical discriminator. **Conclusion:** FTIR spectroscopy combined with machine learning effectively distinguishes biochemical differences among endometriosis types. Lipid content emerges as a potential molecular biomarker for classification and disease progression. **Disclosure of Interest:** The authors declare no conflicts of interest.

POOLED ANALYSIS FROM MULTIPLE CLINICAL TRIALS TO ASSESS THE INCIDENCE OF MALIGNANCIES WITH ELINZANETANT TREATMENT IN POSTMENOPAUSAL WOMEN

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Problem statement: Pivotal trials of elinzanetant, a dual neurokinin-targeted therapy (NK-1 and NK-3 receptor antagonist), have demonstrated efficacy in reducing frequency/severity of moderate-to-severe vasomotor symptoms, and improving sleep and quality of life in postmenopausal women. Risk of neoplasm with NK-3 receptor antagonist has been previously described¹; NK-1 receptor antagonists have potential anti-tumor activity through inhibition of tumor cell growth/migration.² This post-hoc safety analysis evaluates incidence of malignancies with elinzanetant using pooled data from 4 trials.

Methods: Pooled safety data from elinzanetant 120 mg and placebo arms of Phase III OASIS-1–3 trials and Phase IIb SWITCH-1 trial were analyzed. The 52-week analysis included 1113 elinzanetant-treated and 754 placebo-treated participants, including participants who switched from placebo to elinzanetant after 12 weeks in OASIS-1 and -2. Treatment-emergent adverse events (AEs) and post-treatment AEs were identified using Standardized MedDRA Query: Malignant tumors and Breast malignant tumors. Considering different duration of the studies, study size and exposure-adjusted incidence rate (EAIR) was calculated per 100 person-years for comparison between groups and to background incidence rate (IR) reported in women aged 50–64 years from Surveillance, Epidemiology, and End Results (SEER). **Results:** Overall, 6 and 2 malignancies were reported in 5 (0.4%) and 2 (0.3%) participants in elinzanetant and placebo groups, respectively. Four out of 6 malignancies in elinzanetant group occurred in the 1-year OASIS-3 trial; the EAIRs for malignant tumors in elinzanetant (0.88 [95% confidence interval {CI} 0.39–2.01]) and placebo (0.39 [95% CI 0.08–1.82]) groups had overlapping CIs, and were in line with population-level IR for all cancer (0.81 [95% CI 0.81–0.82]). No endometrial malignancy was reported in either group. All 3 breast malignancies in 2 participants occurred in the elinzanetant group of OASIS-3 trial; EAIR (0.38 [95% CI: 0.12–1.28]) was in line with population-level IR (0.29 [95% CI 0.28–0.29]) for breast cancer. No breast malignancy was reported in placebo group (Table). **Conclusion:** In the clinical trial setting, the IR of malignancies observed with up to 1 year of elinzanetant use in postmenopausal women was similar to population-level IR from SEER.

¹Douxfils. Lancet. 2023; ²Muñoz. Peptides. 2013.

Funded by Bayer.



Table. TEAEs and PTAEs by preferred term and SMO Breast malignant tumors

TEAEs and PTAEs by PT or SMO	Enzalutamide 120 mg (Week 1-52) N=1113 (100%)		Placebo (Week 1-52) N=754 (100%)	
	n (%)	EAR* (95% CI) [†]	n (%)	EAR* (95% CI) [†]
Participants with a TEAE	5 (0.4%)	0.88 (0.39-2.01)	2 (0.3%)	0.39 (0.08-1.82)
PT Adenocarcinoma of colon	1 (0.1%)	0.12 (0.02-0.86)	0	
PT Basal cell carcinoma	0		2 (0.3%)	0.39 (0.08-1.82)
PT Breast's disease	1 (0.1%)	0.18 (0.03-0.96)	0	
PT Squamous cell carcinoma of skin	1 (0.1%)	0.19 (0.04-0.98)	1 (0.1%)	0.19 (0.03-1.49)
SMO Breast malignant tumors [‡]	2 (0.2%)	0.38 (0.12-1.28)	0	

CI, confidence interval; EAR, exposure-adjusted incidence rate; N, number of participants who received the respective treatment at any time; n, number of participants with ≥1 TEAE; PT, preferred term; PTAE, post-treatment adverse event; SMO, Standardized MedDRA Query; TEAE, treatment-emergent adverse event.
[†]Study size and EARs according to Cohen et al (2016). Results are provided per 100 person-years, where 1 person-year is defined as 365.25 days. *The CI for study size and EARs is calculated by dividing Wilson CI according to Teun et al (2015). Reported in the same participant in the placebo group. †Data removed using the SMO Breast malignant tumors. The following PTs were reported: Breast cancer, invasive breast carcinoma and invasive ductal breast carcinoma. One participant reported 2 events.

CHYLOUS ASCITES IN GYNECOLOGIC SURGERY: AN UNUSUAL PRESENTATION OF FOLLICULAR LYMPHOMA

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Introduction: Chylous ascites (CA) is an uncommon subtype of ascites characterized by the accumulation of triglyceride-rich lymphatic fluid within the peritoneal cavity. Its etiologies are diverse and include traumatic, congenital, infectious, neoplastic, postoperative, cirrhotic, and cardiogenic causes. The diagnosis is established by the identification of milky-appearing ascitic fluid with triglyceride concentrations exceeding 200 mg/dL. **Case Report:** We present the case of a 61-year-old woman with a medical history of adenomyosis and cervical conization due to persistent HPV infection, one previous cesarean delivery, and menopause at the age of 52 without hormone replacement therapy. She was scheduled for laparoscopic hysterectomy with bilateral salpingo-oophorectomy due to a postmenopausal episode of abnormal uterine bleeding and an endometrial biopsy that revealed disorganized proliferative endometrium. At the beginning of the procedure, abundant milky-appearing intra-abdominal exudate was observed, along with multiple adhesions. Given these intraoperative findings, peritoneal lavage was performed and the surgery was discontinued. The ascitic fluid was sent for microbiological analysis, which returned negative results, and triglyceride levels were measured and found to be elevated. Subsequently, a contrast-enhanced thoraco-abdomino-pelvic CT scan revealed a retroperitoneal lymphadenopathic conglomerate, and a bone marrow biopsy was performed. Both histological analyses were consistent with follicular non-Hodgkin lymphoma (NHL). Following the diagnosis, the patient underwent laparoscopic hysterectomy with bilateral salpingo-oophorectomy, and histopathological examination of the surgical specimen confirmed uterine and adnexal involvement by follicular NHL. Based on these findings, a diagnosis of grade 2, stage IV follicular non-Hodgkin lymphoma was established, and the patient was referred for chemotherapy, which is currently ongoing. **Conclusion:** This case highlights chylous ascites as a rare initial manifestation of follicular non-Hodgkin lymphoma. The intraoperative finding of milky peritoneal fluid was the key to the diagnostic workup, ultimately leading to the identification of advanced-stage disease. Its early recognition is crucial for prompt diagnosis and management.

Note: We have videos and photographs that we would like to share during the oral presentation.

REAL-WORLD TREATMENT FOR HEAVY MENSTRUAL BLEEDING IN THE UNITED STATES AND UNITED KINGDOM: A EUROPEAN HEALTH DATA AND EVIDENCE NETWORK (EHDEN) STUDY

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Problem Statement: Comprehensive characterizations of treatment patterns in women with heavy menstrual bleeding (HMB) in clinical practice across geographical regions are lacking. **Methods:** EHDEN-

HMB is an observational study using real-world data from different countries to evaluate diagnosis, characteristics, and treatment for HMB. We included women aged 11–55 years, diagnosed with HMB between 2000–2023 with ≥1-year observation prior to the index date (first HMB diagnosis). Data were from Merative MarketScan® and Optum Clinformatics® databases for US women covering primary and secondary care, and Clinical Practice Research Datalink (CPRD) Aurum and GOLD databases for UK women covering only primary care. **Results:** 2,000,878 and 748,066 US women with HMB were included from MarketScan and Clinformatics databases, respectively, as were 471,578 and 249,969 UK women from CPRD Aurum and GOLD databases. Median age was 38 and 39 years in corresponding US databases, and 40 years in the UK. The most common concurrent condition was pain. Overall incidence rates of HMB per 1,000 patient-years were 23.9–25.9 in the US and 8.7–10.0 in the UK. Within 2-years following diagnosis, the most common initial treatments were nonsteroidal anti-inflammatory drugs (NSAIDs), combined oral contraceptives (COC), endometrial ablation, and hysterectomy in the US (Table). In the UK, the most common initial treatments were tranexamic acid, NSAIDs, progestin, and COC. We observed higher proportions of hysterectomy (4.0%–5.8%) in the US than in the UK (0.6%–0.9%). The proportion of hysterectomy in US women increased with age (4.9%–7.1% in women 30–44 years; 6.8%–9.1% in women 45–55 years). **Conclusion:** In the US and UK, NSAIDs and COCs were among the most common treatments for HMB, whereas tranexamic acid was more commonly used in the UK and surgical interventions were more commonly used in the US. Hysterectomy was approximately 4.4 to 9.7 times higher in the US than in the UK. These real-world findings help inform how HMB is managed in different regions.

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Table. Most common initial treatments for HMB at index date

Country/Database	Patients With HMB	Treatment	Treated Patients (%)
US/MarketScan	2,000,878	NSAIDs	287,820 (15)
		COC	261,370 (13)
		Endometrial ablation	180,090 (9)
		Hysterectomy	115,825 (6)
US/Optum Clinformatics	748,066	NSAIDs	115,813 (15)
		COC	99,782 (13)
		Endometrial ablation	49,445 (7)
		Hysterectomy	30,251 (4)
UK/CPRD Aurum	471,578	Tranexamic acid	40,806 (9)
		NSAIDs	36,085 (8)
		Progestin	29,057 (6)
		COC	21,229 (5)
UK/CPRD GOLD	249,969	Tranexamic acid	23,838 (10)
		NSAIDs	20,259 (8)
		Progestin	15,845 (6)
		COC	10,176 (4)

COC, combined oral contraceptives; CPRD, Clinical Practice Research Datalink; HMB, heavy menstrual bleeding; NSAIDs, nonsteroidal anti-inflammatory drugs; UK, United Kingdom; US, United States.

THE EFFECT OF WEB-BASED EDUCATION GIVEN TO MIDWIVES AND NURSES ON THEIR KNOWLEDGE LEVELS REGARDING ERAS PROTOCOLS APPLIED IN GYNECOLOGICAL AND OBSTETRIC SURGERY

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Problem statement: The aim of this study was to determine the effect of web-based training given to midwives and nurses on their level of knowledge about ERAS protocols applied in gynecological and obstetric surgery and the attitudes of midwives/nurses towards evidence-based practices. **Methods:** This research is an experimental study with a pre-test-post-test control group. It was conducted with 78 midwives and nurses (45 experimental group, 33 control group) working in gynecology and obstetrics units (clinic, operating room, delivery room) at Erzurum City Hospital and Atatürk University Research Hospital between September 2023 and August 2024. In the study, a total of 6 web-based trainings were given to the midwives and nurses in the experimental group twice a week for 3 weeks. Introductory Characteristics Form, ERAS Knowledge Test, Attitude Towards Evidence-Based Nursing Scale were used in data collection. **Results:** It was determined that the



knowledge levels of the participants in the experimental and control groups included in the study regarding ERAS protocols were similarly low, and their attitudes towards evidence-based nursing were moderately positive. The difference between the pre-test and post-test measurements of the ERAS Knowledge Test mean scores of the participants in the experimental and control groups was found to be statistically significant ($p < 0.05$). While the difference between the pre-test and post-test measurements of the Attitude Scale towards Evidence-Based Nursing mean scores of the participants in the experimental group was found to be statistically significant ($p < 0.05$), the difference between the mean scores of the participants in the control group was found to be statistically significant ($p < 0.05$). **Conclusion:** It was found that web-based training given to midwives and nurses positively increased their knowledge level regarding ERAS protocols applied in gynecological and obstetric surgery and their attitudes towards evidence-based practices.

EMERGENCY CERCLAGE FOR BULGING MEMBRANE IN THE MIDTRIMESTER: TO STITCH OR NOT TO STITCH?

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Problem statement: Management of bulging fetal membranes in the midtrimester represents a major clinical dilemma. Pregnancies are often highly valued, with histories of infertility or recurrent miscarriage. Treatment options include pregnancy termination, expectant management, or emergency cerclage. The role of emergency cerclage remains controversial due to limited evidence and absence of randomized controlled trials. **Methods:** We retrospectively reviewed 10 cases of emergency cerclage performed for bulging membranes between 1997–2015 at Yoseftal Hospital by a single surgeon. Patient evaluation included medical history, ultrasound, vaginal and urine cultures, and exclusion of intra-amniotic infection by amniocentesis when feasible. Management included antibiotics, Trendelenburg positioning, and at least 48 hours of observation before intervention. Informed consent and counseling regarding risks and alternatives were documented. **Results:** All 10 women underwent successful cerclage placement. The mean gestational age at the time of procedure was 20 weeks (range 17–23). Prolongation of pregnancy ranged from 3 to 15 weeks, allowing for viable deliveries in 6 cases. Four pregnancies ended in miscarriage within 2 weeks of the procedure. No cases of maternal sepsis were recorded. Outcomes suggest that selected patients may benefit from cerclage in terms of pregnancy continuation and neonatal survival. **Conclusion:** Emergency cerclage for bulging membranes in the midtrimester remains a debated intervention. Our series demonstrates that, with careful patient selection, informed consent, and exclusion of infection, the procedure may prolong pregnancy and improve neonatal outcomes. Further prospective studies are warranted to establish clear guidelines for clinical practice.

EARLY PREGNANCY LOSS: CLINICAL, PSYCHOLOGICAL CHARACTERISTICS AND MANAGEMENT IN A TERTIARY CENTER

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Problem statement: Early pregnancy loss (EPL) represents one of the most frequent complication of pregnancy, with an estimated incidence of 12-24% worldwide. Despite its prevalence, patient characteristics and optimal management strategies remain incompletely defined. EPL is associated with significant emotional, social, and economic burdens, often leading to recurrent investigations and long-term reproductive anxiety. The etiology is multifactorial, encompassing chromosomal abnormalities, maternal age extremes, endocrine and immunological disorders, and pre-existing gynecological conditions. **Methods:** We performed a retrospective observational study of 174 women admitted with EPL at the Tertiary Perinatal Center, Republic of Moldova, between January 2022 and December 2024. Inclusion criteria were maternal age ≥ 18 years and gestational age ≤ 12 weeks, confirmed by ultrasound. Data were extracted from medical records and analyzed with descriptive statistics, focusing on demographic profile, obstetric and gynecological history, clinical presentation, laboratory parameters, and management

approaches. On the basis of the Patient Health Questionnaire-9 and the Generalized Anxiety Disorder-7, the mental health were assessed. **Results:** The cohort included women aged ≤ 25 years (26.1%), 26-35 years (48.3%), and ≥ 36 years (25.6%). Multiparity was frequent (72.2%). A history of spontaneous abortion was noted in 14.7% of cases, with 11.9% experiencing recurrent losses. Gynecological pathologies were present in 10.4%, while somatic conditions such as anemia (24.9%) and diabetes (5.6%) were also identified. Vaginal bleeding occurred in 63.7% of pregnancies. Management strategies included vacuum aspiration (60.5%), curettage (33.9%), and medical management with misoprostol or mifepristone in selected cases. **Conclusion:** EPL is a multifactorial condition strongly associated with maternal age, previous reproductive history, and comorbidities. It is perceived as a major personal trauma that affects emotional balance. Diagnosis relies on ultrasonography combined with clinical assessment, while management requires an individualized approach balancing surgical and medical options.

SYNTHETIC TRANSOBTURADOR SUBURETHRAL SLINGS: RESULTS AND RISK FACTORS FOR FAILURE

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Problem statement: Access the results for transobturador suburethral slings (TOSS) at our institution and the risk factors associated with their failure. **Methods:** Retrospective analysis of cases of isolated stress urinary incontinence (SUI) in women submitted to surgery (N 204) and comparative study between "cure" and "failure" group, performed at our Hospital between 2012-2024. Exclusion criteria included: mixed urinary incontinence, previous or concomitant pelvic floor surgery, previous SUI surgery and loss to follow-up before 1 month. Success was defined subjectively as 'cure,' 'improvement,' and 'failure' and objectively as a negative postoperative stress test. Risk factors for failure assessed were clinical (age, BMI, previous vaginal deliveries, menopause status and history of previous hysterectomy) and intra-operative data (surgery duration, surgeon experience). T-test and Fisher's exact test were used for statistical comparison. **Results:** Cases were analysed for 1 year, with follow-up at 1, 6 and 12 months after surgery. Loss for follow up was 25 % at 6 months and 9.1% at 12 months. Objective cure rates (1, 6, 12 months) were 90%, 90.8% and 92.8%, respectively and subjective cure rates were 97%, 94.8% and 94.3%, respectively. No significant deterioration in outcomes, over time, was observed in both parameters. At 6 months of follow-up, there were no significant differences between groups (Cure and Failure) in clinical demographic data: mean age (52.9 vs. 49.5y), obesity (42 vs. 33%), previous vaginal deliveries ($\geq 3 - 23$ vs. 0%), menopause status (47 vs. 25%) or previous hysterectomy (14 vs. 13%). Regarding the surgical procedure, no statistical differences between groups were found (surgeon experience or surgery duration - 26 vs. 26.5min). At 1 year of follow-up the results were similar. De novo urge incontinence was not different between groups at 6 or 12 months (10 vs. 25%; 13 vs. 37.5%, respectively). **Conclusion:** Cure rates for TOSS were similar to those reported in the literature and none of the factors analyzed were associated with surgical failure. One of the biases of this study was the loss of follow-up of approximately one-third of patients. Further studies with larger samples and longer follow-up periods, ideally prospective, are needed.

MIDWIVES' VIEWS ON GENITAL AESTHETICS: A QUALITATIVE STUDY

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Summary: Purpose: The aim of this study is to determine midwives' views on genital aesthetics. **Method:** The study is a phenomenological research design with a qualitative research design. Seventeen midwives working at Hospital X were interviewed. A Descriptive Information Form and a Semi-Structured Interview Form were used in the data collection process. The study was reported in accordance with the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines. Data were conducted using Colaizzi's phenomenological analysis method. Findings: Data analysis findings were categorized under three categories: individual views on genital aesthetics, views on body image perception, and effects on women's health. A content analysis based on



participants' statements generated eight themes: physical, psychological, social, cultural, women's autonomy, body image, health/operational factors, and individual perception. **Conclusion:** The research findings revealed that midwives support genital aesthetics practices, that these practices are considered within the scope of women's bodily rights, and that they have positive effects on body image perception. Additionally, it has been concluded that genital aesthetic procedures positively impact women's physical and psychological lives. **Keywords:** Midwifery, Genital Aesthetics, Women's Health

ORAL PRESENTATION 14: FETOMATERNAL MEDICINE: HIGH RISK PREGNANCY

HIV POSITIVE GESTATIONS AND DELIVERY MODE: A TERTIARY CENTER RETROSPECTIVE COHORT

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Problem statement: Current international recommendations regarding mode of delivery and intrapartum care in Human Immunodeficiency Virus (HIV) positive pregnant women differ between international guidelines. At Hospital Santa Maria (HSM), a tertiary hospital in Portugal, vaginal delivery is advocated when the viral load (VL) is 50 copies/mL. With this paper, we aim to characterize the population of HIV-infected pregnant women monitored at this hospital and to analyze the mode of delivery and vertical transmission rate. **Methods:** A retrospective cohort study was conducted and included all HIV-infected pregnant women who had pre-natal appointments and their delivery at the Department of Obstetrics in HSM between January 2020 and September 2025. **Results:** A total of 66 women and 71 pregnancies were included, with a mean maternal age of 32.9 ± 6 years. HIV infection was first diagnosed during pregnancy in 7 cases (9.9%). In 53 (74.6%) the transmission was sexual and only in 5 (7%) was it vertical. Viral load in the third trimester was. Vaginal delivery occurred in 38 cases (53.5%), including 7 (18.4%) with a positive VL but 1000 copies/mL and/or poor therapeutic adherence. There have been zero reports of HIV vertical transmission in this group. **Conclusion:** The majority of women in this population achieved good infection control and delivered vaginally. The vertical transmission rate was zero, even in cases with VL between 50–1000 copies/mL and vaginal delivery.

PROSPECTIVE STUDY TO EVALUATE PREDICTORS OF ADVERSE MATERNAL OUTCOME IN HOSPITALIZED PREGNANT/ POST-PARTUM WOMEN WITH ACUTE LIVER INJURY

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Problem statement: Liver diseases affect 3% of pregnancies and can cause significant morbidity and mortality to both mother and child. Timely multi-disciplinary care is prudent for optimal management which is available to all in low-resource settings. Early prediction of adverse outcome can lead to better resource allocation. It is prudent to identify predictors of adverse outcome in women with acute liver injury, irrespective of etiology. **Methods:** Prospective observational study in which 62 women hospitalized at a tertiary care hospital in North India with ALI (etiology being pregnancy specific or non-specific) during pregnancy/ up-to 42 days post-partum were recruited over 1 year. ALI was defined as elevation of AST/ ALT 5 times normal with INR 1.5, of less than 4 weeks duration and no prior history of liver disease. The diagnostic evaluation and management of the patient were done as per the treating team and no alteration was made for the purpose of the study. All women were followed till death/ discharge. **Results:** The study included 33 antenatal and 29 postnatal patients. The most common symptom at presentation was fever (62.9%) followed by abdominal pain (53.2%). Sepsis (27, 43.5%) was the most common diagnosis followed by dengue (11, 17.7%) and AFLP (9, 14.5%). All parameters were compared between survivors and non-survivors. The baseline parameters including age, gravidity, parity and socioeconomic status did not differ between the two groups. Presence of icterus, metabolic acidosis ($p = 0.0377$) and hypoglycaemia ($p = 0.001$) assessed at point of recruitment were significantly important in predicting mortality. The etiology of ALI did not determine mortality in liver injury patients. **Conclusion:** A new model to predict mortality in all cause ALI in

pregnancy has been suggested as follows: $0.788 + 2.509 * HE + 0.170 * \text{Total bilirubin} - 1.287 * \text{Total protein} + 0.014 * \text{Serum ammonia}$, (cut off value of -1.043). Index model had a sensitivity of 95.7% and specificity of 81.1% in predicting maternal mortality. Abbreviations: ALI: acute liver injury, AST: aspartate aminotransferase, ALT: alanine aminotransferase, INR: international normalized ratio, AFLP: acute fatty liver of pregnancy, HE: hepatic encephalopathy.

MORPHOLOGY AND FUNCTION OF THE FETAL HEART AND GESTATIONAL DIABETES MELLITUS

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Problem statement: In gestational diabetes mellitus (GDM) a poor maternal glycoregulation (A1c 6.1%) is one of the most important etiological factors of the development of congenital anomalies of the fetal heart. The first sonographic markers of cardiac hypertrophy are an increased intraventricular septum thickness (IVS) 5mm and a cardiothoracic ratio (CTR) 0.6. Functional changes include elevated basal fetal heart rate, impaired ventricular filling and obstructed outflow tract, leading to systolic and diastolic dysfunction (IVS) 5y left or right atrial MV and TV d) 0.6. A: left or right atrial systola (E/A ratio). **Methods:** A total of 126 patients were enrolled in a retrospective study during their first visit to the Clinic for Gyn/Obstet University Clinical Center in Belgrade during 2020-2024. GDM was diagnosed in the 26th week of gestation. The following groups were: patients with GDM treated only with dietary changes (A group, $n = 63$); patients without GDM- control group (B group, $n = 63$). The first fetal echocardiogram was obtained immediately after admission to the clinic at 37.1 ± 1.69 GW. Statistical analysis: Paired-Samples T test, ANOVA, Pearson chi-square test. **Results:** IVS septum thickness 5mm measured in 11 (17.5%) (A group) as well in 3 (4.8%) fetuses (B group) ($p = 0.247$). Suspicious cardiomyopathy or CTR 0.6 was diagnosed in 21 (33.3%) (A group) in contrast to 2 (3.2%) fetuses (B group) ($p = 0.001$). The average MV (E/A) diastolic function in the A group was 0.85 ± 0.06 and 0.85 ± 0.03 in the B group ($p = 0.012$). The average TV (E/A) diastolic function in group A was 0.76 ± 0.05 , and in group B diastolic function was 0.76 ± 0.03 ($p = 0.018$). **Conclusion:** Fetal echocardiography is mandatory for early diagnosis of signs of cardiomyopathy (CTR 0.6; hypertrophy IVS thickness) as well as diastolic dysfunction of the fetal heart in pregnancies that are complicated by GDM

SYSTEMATIC SCOPING REVIEW OF OBJECTIVE POSTPARTUM UTERINE ACTIVITY MONITORING

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Problem statement: postpartum hemorrhage (PPH) is the leading course of maternal morbidity and mortality worldwide. Research on PPH has predominantly focused on elucidating the underlying cause of uterine atony and retained placental tissue, alongside efforts to determine the most effective therapeutic interventions. However, the normal and abnormal physiology of postpartum uterine activity remains poorly understood. A deeper understanding of the (patho)physiology of postpartum uterine activity is essential for optimizing obstetric care. This scoping review outlines the features of various postpartum uterine activity monitoring methods, provides insights in the (patho)physiology of postpartum uterine activity and highlights underexplored aspects of postpartum monitoring. **Methods:** A structured literature search was performed in Pubmed, Embase and Cochrane without the use of filters. Two independent researchers systematically screened and selected the articles. Inclusion criteria were patients ≥ 18 years old who underwent postpartum monitoring using external tocodynamography (TOCO), intra-uterine pressure catheter (IUPC) and/or electrohysterography (EHG).



Exclusion criteria included studies involving non-pregnant patients, non-labor contexts, non-human subjects, gray literature, review articles, technical papers, and conference abstracts. Study quality was assessed using the NewCastle-Ottawa Quality Assessment Scale for cohort studies and the revised Cochrane risk-of-bias for Randomized Controlled Trials. A structured methodology was applied to collect and systematically organize the data. **Results:** Out of 5826 articles screened, 29 were selected. Due to a high risk of bias in 6 articles, 23 articles were ultimately analyzed (TOCO n=1, IUPC n=16 and EHG n=6). Normal postpartum uterine contraction frequency ranges between 2.4 and 2.8 contractions per ten minutes. When oxytocin is administered, the frequency increases to between 3.7 and 4.6 contractions per ten minutes. There is need for a standardized and objective method for postpartum uterine activity and units. **Conclusion:** The normal and abnormal physiology of uterine activity postpartum remains largely unknown. EHG shows promise as a method for continuous postpartum uterine activity monitoring, potentially enhancing our understanding of normal uterine activity and aiding in the early recognition of PPH. **Disclosure of interest:** Prof. dr. SG. Oei is the initiator of the development of the Nemo Fetal Monitoring System®, one of the electrophysiological monitoring systems described in this scoping review.

THE EFFECT OF ORAL PROBIOTICS ON GLYCEMIC CONTROL OF WOMEN WITH GESTATIONAL DIABETES MELLITUS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Problem statement: The study aims to determine the efficacy of Lactobacillus acidophilus, Lactobacillus casei, and Bifidobacterium bifidum supplementation on the glycemic control of women with gestational diabetes mellitus, particularly their effect on fasting plasma glucose, serum insulin levels, and HOMA-IR. **Methods:** A search of published literature was conducted on electronic databases such as PubMed, MEDLINE, Google Scholar, and Cochrane through the years 2014-2023. Selected studies were randomized controlled trials comparing probiotics Lactobacillus acidophilus, Lactobacillus casei, and/or Bifidobacterium bifidum versus no treatment or placebo and their effectiveness in the glycemic control of women with GDM. Meta-analysis was done using R (ver 4.2.2) and its packages: metfor, meta, and weightr. The metacont function was used. Random-effects model was used to compute the pooled estimate. I² and T² were used as measures of heterogeneity. Standard mean differences (SMD) were reported and the 95% CI of the differences between the groups was computed using the standard normal distribution. **Results:** Meta-analysis of three randomized controlled trials involving 168 participants showed moderate effect sizes on fasting plasma glucose (95% CI: 0.45, 0.94, P = 0.42), and large effect sizes on serum insulin (95% CI: 0.44, 1.56, P = 0.03). Meta-analysis of trials involving 165 participants showed large effect sizes on HOMA-IR (95% CI: 0.57, 1.48, P = 0.14). **Conclusion:** Supplementation with Lactobacillus acidophilus, Lactobacillus casei, and Bifidobacterium bifidum enhances glycemic control in women with gestational diabetes mellitus as evidenced by the statistically significant improvements in fasting plasma glucose, serum insulin levels, and HOMA-IR.

CONTINGENT FIRST-TRIMESTER PREECLAMPSIA SCREENING WITH SELECTIVE USE OF ANGIOGENIC BIOMARKERS: A REAL-WORLD MULTICENTER STUDY (CRISP)

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Problem statement: Universal first-trimester preeclampsia (PE) screening systems including maternal risk factors, arterial pressure, angiogenic markers and uterine artery doppler have been proposed, achieving high detection rates of early-onset PE. This has allowed the implementation of preventative strategies with low-dose aspirin, but such models imply higher costs. Theoretical contingent strategies with selective use of biophysical or biomarkers markers have been proposed to match the effectiveness of universal screening. However, real-world data are lacking and this remains controversial. This study aims to evaluate the effectiveness of a contingent, two-step first-trimester PE screening strategy incorporating Placental Growth Factor (PIGF) selectively in women at intermediate-risk after multivariate screening. **Methods:** We conducted a prospective multicenter study including 7138 singleton pregnancies. First-step risk was assessed using maternal history, arterial pressure, Pregnancy Associated Plasma Protein-A (PAPP-A), and uterine artery Doppler. Women were stratified into high ($\geq 1/50$), intermediate (1/51–1/500), or low ($\leq 1/501$) risk. PIGF was measured only in the intermediate-risk group, with reclassification using a final cut-off of $\geq 1/250$ to define high risk. Low-dose aspirin was recommended for all high-risk women. The model's ability to accurately identify high-risk women and its impact on pregnancy outcomes were assessed. **Results:** After first-step screening, 6.3% women were classified at high-risk of early-onset PE (34 weeks), 12.4% had an intermediate-risk and 81.2% had a low-risk. A total of 11.5% of women were classified as high risk after two-step screening. The overall incidence of PE was 3.7%, including 0.3% early-onset PE (34 weeks), 0.9% preterm PE and 2.8% term PE. Women classified as high-risk had significantly higher rates of early-onset PE (1.9% vs 0.1%, p0.001), preterm PE (3.9% vs 0.4%, p0.001), small-for-gestational-age infants, preterm birth and stillbirth, despite aspirin prophylaxis. **Conclusion:** Contingent PE screening determining PIGF in only 12.4% of the population effectively identifies high-risk pregnancies, with reduced cost. These findings provide real-world evidence regarding the clinical utility and feasibility of PE contingent models. Our results also suggest that high-risk pregnancies require tailored monitoring, as adverse outcomes persist in this group. Further research is needed to better characterize which women within the high-risk category remain at greatest risk of developing obstetric complications.

CLINICAL AND BIOCHEMICAL PREDICTORS OF INSULIN THERAPY IN GESTATIONAL DIABETES: THE ROLE OF OGTT-BASED PHENOTYPES

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Background: Gestational diabetes mellitus (GDM) represents one of the most common metabolic disorders of pregnancy. This study aimed to identify clinical and biochemical predictors of antenatal insulin therapy, focusing on the predictive value of oral glucose tolerance test (OGTT)-based phenotypes. **Methods:** This retrospective observational study included women diagnosed with GDM between January 2022 and February 2024 at a tertiary maternity center. Women are divided into two groups according to their treatment (nutritional therapy (NT) or insulin therapy). GDM was classified into three phenotypes based on OGTT results: isolated fasting hyperglycemia (IFH-GDM), isolated post-load hyperglycemia (IPH-GDM), and combined hyperglycemia (CH-GDM). Maternal demographic, obstetric, and biochemical data were analyzed. Logistic regression models identified independent predictors of insulin therapy, and a nomogram was developed for clinical application. **Results:** Among 458 women, 39.3% required insulin therapy. Independent predictors of insulin therapy included pre-pregnancy obesity (OR 2.07, 95% CI 1.21–3.55), spontaneous miscarriage history (OR 1.89, 95% CI 1.21–2.93), pregestational hypothyroidism (OR 2.63, 95% CI 1.08–6.42), GDM diagnosis at 24–28 weeks versus earlier diagnosis (OR 0.45, 95% CI 0.28–0.72), and GDM phenotype. Compared with IFH-GDM, IPH-GDM was associated with a lower risk of insulin therapy (OR 0.51, 95% CI 0.31–0.84), whereas CH-GDM was associated with a higher risk (OR 1.90, 95% CI 1.10–3.31). Insulin-treated women had higher pre-pregnancy BMI, fasting OGTT glucose, and increased rates of macrosomia and LGA neonates. **Conclusions:** OGTT-based phenotypes are independent predictors of insulin therapy and reflect distinct underlying metabolic profiles. Women with fasting



and combined hyperglycemia represent the highest-risk group for insulin therapy. Integrating OGTT-based phenotypes with clinical risk factors (BMI, ethnicity, comorbidities, and timing of diagnosis) may allow earlier identification of women at risk of NT failure and support a more personalized management strategies.

IS ORAL HYDRATION THE KEY TO SAFER BIRTHS IN OLIGOHYDRAMNIOS? INSIGHTS FROM A SYSTEMATIC REVIEW AND META-ANALYSIS

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Problem statement: Maternal oral hydration therapy is a non-invasive approach to improving amniotic fluid index(AFI), but its effectiveness remains uncertain. This systematic review and meta-analysis was therefore undertaken to assess the effectiveness of maternal oral hydration therapy in increasing AFI in pregnancies complicated by oligohydramnios and to evaluate its impact on maternal and neonatal outcomes. **Methods:** A systematic search of Cochrane Library, Embase, PubMed, Scopus, and Web of Science was conducted. Eligible studies included "randomized controlled trials (RCTs)", quasi-experimental studies, and analytical observational studies. All studies published till 22 November 2024 in the above databases were included. No restrictions were placed on geographic location or study setting. Two reviewers independently undertook the screening. Relevant studies were identified, screened, and duplicates removed using NESTED Knowledge. Risk of bias was assessed using NOS, JBI, and ROBINS-I tools. Statistical analyses, including meta-analysis using a random-effects model, were conducted in R Studio and Comprehensive Meta-Analysis (CMA) software. Heterogeneity was assessed using the I² statistic. **Results:** Out of the 12 included studies, four qualified for meta-analysis. Pooled results showed a significant increase in AFI at 2 hours (mean difference: 0.996; 95% confidence interval (CI): 0.781–1.210), 1 day (0.853; 95% CI: 0.532–1.174), 2 days (1.649; 95% CI: 0.943–2.356), and 1 week (2.232; 95% CI: 0.943–3.520). However, high heterogeneity was observed due to variations in fluid type, volume, and frequency. **Conclusion:** It can be concluded that oral hydration therapy significantly increases AFI and is a simple intervention for managing oligohydramnios, especially in resource-limited settings.

THE EFFECT OF BIRTH PREPARATION MEDITATION USING THE THETAHEALING MEDITATION METHOD ON BIRTH FEAR, BELIEFS ABOUT VAGINAL DELIVERY, AND SELF-EFFICACY

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Problem statement: This study was conducted to examine the effect of birth and motherhood preparation meditation using the ThetaHealing meditation method on birth fear, beliefs about vaginal delivery, and self-efficacy in primiparous pregnant women. **Method:** This research is a randomized controlled experimental study. It was conducted with 100 pregnant women who volunteered and met the research criteria at the Pregnancy Follow-up Clinic of Ankara Bilkent City Hospital- Women's Hospital between June 1, 2023, and October 30, 2024. The participants were divided into three groups: Group A (Control, n=32), Group B (Pregnancy School, n=34), and Group C (Experimental, n=34). Data collection tools included the Personal Information Form, Prenatal Self-Evaluation Questionnaire- Birth Fear Subscale, Beliefs About Vaginal Birth Scale, Vaginal Birth Self-Efficacy Scale, Visual Analog Scale, Birth Fear Scale, Wijma Delivery Experience Questionnaire, and Mobile EEG Device Recording Data. **Results:** A statistically significant difference was found between the experimental group and the other groups in terms of normal delivery rates, post-test mean scores of the Wijma Delivery Experience Scale, and Vaginal Birth Self-Efficacy Scale (p<0.005). The normal delivery rate in the experimental group was significantly higher than in the other groups at 73.53% (p=0.00164). The mean Visual Analog Scale score during delivery was highest in the control group at 8.18±0.96, and the difference in mean scores between the groups was statistically significant (p=0.001). **Conclusion:** Birth preparation meditation using the ThetaHealing meditation method was found to be effective in reducing birth fear, increasing vaginal birth self-

efficacy, normal delivery rates, and the perception of a positive birth experience. It is recommended to incorporate birth preparation meditation into pregnancy and childbirth preparation classes.

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ORAL PRESENTATION 15:

ART/IVF/INFERTILITY: INFERTILITY/ENDOCRINOLOGY / IVF CASE REPORT (STUDY)

INFERTILITY/ENDOCRINOLOGY

COMPARISON OF THE EFFICACY OF DIFFERENT OVULATION INDUCTION AGENTS IN OVULATION INDUCTION AND INTRAUTERINE INSEMINATION THERAPY IN POLYCYSTIC OVARY SYNDROME PHENOTYPES

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Problem statement: PCOS causes 70-80% of anovulatory infertility cases. While clomiphene citrate (CC) is the standard treatment and letrozole (LT) has been used since 2001, their effectiveness hasn't been compared across different PCOS phenotypes or hyperandrogenism(HA) status. We designed this study to compare the success of CC and LT in terms of ovulation, clinical pregnancy and ongoing pregnancy rates in PCOS phenotypes and subgroups according to modified Ferriman-Gallwey (mFG) score and HA. **Materials and Methods:** Patients with a diagnosis of PCOS who were admitted to Ankara University Faculty of Medicine, Department of Obstetrics and Gynecology, Infertility Outpatient Clinic between November 2023-April 2024 and underwent ovulation induction with CC or LT were included in the study. Patients treated for other infertility factors were excluded. Patients were compared in terms of response to ovulation induction, clinical pregnancy and ongoing pregnancy rates. **Results:** 207 patients were included in the study, 159 patients with HA (phenotypes A, B and C) and 48 patients without HA (phenotype D). According to multivariate logistic regression analysis, age (OR: 0.843, 95% CI 0.732-0.971, P=0.018) and free androgen index (FAI) (OR: 0.279, 95% CI 0.091-0.860, P=0.026) were significantly associated with the chance of clinical pregnancy. In the phenotype A, B and C subgroup, there was a significant difference between CC and LT for ovulation (P=0.005). In the mFG score8 subgroup, there was a significant difference between CC and LT for ovulation (P=0.005). Furthermore, in the group of patients with FAI³7, a significant difference was found between CC and LT for ovulatory response (P=0.006), clinical pregnancy (P=0.003) and ongoing pregnancy (P=0.007). In patients with total testosterone³48, there was a significant difference between CC and LT for clinical pregnancy (P=0.012) and ongoing pregnancy (P=0.023). **Conclusion:** There is no significant difference between CC and LT in ovulation induction of different PCOS phenotypes. However, LT was found to be a more effective option in terms of ovulation rates in PCOS patients with clinical and/or biochemical HA. In addition, higher clinical and ongoing pregnancy rates are achieved with LT in patients with laboratory HA but not clinical HA.

INFERTILE MALES' PERCEPTIONS OF INFERTILITY: A METAPHOR ANALYSIS

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Problem statement: Infertility affects both partners and can be a major life crisis, disrupting routines and emotional well-being. The difficulties faced by infertile men should not be ignored. **Methods:** The qualitative research was conducted from December 30, 2023, to January 30, 2024, in the IVF unit of a gynecology and pediatrics hospital in Istanbul. The study's sample population was comprised of 30 men diagnosed with infertility who met the criteria for study participation. The data collection process was stopped when data saturation was achieved. The data were collected through the implementation of a face-to-face interview technique, which was employed to elicit responses from men diagnosed with infertility who met the established inclusion criteria. The researchers



developed a metaphor identification form to determine the fathers' perceptions of the concept of infertility. The participants were instructed to complete the statement, "Infertility is like...because..." by filling in the blank. The collected data were then subjected to a 5-stage content analysis technique. **Results:** The mean age of infertile men in the study was 39.46 ± 5.43 years. Among participants, 43.3% had primary education, all lived in nuclear families, and 50% were employed. Additionally, 90% had health insurance, 53% had been diagnosed with infertility within the past year, 70% had undergone one IVF cycle, and 30% had experienced one intrauterine insemination. Regarding their perceptions of infertility, 76.7% generated negative metaphors, 13.3% neutral, and 10% positive. The metaphors produced by men diagnosed with infertility for the concept of "infertility" were grouped under seven conceptual categories. Among these categories, men diagnosed with infertility produced six metaphors under the conceptual category of "Difficulty and Struggle," five metaphors under the category of "Emotional experiences and internal difficulties," and three metaphors under the category of "Social Perception and Isolation." They produced four metaphors under the category of "Privacy and Inadequacy", four metaphors under the category of 'Natural and Physical Processes, 'three metaphors under the category of 'Healing and Treatment,' and five different metaphors under the category of "Uncertainty and Out of Control." **Conclusion:** It was determined that the metaphors developed by males diagnosed with infertility towards infertility were generally negative.

REPRODUCTIVE OUTCOMES AND LONG-TERM HEALTH RISK FACTORS IN WOMEN WITH POOR OVARIAN RESPONSE: A MULTICENTER PROSPECTIVE COHORT STUDY (RUBIC CONSORTIUM)

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Problem statement: About 10% of women respond poorly to ovarian stimulation, classified as poor ovarian responders (POR). Women with POR may have premature ovarian insufficiency (POI), which is associated with increased cardiovascular risk and mortality. This study compares the reproductive potential of POR women with other infertility patients and examines risk factors for long-term health. **Methods:** This prospective cohort study on women with POR used data from the ReproUnion Biobank and Infertility Cohort (RUBIC), a binational cohort of couples undergoing fertility treatment with detailed information on assisted reproductive technology (ART) procedures and outcomes. POR was defined by the Bologna criteria, and the control group consisted of women who did not fulfill these criteria, representing the broader infertility population. Only women who had initiated at least one ART cycle were included. **Result:** In total 1,397 women were enrolled; 97 (7%) met the Bologna criteria for POR, while the remainder served as controls. Women with POR were older at first cycle start compared to controls (37 ± 3 vs. 33 ± 4 years, $P=0.001$). Clinical pregnancy rate per transfer was 19% in the POR group (29/155) versus 36% in controls (900/2510) ($p=0.002$). The complete follow-up data is not available yet, but in a subgroup (87 POR, 571 controls), the cumulative live birth rate (CLBR) per woman with an initiated ART cycle was significantly lower in the POR group (29/97, 32%) compared with controls (392/571, 69%) ($p=0.001$). For long-term health, mean arterial pressure (MAP) was within

the normal range in both groups, POR: 82 ± 8 mmHg and controls: 81 ± 9 mmHg with no significant difference between groups ($p=0.05$). The same applied to waist/hip ratios (POR: 0.78 ± 0.06 ; controls: 0.77 ± 0.07 ; $p=0.05$). Body Mass Index (BMI) was in the upper normal to lower overweight range for both groups with controls having a BMI of 24 ± 4 and POR 25 ± 4 with a slightly significant difference between groups ($p=0.03$). Data adjusted for age, BMI and smoking will be presented at the conference. **Conclusion:** As expected women with POR had lower CLBR than other infertility patients, while long-term health risk factors were largely similar, except for a slightly higher BMI in the POR group.

RELATIONSHIP OF CYBERCHONDRIA WITH DEPRESSION, ANXIETY, STRESS AND QUALITY OF LIFE IN INFERTILE WOMEN

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Problem statement: Cyberchondria is defined as a repetitive and continuous information-seeking behavior related to health that increases individuals' anxiety in the online environment. Infertile women frequently use the internet as a source of information regarding the causes, diagnoses, and treatments of infertility, as well as the side effects of the medications used. In this context, the research was conducted to examine the relationship between cyberchondria and depression, anxiety, stress, and quality of life in infertile women. **Methods:** Descriptive and cross-sectional research was conducted with 110 women undergoing infertility treatment in Izmir/ Turkey, between May and October 2023. Data were collected using a descriptive information form, the Cyberchondria Severity Scale (CSS-12), the Depression-Anxiety-Stress Scale (DASS-21), and the Quality of Life Scale for Individuals Experiencing Fertility Issues (2008). The relationships between scale scores were evaluated using correlation analysis.

Results: It was found that the average age of women was 32.48 ± 6.9 , and that they mostly had a university degree or higher (43.6%) and were employed (50.9%). When examining the relationship between scales in infertile women, it was determined that there was a significant positive relationship between the subscale scores of cyberchondria distress and depression and anxiety, and a significant negative relationship with the emotional, mind-body, and social quality of life subscales. A positive relationship was found between the total score of cyberchondria and the scores of depression and stress, while a negative relationship was identified between the emotional and social quality of life sub-dimensions. **Conclusion:** The study concluded that the level of health information seeking on the internet among infertile women increases depression and stress, and decreases emotional and social quality of life. It would be beneficial for healthcare professionals to guide infertile individuals towards reliable sources of information while providing services.

THE EFFECT OF SURGICAL TREATMENT ON REPRODUCTIVE AND PREGNANCY OUTCOMES IN WOMEN WITH DEEP ENDOMETRIOSIS

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Problem statement: Deep endometriosis (DE) is a leading cause of infertility, but the impact of surgical management on subsequent reproductive outcomes remains controversial. Standardized predictive tools such as the #ENZIAN classification and Endometriosis Fertility Index (EFI) may aid in patient selection and counseling, but real-world data are limited. **Methods:** This retrospective cohort study included 75 women (2020–2022) with DE and primary infertility, treated surgically at a specialized tertiary center in Poland. Patients with major bowel involvement were excluded. Reproductive and pregnancy outcomes were tracked prospectively for up to 24 months post-surgery. Clinical data, #ENZIAN and EFI scores, and prior infertility treatments were analyzed. Statistical significance was defined as $p < 0.05$. **Results:** Natural conception occurred in 41% of patients post-surgery, and the total pregnancy rate reached 45%. The majority (83%) required adjunct infertility treatment. Live birth rate was highest among women with normal or overweight BMI, and declined significantly with age - patients 34 years had a 5-fold lower chance of live birth compared to those **Conclusion:** Surgical treatment of DE, informed by detailed anatomical and fertility assessment, offers meaningful pregnancy and live birth rates



even in women with longstanding infertility. EFl and #ENZIAN classification are valuable prognostic tools, highlighting the importance of individualized, anatomy-based counseling. Age, BMI, and presence of adenomyosis significantly influence reproductive outcomes. Early intervention and tailored management paths are critical to optimizing results for women with DE-related infertility.

Disclosure of Interest: No conflicts of interest.

PREGNANCY OUTCOMES OF ARTIFICIAL AND NATURAL CYCLES IN FET CYCLES ACCORDING TO THE PRETREATMENT AMH STATUS?

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Objective: To compare the pregnancy outcomes of artificial and natural FET cycles change based on AMH values. **Materials:** The outcomes of patients between 2014 and 2024 with frozen embryo transfer cycles who applied to the Ankara University ART clinic were retrospectively examined. The included patients were grouped according to the AMH values as ≤ 1 ng/ml, 1-3.5 ng/ml and ≥ 3.5 ng/ml. Subsequently, the patients were divided into those who underwent artificial and natural cycles, and compared in terms of pregnancy outcomes both within the same group and with the other group based on their AMH levels. The records of 343 patients were examined retrospectively. The artificial cycle was conducted with a fixed or step-up protocol. The natural cycle were underwent based on ultrasonographic examinations. All patients received luteal phase support. The clinical pregnancy rate, the live birth rate and the abortion rate were compared between the groups. There are 73 patients in the AMH ≤ 1 ng/ml group; 128 patients in the 1-3.5 ng/ml group and 115 patients in the ≥ 3.5 ng/ml group. **Results:** While 97 patients underwent a natural cycle (NC), 246 patients underwent an artificial cycle (AC). 49 patients (50.5%) in the NC group and 102 patients (41.6%) in the AC group had a clinical pregnancy and it was statistically significant ($p:0.001$). When the patients in the AC and NC groups were evaluated within their own groups according to AMH levels, no significant difference was found in pregnancy outcomes within the group. However, when the outcomes of patients in the AC and NC groups were compared according to similar AMH levels, the clinical pregnancy rates and the live birth rates in the NC group were significantly higher when the AMH level was ≤ 1 ng/ml and 1-3.5 ng/ml, respectively ($p:0.002$; $p:0.009$). However, when AMH ≥ 3.5 ng/ml, there was no significant difference in pregnancy outcomes between the NC and AC groups ($p:0.07$). **Conclusion:** The pregnancy outcomes of natural cycles are better in patient with AMH level below the 3.5 ng/ml during the FET cycles.

PERCEPTION OF FERTILITY PRESERVATION OPTIONS IN TRANSGENDER PATIENTS: EXPERIENCE FROM A SINGLE-CENTER COHORT

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Problem statement: Gender dysphoria is defined as the distress experienced by people whose sex assigned at birth doesn't align with their gender identity – transwomen are assigned male at birth and identify as female, while transmen are assigned female at birth and identify as male. Gender-affirming hormone therapy (GAHT) plays a central role in the treatment of gender dysphoria, by aiming to suppress levels of endogenous sex hormones and maintaining sex hormone levels for the affirmed gender, thereby affecting both female and male fertility. With increasing numbers of transgender patients seeking care, a rising demand for reproductive health services in this population can be anticipated. **Methods:** We retrospectively collected data from transgender patients treated at the endocrinological outpatient clinic, Department of Obstetrics and Gynecology, Salzburg University Hospital (January 2020–February 2025). Cohort characteristics were described using descriptive statistics (means $\pm$ SD for continuous variables; frequencies and percentages for categorical variables). Analyses were performed with jamovi version 2.6.26.0. **Results:** From January 2020 – February 2025 148 patients were seeking consultation for gender identity issues. 39.9% ($n=59$) identified as transmen (mean age 22.5; SD (6.5)), 58.1% ($n=86$) identified as transwomen (mean age 27.8; SD

(10.3)) and 2% ($n=3$) identified as non-binary (mean age 28.7; SD (13.2)). 78 patients were started on GAHT, with 48 patients pursuing feminization and 30 patients pursuing masculinization. A total of 12 patients participated in fertility preservation prior to initiation of GAHT (cryo-conservation of semen ($n=11$), cryo-conservation of oocytes ($n=1$)). **Conclusion:** Our results provide a descriptive overview of the transgender patients treated at the Salzburg University Hospital and may serve as a basis for future studies and more in-depth analysis. Although all transgender individuals are informed about the option of fertility preservation, only a small proportion proceeds to concrete procedures. Reasons may include both the medical as well as financial burden associated with such interventions. Our observations further suggest that transwomen are more likely to undergo fertility preservation prior to initiating GAHT than transmen.

Abbreviations: GAHT – gender-affirming hormone therapy

Disclosure of interest: There is no disclosure of interest.

PREMATURE OVARIAN FAILURE: WHEN AND HOW TO TREAT PREMATURE OVARIAN FAILURE

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Currently, premature ovarian failure (POF) is a medical and social problem because it negatively affects woman's health and her social status. POF directly leads to the formation of a complex of pathological symptoms similar to pathological menopause, involving not only the reproductive organs but also the systems that are influenced by changes in sex hormone levels, because the ovaries complete their functions long before they are genetically programmed.

This descriptive study was conducted during the years 2003-2023 included 121 patients with premature ovarian failure syndrome. The POF diagnosis was established based on clinical signs and statistical analysis of the obtained results: - mean division, r - correlation coefficient, 2 - criterion squared by Person, criterion (t) Student, weighted arithmetic quantities (M), standard deviation (σ), mean size error arithmetic (m). In POF estradiol level below 80 pmol / l leads to decrease and then cessation of proliferative processes in the urogenital tract. We found a high direct correlation ($r = 0.69$; $p = 0.004$) between estradiol level and urogenital pathology: the more below 80 pmol / l the estradiol level is, the more expressed is the urogenital pathology (atrophy, urinary incontinence). Patients with similar psycho-emotional and vasomotor POF have a mean E_2 level of 109.4 ± 20.3 pmol / l, and a very high direct correlation was found ($r = 0.78$; $p = 0.01$): the closer to 100 pmol the level of estradiol was the more clinically expressed were the psycho-emotional and vasomotor signs, especially among patients with LH / FSH ratio greater than 1. Patients with POF with slightly increased total testosterone level, with medium increased free fraction of testosterone and low level of globulin that binds the steroid hormone is due to decreased levels of E_2 , which reduces the synthesis of globulin in the liver, including the one which binds sexual hormone. As a result of this, so-called relative hyperandrogenism develops with following signs: acne, mail fat distribution, hair loss, etc. HRT significantly influences the health and quality of life of patients whis POF and if chosen correctly does not show side effects.

SIMPLE INDICES OF INSULIN RESISTANCE AS A POSSIBLE INDICATORS OF TYPE 2 DIABETES AND PREDIABETES IN WOMEN WITH PCOS – A PRELIMINARY, RETROSPECTIVE STUDY

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Problem statement: Women with polycystic ovary syndrome (PCOS) face a heightened risk of impaired fasting glucose (IFG), impaired glucose tolerance (IGT), and type 2 diabetes (T2D), necessitating regular glycemic assessment at diagnosis and follow-up every 1–3 years. Insulin resistance is a key pathophysiological factor in PCOS, affecting up to 95% of those with overweight or obesity. Despite this, routine insulin assays lack clinical utility. The oral glucose tolerance test (OGTT) remains the most reliable method for diagnosing glucose abnormalities in PCOS, though practical limitations (time, cost, inconvenience) highlight the need for alternative screening strategies. In this study, we assessed whether insulin resistance indices - HOMA-IR or QUICKI – can reliably predict T2D and Prediabetes in women with



PCOS, offering a practical and patient-friendly alternative to standard diagnostic methods. **Methods:** This retrospective single-center study included 86 women, aged 18-42, who were diagnosed with PCOS in our clinic between July 2024 and December 2024. Each participant underwent an OGTT to diagnose diabetes or prediabetes per American Diabetes Association (ADA) criteria. Insulin resistance was evaluated using HOMA-IR and QUICKI, calculated from fasting glucose and insulin levels. These indices were assessed for their diagnostic accuracy in detecting glycemic abnormalities. **Results:** In our cohort, 10 cases of impaired glucose tolerance were identified, while no participants exhibited IFG or diabetes. Insulin resistance was detected in 24.4% and 33.72% of subjects based on HOMA-IR and QUICKI, respectively. HOMA-IR demonstrated 60% sensitivity and 80.3% specificity, while QUICKI showed 70% sensitivity and 71.2% specificity. ROC curve analysis confirmed their predictive value for IGT (AUC=0.742; p=0.013 for both). Optimal cut-offs were 2.7984 for HOMA-IR and 0.3274 for QUICKI, each yielding 60% sensitivity and 88.2% specificity. In women with BMI ≥ 25 kg/m², predictive performance improved (AUC=0.788; p=0.015). **Conclusion:** These findings suggest that HOMA-IR and QUICKI could serve as practical screening tools for IGT in women with PCOS, particularly those with overweight. However, given their limitations, OGTT remains essential for diagnosis. Further research is needed to establish alternative, cost-effective, and widely accessible screening strategies in clinical practice.

IVF CASE REPORT / STUDY

NEGATIVE NON-INVASIVE PRENATAL TESTING (NIPT) AND SUBSEQUENT LIVEBIRTH RESULTING FROM A TRANSFER OF AN ANEUPLOID EMBRYO: A CASE REPORT

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Problem statement: To report a case of a live birth resulting from an aneuploid embryo after pre-implantation genetic testing for aneuploidy (PGT-A). **Method(s):** Frozen embryo transfer of aneuploid embryo after informed consent. **Results:** In the absence of euploid embryos, compassionate transfer of aneuploid embryos was done in a 43-year-old female with history of recurrent implantation failure. In the embryo transferred, mosaicism was noted in chromosome 10 and 13, while extra copies of chromosome 8 and 11 were noted (Trisomy 8 and 11). Non-invasive prenatal testing using maternal cell-free DNA done at 11 weeks and 7 days age of gestation showed low-risk result for aneuploidy (chromosomes 13, 18, and 21, and other chromosomes). The outcome was a pre-term live birth of a female infant, delivered via cesarean section at 35 weeks age of gestation. 2D echocardiogram done on the second day of life showed Tetralogy of Fallot. The plan is to have her heart repaired once she reaches 10 kilograms or 1 year old. The possibility of PGT-A/biopsy error versus self-correction may be considered. **Conclusion:** The potential for a livebirth of a complex aneuploid embryo was demonstrated in this case. PGT-A results, although with high accuracy, must always be interpreted with caution. Reproductive autonomy after thorough counselling and informed consent should be honored, especially in couples who are unable to form euploid embryos.

Table 1: Outcomes of the Pre-implantation Genetic Testing for Aneuploidy (PGT-A).

Embryo	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	X	Y	Conclusion	
1																					empty			1	1	Concluded
2																										Prepared
5								C		MC	C		ML								C					Prepared

FERTILITY PRESERVATION

FIRST REPORT OF THE HISTOLOGICAL AND MOLECULAR ASSESMENT OF THE REMOVED OVARIAN TISSUES FOLLOWING OVARIAN TRANSPLANTATION IN LEUKEMIA PATIENTS

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Problem statement: Ovarian tissue cryopreservation (OTC) followed by transplantation (OTT) offers fertility preservation in cancer patients. Its use in acute leukemia (AL) cases has been highly debated due to the theoretical risks of leukemic relapse. Evidence on repeat transplantations and graft removal strategy is lacking. **Methods:** We report two ALL survivors who underwent OTC at age 20 before myeloablative therapy. In both cases, detailed molecular and histological screening of thawed ovarian tissue was performed prior to transplantation. Hormonal recovery, controlled ovarian stimulation (COS), preimplantation genetic testing, and embryo transfer followed OTT. **Results: Case 1:** The patient underwent two separate OTT procedures, at age 28 and 33, using cryopreserved tissue fragments when AMH was below 0.1 ng/ml. The first OTT resulted in hormonal recovery and a live birth. The second led to two euploid embryos and a clinical pregnancy, which ended in first-trimester miscarriage. Hematological assessment revealed no leukemic relapse over the 91 months from the first OTT. **Case 2:** OTT was performed at age 33, 13 years after OTC. Eight strips were transplanted (5 retroperitoneal, 3 intraovarian) when AMH was 0.13 ng/mL. Hormonal recovery was observed, and COS yielded 4 euploid embryos. A single frozen embryo transfer resulted in a full-term live birth via cesarean delivery. Transplanted grafts were surgically removed at delivery and revealed no leukemic infiltration. Hematological assessment revealed no leukemic relapse over the 19 months from the OTT. **Conclusion:** This report demonstrates that OTT—including repeated procedures—is a viable and safe fertility restoration method in leukemia survivors. Live births were achieved in both cases, with no evidence of leukemic relapse. Despite the absence of a definitive strategy, the pros and cons of the surgical removal of grafts should be discussed with the patients. These findings support the growing evidence that, with careful histological and molecular screening, OTT is a feasible fertility preservation option even in acute leukemia.

Disclosure of Interest: The authors declare no conflicts of interest.

FERTILITY PRESERVATION IN YOUNG PATIENT WITH PREVIOUS OVARIAN DYSGERMINOMA

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Problem statement: 28-year-old woman with rheumatoid arthritis and previous laparoscopy surgery treatment for right adnexectomy, right pelvic and aortic lymphadenectomy, infracolic omentectomy for ovarian dysgerminoma. **Methods:** Oncofertility counseling for oocyte cryopreservation; ovarian stimulation-ovarian pick up. **Results:** Cryopreservation (6 oocytes retrieval, 4 oocytes MII). Natural pregnancy after five months. **Conclusion:** Safety spontaneous pregnancy after oocytes cryopreservation for oncological reasons.

EPIGENETIC MEDIATED TELOMERE INSTABILITY IN CRYOPRESERVED SPERM OF CANCER PATIENTS: IMPLICATIONS FOR ONCO-FERTILITY

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Problem statement: The increasing incidence of cancer among younger males has amplified the importance of fertility preservation. While survival rates for haematological malignancies such as CML, AML, NHL, and HL now exceed 90%, the gonadotoxic effects of chemotherapy often lead to irreversible damage to the spermatogenic population. Cryopreservation of sperm prior to treatment has become standard practice; however, concerns remain regarding the long-term genomic and epigenetic integrity of post-thaw sperm. Recent studies point to telomere length and TERRA (Telomeric Repeat-containing RNA) as crucial markers of chromatin and genomic stability, particularly under conditions of oxidative stress. This study aimed to evaluate the epigenetic and telomeric stability of cryopreserved sperm from cancer patients' pre-chemotherapy, and to explore the potential impact on fertility and genetic health of future offspring. **Methods:** Semen samples were obtained from 20 male cancer patients and 20 age-matched fertile controls. Semen analysis was performed before and after cryopreservation. Telomeric dynamics were assessed using RT-qPCR to measure telomere length and TERRA expression. Epigenetic modifications were evaluated by quantifying 5-hydroxymethylcytosine (5-hmC) levels through ELISA, as a marker of oxidative DNA demethylation. **Results:** Post-cryopreservation sperm from cancer patients and controls showed a significant increase in 5-hmC levels (p<0.05), indicating enhanced oxidative stress-driven epigenetic remodelling. TERRA expression was more significantly elevated in cancer group. This TERRA dysregulation was associated with reduced telomere length and instability—markers of impaired chromatin integrity and increased genomic vulnerability in spermatozoa majorly in cancer patients. **Conclusion:** Our findings highlight the epigenetic fragility and telomeric dysregulation in sperm post-cryopreserved samples, challenging the conventional assumption of gamete stability post-thaw. The interplay between oxidative stress, TERRA imbalance, and telomere shortening reveals a new dimension in onco-fertility that requires not just the preservation of sperm but the preservation of their genetic and epigenetic integrity. Incorporating TERRA, Telomere length and 5-hmC as functional biomarkers could enhance the evaluation of sperm quality in fertility preservation programs. A holistic model that addresses not only sperm viability but also molecular integrity is essential to safeguard reproductive potential and prevent the transgenerational passage of genomic instability.

FIRST SPONTANEOUS PREGNANCIES FOLLOWING OVARIAN TISSUE TRANSPLANTATION IN LEUKEMIA SURVIVORS

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Problem statement: Ovarian tissue cryopreservation (OTC) followed by transplantation (OTT) restores endocrine function and fertility in cancer survivors. Even though limited number of healthy live births have been reported using IVF in leukemia survivors, natural pregnancy has not been reported thus far since transplanted tissues are suggested to be removed due to the leukemia relapse risk. **Methods:** We describe two cases of acute leukemia survivors who underwent OTC before hematopoietic stem cell transplantation (HSCT). After remission, both intraovarian and retroperitoneal frozen-thawed OTT were performed. Patients were monitored by hormone measurements and assessment of menstrual functions. Outcomes of assisted reproduction attempts and natural conception outcomes were documented. **Results: Case 1:** A 27-year-old woman diagnosed with AML-M2 with t(8;21)+ underwent OTC prior to HSCT. Following ovarian failure, dual-site OTT (retroperitoneal and intraovarian) was performed (December 2016). The graft began to function on the 3rd postoperative month and following multiple stimulation cycles an euploid blastocysts were generated using ICSI of oocytes retrieved from the retroperitoneal transplant. Transfer of an euploid blastocyst ended up with a healthy live birth on June 2024. Following birth the patient had irregular menstrual functions during her nursery and a spontaneous conception occurred in August 2025 from the intraovarian graft. The pregnancy is progressing healthy at the 8th week of gestation. **Case 2b** A 19-year-old woman with Philadelphia chromosome-positive ALL underwent OTC prior to cord blood transplantation. She developed premature ovarian insufficiency post-transplant. In 2017, the first OTT (mesosalpingial) restored ovarian



activity and resulted in multiple IVF cycles, one leading to a live birth in 2019. A second OTT in 2023 (mesosalpingeal, intraovarian) again restored function, but IVF resulted in miscarriage at the 13th week of gestation. Remarkably, in September 2025 she conceived spontaneously, and the pregnancy is progressing healthy at the 6th week of gestation. **Conclusion:** These are the first reported spontaneous pregnancies in leukemia survivors following OTT. Here we demonstrate that OTT not only restores endocrine functions and fertility via assisted reproductive technologies, but also supports natural conception through intraovarian grafts offering sustained long-term reproductive potential. However long term safety of the ovarian cortical grafts remain in-situ, still remains to be determined.

THE EFFECT OF COUNSELING BASED ON WATSON'S THEORY OF HUMAN CARING ON REPRODUCTIVE CONCERN IN WOMEN DIAGNOSED WITH CANCER: A RANDOMIZED CONTROLLED TRIAL

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Problem Statement: Reproductive concern is a major issue affecting the quality of life in women diagnosed with cancer, and becomes a critical psychosocial problem when combined with fears about the future. Addressing this concern requires a holistic approach. This study aimed to examine the effect of counseling based on Watson's Theory of Human Caring on reproductive concern and patient satisfaction in women diagnosed with cancer. **Methods:** A single-blind randomized controlled trial with a pre-test-post-test design was conducted with 50 women diagnosed with cancer (25 in the intervention group and 25 in the control group). The intervention group received counseling based on Watson's Theory of Human Caring, while the control group received standard counseling. Data were collected using a Descriptive Information Form, the Reproductive Concerns After Cancer Scale, and the Patient Satisfaction Evaluation Form Based on Watson's Healing Processes. **Results:** The difference in reproductive concern and patient satisfaction between the groups was statistically significant ($p<0.05$), with an effect size of 0.74 for reproductive concern reduction. The intervention group reported notably higher satisfaction levels based on Watson's healing processes compared to the control group. **Conclusion:** Counseling based on Watson's Theory of Human Caring was found to reduce reproductive concern and enhance patient satisfaction in women diagnosed with cancer. It is recommended that individualized counseling based on this theory be integrated into standard care practices for cancer patients to support reproductive well-being.

THE RELATIONSHIP BETWEEN PREGNANT WOMEN'S CLIMATE CHANGE AWARENESS AND THEIR APPROACHES AND ATTITUDES TOWARD RECEIVING ANTENATAL CARE AND HEALTHY LIFESTYLE BEHAVIORS

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Problem statement: This study aims to investigate the relationship between pregnant women's awareness of climate change, their approaches and attitudes toward receiving antenatal care, and their healthy lifestyle behaviors. **Methods:** This descriptive and correlational study was conducted with a sample of 453 primiparous pregnant women who were admitted to the pregnancy outpatient clinics of a public hospital in the Central Anatolia Region between July 1, 2023, and March 31, 2024. Data were collected using the Personal Information Form (PIF), Climate Change Pregnant Awareness Scale (CCPAS), Antenatal Care Receiving Scale (ANCS), and Healthy Lifestyle Behaviors Scale-II (HLBS-II). Descriptive statistics, independent samples t-test, one-way ANOVA, and multiple linear regression analysis were used for data analysis. **Results:** The average age of the pregnant women participating in the study was found as 24.63 ± 4.24 years. The mean scores for CCPAS, ANCS, and HLBS-II were 71.55 ± 19.35 , 138.42 ± 41.69 , and 135.24 ± 24.47 , respectively. Educational level, information on climate change, and HLBS-II score were detected to affect pregnant women's climate change awareness. The HLBS-II score affects pregnant women's approaches and attitudes toward receiving antenatal care. Age, attending pregnancy training sessions, frequency of antenatal

check-ups, having information on climate change, and CCPAS and ANCS scores are the factors affecting the healthy lifestyle behaviors of pregnant women. **Conclusion:** The findings reveal a significant positive relationship between pregnant women's awareness of climate change and their healthy lifestyle behaviors. Moreover, a significant positive relationship was observed between their approaches and attitudes toward receiving antenatal care and their healthy lifestyle behaviors.

CLINICAL ART/IVF

COMPARISON OF IVF FET PROTOCOLS IN POLYCYSTIC OVARY SYNDROME BASED ON FORT (FOLLICULAR OUTPUT RATE), FOI (FOLLICLE-OOCYTE INDEX), AND OSI (OVARIAN SENSITIVITY INDEX) VALUES

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Problem statements: Over the past 15 years, parameters such as FORT, FOI, and OSI have been suggested to demonstrate success rates; however, there are limited studies in the literature on this subject. Our study aimed to compare GnRH antagonist and PPOS protocols in women with PCOS undergoing IVF treatment and to evaluate the impact of FORT, FOI, and OSI parameters. **Methods:** This is a prospective cohort study conducted between 2024 and 2025, including 139 infertile women diagnosed with PCOS according to the modified Rotterdam criteria, who underwent GnRH antagonist or PPOS protocols. In patients who underwent ovarian stimulation with both protocols, FORT, FOI, and OSI values were calculated using preovulatory follicle count (PFC), antral follicle count (AFC), the number of oocytes retrieved, and gonadotropin dose. The protocol selection was made randomly. In patients who underwent frozen-thawed embryo transfer, treatment protocols and pregnancy outcomes of the first and single cycles were compared based on these parameters. **Results:** The GnRH antagonist protocol was applied to 74 patients (53.2%), while 65 patients (46.8%) underwent the PPOS protocol. No significant differences were found between the two groups in terms of the number of retrieved oocytes and embryos formed ($p>0.05$). While clinical pregnancy rates (48.4% vs. 45.5%), hCG positivity (53.2% vs. 52.7%), and live birth rates (37.1% vs. 34.5%) were higher in the GnRH antagonist group, these differences were not statistically significant ($p>0.05$). OHSS was less frequently observed in the PPOS protocol (4.6% vs. 14.9% $p>0.05$). FORT (GnRH A:66 vs PPOS:70), FOI (GnRH A:86.3 vs PPOS:85) and OSI (GnRH A:0.83 vs PPOS:0.85) parameters were similar between the two groups, with no statistically significant differences ($p>0.05$). Although pregnancy rates increased with higher parameter values, a statistically significant difference was observed only for OSI in patients treated with the PPOS protocol ($p>0.05$). **Conclusion:** As FORT, FOI, and OSI parameters increase, the number of oocytes and embryos also increases, but this has not impacted clinical pregnancy outcomes. We believe that our study makes a significant contribution to the literature by both comparing different IVF protocols and evaluating parameters that could potentially predict treatment success.

EUPLOIDY RATE IN IVF VERSUS ICSI EMBRYOS FOR INDIVIDUALS OR COUPLES WITH NON-MALE FACTOR INFERTILITY: A RETROSPECTIVE CASE CONTROL STUDY OF SPLIT IVF/ICSI CYCLES

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Methods: This is a retrospective case control study conducted on 258 Tripod Fertility patients undergoing split IVF/ICSI cycles between January 2018 and December 2023 in two different fertility laboratories in Toronto, Canada. This study included all patients with non-male factor infertility that have undergone split IVF/ICSI treatments at Tripod Fertility or any affiliated centres from January 2018 to December 2023. Patients that qualified for the study had their demographic, medical, and lifestyle information assessed, as well as data from embryology and andrology reports, IVF/ICSI fertilization and blastulation rates, euploidy rates, and FET outcomes when available, measured. A total of 258 cycles were analyzed with the primary outcome being the euploidy rate of IVF versus ICSI. Oocytes were not assigned to either IVF or ICSI in a blinded manner. As such, splitting of oocytes was done by embryologists who may have contributed to selecting morphologically better oocytes for either technique. A controlled-trial with the oocyte group being assigned



randomly after splitting would help eliminate any bias. **Results:** There is no significant difference between fertilization rates of IVF (817 / 1469, 56%) and ICSI (838 / 1436, 58%). There is also no significant difference between blastulation rates of IVF (402 / 817, 49%) and ICSI (397 / 838, 47%). There is no significant difference between euploidy rate of IVF (199 / 402, 50%) and ICSI (194 / 397, 49%). The p-value is larger than 0.1 for all three hypotheses. **Conclusion:** This study confirms that for non-male factor infertility, fertilization, blastulation and euploidy rates are not significantly different between IVF or ICSI. Current guidelines recommending against the use of ICSI for non-male factor indications should be adhered to. In non-male factor infertility in-vitro fertilisation cycles, ICSI does not increase the euploidy rate of blastocysts and therefore should not be recommended to patients.

UNVEILING METABOLIC CUES IN MATERNAL OBESITY AND EMBRYO DEVELOPMENT

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Problem statement: Maternal obesity is a growing global health concern, yet the specific metabolic alterations in the embryo's microenvironment associated with elevated maternal body mass index (BMI) have not been fully characterized. This prospective cohort study aims to elucidate the influence of maternal body mass index (BMI) on the metabolic profile of blastocyst-stage embryos from in vitro fertilization (IVF) outcomes in IVF treatments. **Methods:** A total of 48 embryos were classified into two groups based on patient BMI as defined by the World Health Organization: the normal weight group (NW, BMI ≥ 18.5 and ≤ 24.9 ; n = 34) and the obesity group (OB, BMI ≥ 30 ; n = 14). Embryos were cultured until the blastocyst stage, and the corresponding culture media were collected post-freeze or post-transfer. The media underwent untargeted metabolomic profiling using high-resolution MALDI-Orbitrap mass spectrometry. Statistical analyses were conducted with MetaboAnalyst 6.0 employing the PSL-Da test, and metabolite identification was achieved via cross-referencing multiple databases including HMDB, KEGG, LipidMaps, MeTLin, and PubChem. **Results:** Results demonstrated significant disparities in the low molecular weight ions present in the culture media between the two groups. In the NW group, the predominance of metabolites—such as uridine 5'-monophosphate, PC (34:1), TG 54:3, GM2 d18:1/18:0, LysoPC 16:0, and PC (34:2)—suggested a state of balanced energy metabolism and optimal cellular division. Conversely, the OB group exhibited metabolite profiles indicative of altered energy metabolism, increased oxidative stress, and perturbed signaling pathways (evidenced by elevated levels of LysoPC 22:4, SM(d42:2), and ferulic acid glucuronide at m/z 326.07). **Conclusion:** In conclusion, the metabolic signature identified in embryonic culture media appears to mirror the patient's systemic metabolic state. Obesity is associated with a lipid-enriched microenvironment, which may disrupt cellular energy homeostasis and impact key biological functions such as signal transduction and cellular differentiation. These findings underscore the potential for targeted clinical interventions to optimize the embryonic milieu, thereby enhancing the efficacy of assisted reproductive treatments.

Nothing to disclose.

UTERINE PATHOPHYSIOLOGY

EVALUATION OF PREGNANCY RATES POST-ANTIBIOTIC TREATMENT IN PATIENTS WITH PATHOGENIC PROFILE IN PRE-TRANSFER ENDOMETRIAL MICROBIOME ANALYSIS

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Problem statement: The endometrial microbiome is increasingly recognized as a critical factor in reproductive success, influencing implantation, embryonic development, and pregnancy outcomes. Pathogenic or imbalanced profiles may contribute to infertility or recurrent pregnancy loss. Personalized approaches, including antibiotics and probiotics, aim to restore microbial balance and improve endometrial receptivity. This study evaluated whether pregnancy outcomes differ after antibiotic treatment in patients with pathogenic endometrial microbiome profiles. **Methods:** We conducted a retrospective study including 135 patients with previous implantation failure or miscarriage (mean age 41.5 ± 4.6 years) between May 2021 and December 2022. Endometrial biopsies were obtained, and DNA was analyzed by qPCR to detect bacteria, fungi, and viruses. Based on results, patients received personalized treatment with antibiotics and/or probiotics. Clinical outcomes were assessed after embryo transfer, including implantation, pregnancy, and miscarriage rates. Subgroup analysis was performed for oocyte donation versus autologous embryo transfers. **Results:** Implantation rates were 57.1% in the pathogenic group and 50% in the non-pathogenic group, with clinical pregnancy rates of 49% and 46.6%, respectively. Miscarriage rates were comparable (10.2% vs 12.8%). Ongoing pregnancy rates were 30% and 27.9%. In both groups, implantation rates were higher in oocyte donation cycles (67.9% vs 65.1%) compared to autologous transfers (32.1% vs 34.9%). No statistically significant differences were observed in outcomes between groups, suggesting effective restoration of microbial balance following treatment. **Conclusion:** Endometrial microbiome testing can identify pathogenic profiles potentially impairing implantation. Antibiotic-plus-probiotic treatment appears to normalize microbial balance, resulting in comparable pregnancy outcomes between pathogenic and non-pathogenic groups. Expanding patient numbers may further validate these findings and refine personalized fertility strategies.

Disclosure of interest: The authors declare no conflicts of interest.

Keywords: Microbiome; Bacteria; Implantation failure; Endometrial testing; Chronic endometritis

AGE-RELATED INCREASED PERIPHERAL BLOOD NATURAL KILLER CELLS MAY CONTRIBUTE TO IMPLANTATION FAILURE AND PREGNANCY LOSS: A RETROSPECTIVE STUDY

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Problem statement: Reproductive success declines with maternal age, partly due to ovarian factors, but the immunological contribution is less well defined. Elevated natural killer (NK) cells in peripheral blood have been linked to recurrent implantation failure (RIF) and recurrent pregnancy loss (RPL), though results are inconsistent. This study investigated whether advanced maternal age is associated with increased peripheral blood NK (pbNK) cells in women with RIF and RPL. **Methods:** We performed a retrospective cohort study including 300 women with unexplained infertility and either RIF (≥ 2 failed embryo transfers) or RPL (≥ 2 consecutive miscarriages). All were treated at a reproductive immunology unit between January 2022 and December 2024. Peripheral blood samples were analyzed by flow cytometry to quantify NK cell populations (CD3-CD56+CD16+). Patients were stratified into three age groups: ≤ 38 years (n=68), 39–44 years (n=141), and ≥ 45 years (n=90). Data were analyzed using the Kruskal-Wallis test and post-hoc analyses for group comparisons. **Results:** Mean ($\pm$ SD) pbNK cell percentages were 35.3 ± 5.3 in the ≤ 38 group, 41.5 ± 5.6 in the 39–44 group, and 46.9 ± 6.2 in the ≥ 45 group. Women aged 39–44 had significantly higher pbNK levels compared with those ≤ 38 (p0.037). Although the ≥ 45 group exhibited the highest mean NK cell levels, differences did not reach significance in post-hoc analysis. These findings suggest an age-related increase in pbNK cells, potentially contributing to impaired implantation and increased pregnancy loss in older patients. **Conclusion:** Advanced maternal age may be associated with elevated pbNK cells in women with RIF or RPL, pointing to an immunological factor that could contribute to adverse reproductive



outcomes. Assessing NK cell levels may help guide individualized fertility treatment strategies, including immunomodulatory interventions, to improve outcomes in this population.

Disclosure of Interest: The authors declare no conflicts of interest.

Keywords: Peripheral blood NK cells; Recurrent implantation failure; Recurrent pregnancy loss; Advanced maternal age; Immunology; Fertility

CAESAREAN SECTION UTERINE INCISION CONTROVERSIES AND CONSEQUENCES

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The impact of lower segment caesarean section uterine incision on women health is drawing more attention in view of the diverse related clinical consequences. The controversies in the details of uterotomy multiplies in geometric sequence. The exact site of the incision in the lower uterine segment, the direction of incision extension, the techniques of uterotomy extension are all domains for controversies. Bladder falp creation and uterine exteriorization represent issues of different practice as well. There impact on uterine incision healing is significant. The closure of uterotomy details including number of layers, suture details, techniques of suturing each layer, anatomical tissue approximation with inclusion and exclusion of the decidua are controversial subjects with no high level of evidence to support the conflicting approaches. The intersections between uterotomy healing, junctional zone, uterine peristalsis, uterine axis anatomical distortion, focal adenomyosis due to tissue injury and reproductive consequences of uterotomy is an area of hot debate.

The reproductive consequences affecting women health includes implantation disorders, abnormal uterine bleeding, and thin lower uterine segment in subsequent pregnancy with its potential risks of adverse pregnancy outcome. These reproductive disorders result from uterine isthmocoele, caesarean scar pregnancy and placenta accreta spectrum. The complexity of the uterotomy healing process in view of the contributing factors such as obesity, nutrition, infection, impaired blood supply cast shadows on the consequent defective healing and its consequences on women health. Histology of uterine scars demonstrated decidual tissues in some cases of uterine niche. Another finding is focal adenomyosis at the site of previous caesarean scar. The finding of regenerative atypia and fibroblastic stromal reaction in addition to endocervical glands with mucus were document in the histology of uterine niche. This may be related to location of the incision proximal to the uterine cervix. The uterine peristalsis role in implantation has been well documented. Uterine Incision is associated with disturbed uterine peristalsis. The intersection between uterine peristalsis disturbance, uterine axis distortion, caesarean scar defect may explain the possibilities of implantation failure as well as implantation of pregnancy at the site of previous scar defect with its consequences.



ORAL PRESENTATION 17: FETOMATERNAL MEDICINE: LABOR AND DELIVERY / OTHER

LABOR AND DELIVERY

CULTURAL TIMING AND CHILDBIRTH: THE INFLUENCE OF LUNISOLAR CALENDAR BELIEF ON DELIVERY SCHEDULING IN VIETNAM

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Problem statement: Cultural beliefs regarding fate and auspicious timing influence childbirth practices in many societies, including Vietnam. This study examines the impact of avoiding inauspicious days on delivery patterns at Phu San Hanoi Hospital. While previous research suggests that cultural preferences shape birth planning and delivery methods, their direct implications for clinical practice in Vietnam remain underexplored. By analysing these trends, this study aims to improve understanding of cultural influences on obstetric decision-making and support evidence-based hospital planning to optimise maternal and neonatal outcomes. **Methods:** This retrospective cross-sectional study analysed 197,919 deliveries at Phu San Hanoi Hospital from February 2015 to January 2020. Birth dates were classified according to the Vietnamese lunisolar calendar, identifying inauspicious days based on traditional texts. Delivery patterns, maternal characteristics, and neonatal outcomes were compared between births on inauspicious and non-inauspicious days using descriptive statistics and multivariate regression analyses. **Results:** The proportion of deliveries was significantly lower on inauspicious days (94.2 ± 20.1) than on non-inauspicious days (119.2 ± 28.3), particularly for caesarean sections (48.2 ± 13.4 vs. 71.6 ± 22.6). Urban-dwelling, multiparous, and older women (≥ 30 years) were more likely to avoid inauspicious days. Increased rates of singletons, preterm birth, low birth weight, stillbirth, and poor Apgar scores were observed on inauspicious days, likely reflecting the avoidance of low-risk pregnancies. Physicians at Phu San Hospital appeared to exercise flexibility for C-sections within clinical guidelines. The likelihood of hospital overcrowding was markedly higher on non-inauspicious days (OR: 6.93 (95% CI: 5.52–8.74)). **Conclusion:** Cultural beliefs significantly influence childbirth timing in Vietnam, primarily affecting healthy pregnancies. Understanding these trends can improve hospital planning, resource allocation, and patient care. Further research is needed on the intentional selection of auspicious birth dates

THE EFFECT OF MEDIOLATERAL EPISIOTOMY ON THE RISK OF OBSTETRICAL ANAL SPHINCTER INJURIES IN OPERATIVE VAGINAL DELIVERY

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Problem statement: Obstetrical anal sphincter injuries (OASIs) are a severe maternal complication of vaginal delivery, with increased prevalence during operative vaginal deliveries (OVD). Mediolateral episiotomy (MLE) has been proposed as a protective intervention for OASIS, but its role remains controversial. The objective of this study was to investigate whether MLE was associated with a reduced rate of OASIS during OVD. **Methods:** We conducted a retrospective cohort study evaluating singleton pregnancies delivered by an OVD with 37 weeks of gestation in a tertiary hospital, between 2021 and 2024. Two groups were stratified according to whether a MLE was performed. Maternal and neonatal characteristics were compared between groups. SPSS V20 was used for statistical analyses. We used Pearson's correlation, two-tailed 2 or Fisher's exact test, Student's t-test and



logistic regression, as appropriate. A p-value **Results:** The study cohort comprised 1009 deliveries, including 848 vacuum-assisted deliveries (84%) and 161 forceps-assisted deliveries (16%), with an EML rate of 57.9%. The incidence of OASIS was 2.6%. MLE was not significantly associated with a reduced risk of OASIS in either vacuum (1.1% vs 2.5% in those with and without EML; $p = 0.209$, OR 0.519) or forceps deliveries (6% vs 7.1% in those with and without EML; $p = 0.822$, OR 0.832) nor in nulliparous and multiparous. MLE was significantly more frequent in cases of nulliparous ($p < 0.01$) forceps delivery ($p < 0.01$), fetal distress as indication for OVD ($p < 0.01$) and when epidural was administered ($p = 0.04$). **Conclusion:** Episiotomy should be reserved for selected cases, with further studies required to clarify maternal and neonatal outcomes. This study underscores the importance of individualized clinical decision-making regarding the use of episiotomy during OVD.

Table I Association between mediolateral episiotomy and OASIS according to the type of operative vaginal delivery

	Total number of women	Mediolateral episiotomy		No Mediolateral episiotomy		p-value	OR (95% CI)
		Number of women	NP (%) OASIS	Number of women	NP (%) OASIS		
Whole population	1009	585	54	424	11	0.67	
Vacuum delivery	848	472	5	376	39	0.21	0.52 (0.19-1.44)
Forceps delivery	161	113	8	48	2	0.62	0.83 (0.17-4.20)

OR odds ratio, CI confidence intervals, OASIS obstetrical and sphincter injuries

Table II Association between mediolateral episiotomy and OASIS in vacuum deliveries (n=848)

	Total number of women	Mediolateral episiotomy		No Mediolateral episiotomy		p-value	OR (95% CI)
		Number of women	NP (%) OASIS	Number of women	NP (%) OASIS		
Nulliparous	184	103	5	81	8	0.09	0.38 (0.12-1.17)
Multiparous	664	369	3	295	2	1.08	0.95 (0.08-10.6)

OR odds ratio, CI confidence intervals, OASIS obstetrical and sphincter injuries

Table III Association between mediolateral episiotomy and OASIS in forceps deliveries (n=161)

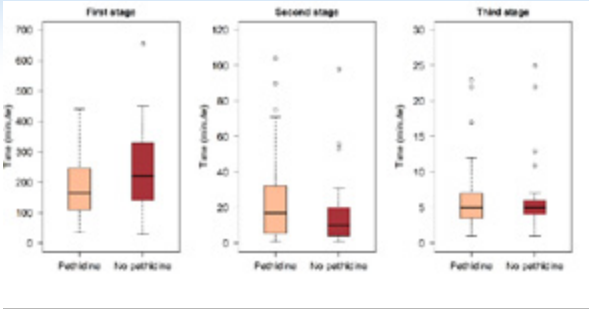
	Total number of women	Mediolateral episiotomy		No Mediolateral episiotomy		p-value	OR (95% CI)
		Number of women	NP (%) OASIS	Number of women	NP (%) OASIS		
Nulliparous	118	69	7	49	1	1.80	3.02 (0.12-8.98)
Multiparous	41	44	1	17	1	0.52	0.45 (0.02-7.17)

OR odds ratio, CI confidence intervals, OASIS obstetrical and sphincter injuries

EFFECT OF INTRAMUSCULAR PETHIDINE ON DURATION OF LABOR: A PROSPECTIVE COHORT STUDY

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Objective: This study evaluates the impact of intramuscular pethidine on labor duration and associated maternal and neonatal outcomes. **Methods:** A prospective cohort study at Hatyai Hospital recruited 114 women with singleton, cephalic pregnancies at 37–41 weeks and spontaneous labor in the active phase from May to December 2024. A total of 59 patients chose to receive intramuscular pethidine at a dose of 1 mg/kg, while 41 patients chose not to receive it. Obstetric outcomes, labor characteristics, pain assessment by visual analog scale (VAS), and maternal and neonatal drug adverse outcomes were recorded. Multivariable linear regression identified factors associated with labor duration, adjusting for confounders, including maternal age, BMI, and parity. **Results:** The median duration of the active phase of the first stage of labor was significantly shorter in the pethidine group (165 min [IQR 110-245]) compared to the non-pethidine group (220 min [IQR 140-330], $p = 0.046$). After adjusting for maternal age, BMI, and parity, pethidine administration was associated with a significant reduction in active phase duration by 67.45 minutes (adjusted coefficient = -67.45, 95% CI: -118.67, -16.23, $p = 0.010$). No cases of birth asphyxia were reported, and no significant differences were observed in NICU admissions. Maternal side effects were mild, with nausea occurring in 7.8% and drowsiness in 10.9% of participants. No severe complications were observed in either group. **Conclusion:** Intramuscular pethidine administration significantly shortens the active phase of the first stage of labor compared to the non-pethidine group after adjusting for confounding factors, without increasing adverse maternal or neonatal outcomes and it may also minimize maternal stress of labor pain indirectly.



THE INFLUENCE OF BMI IN MATERNAL AND NEONATAL OUTCOMES IN PROM AT TERM PREGNANCIES: A COMPARATIVE SUBGROUP RETROSPECTIVE ANALYSIS

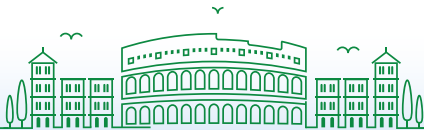
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Problem Statement: Prelabour rupture of membranes (PROM) at term occurs in 10% of pregnancies and is associated with an infectious risk that motivates the induction of labour. Some factors may influence this process. The aim of this study was to compare the neonatal and obstetric outcomes in primiparous pregnant women with PROM according to the body mass index (BMI). **Methods:** A retrospective observational study was conducted in a tertiary hospital in Lisbon, Portugal, between January 2020 and December 2023, including singleton pregnancies in primiparous women. Participants were categorized into five groups: 25kg/m² (G1), 25-29.9kg/m² (G2), 30-34.9kg/m² (G3), 35-39.9kg/m² (G4), ≥40kg/m²(G1). Obstetric and neonatal outcomes were compared across groups. Statistical analysis included ANOVA, Person's χ^2 , Spearman correlation and descriptive methods, with significance set at $p < 0.05$. **Results:** A total of 452 cases were included, 279 (61.7%) in G1, 128 (28.3%) in G2, 34 (7.6%) in G3, 7 (1.5%) in G4 and 4 (0.9%) in G5, with similar mean maternal ages (29 years old) and gestational ages (39 weeks). The mean duration of labour increased across groups, with a mean of 36.8 hours in G5, versus 22.7 in G1 (ANOVA $p < 0.039$). In a subgroup analysis that included only obese women (G3, G4 and G5) with a spontaneous onset of labour, a higher BMI was associated with a longer duration of labor with a significant positive correlation (Spearman's ρ 0.552, $p < 0.01$). A similar significant correlation was verified with induction of labour (Spearman's ρ 0.425, $p < 0.038$). Nevertheless, the induction of labour rates did not differ with statistical significance between groups (χ^2 Person $p < 0.445$). As for the type of labour, 25.6% had a cesarean delivery, with no differences between groups (χ^2 Person $p < 0.117$). The same was verified in the rates of chorioamnionitis (χ^2 Person $p < 0.086$). 8 newborns (2.9%) were admitted in the intensive neonatal care unit, with no significant differences between groups (χ^2 Person $p < 0.309$). **Conclusion:** Excessive weight and obesity seem to increase time until labour in PROM, with no impact on the incidence of chorioamnionitis, cesarean delivery, or admission of newborns in NICU in this cohort.

DELIVERY PLANNING IN A CASE OF MUSCULAR DYSTROPHY IN PREGNANCY

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Problem statement: Muscular dystrophies are genetic myopathies characterized by progressive muscle weakness. During labor, uterine contractions are aided by the skeletal muscles of the abdomen and pelvis to allow for fetal expulsion. Muscle weakness may affect labor and delivery, as well as pregnancy outcomes. **Methods:** This is the case of a 24-year-old primigravida with a known history of muscular dystrophy for 14 years, presenting with gradually progressive bilateral upper and lower extremity weakness. She was admitted to the intensive maternal unit at 33 weeks and 5 days of gestation for oligohydramnios and was managed as a case of muscular dystrophy in threatened preterm labor. **Results:** She was discharged in stable condition, and later underwent elective cesarean section under spinal anesthesia at 37 weeks of gestation, in anticipation of difficulties in fetal expulsion secondary to her



proximal lower extremity weakness. She delivered a live baby boy, 37 weeks by pediatric aging, 2495 grams, with Apgar scores of 9 and 9 at one and five minutes, respectively. There were no fetomaternal complications. **Conclusion:** Muscular dystrophy in pregnancy may increase the likelihood of cesarean section or operative vaginal delivery due to impaired maternal pushing during the second stage of labor. This underscores that the mode of delivery and anesthetic plan should take into account the phenotypic heterogeneity of genetic neuromuscular disorders and should be coordinated with a multidisciplinary team.

EFFICIENCY OF CONSERVATIVE SURGICAL TECHNIQUE FOR PLACENTA ACCRETA SPECTRUM DISORDERS

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Problem statement: Hysterectomy remains a widely used surgical procedure in patients with placenta accreta spectrum (PAS) disorders, which results in infertility and post-hysterectomy syndrome. At the same time, hysterectomies are often accompanied by significant intraoperative blood loss and early postoperative complications. The wider implementation of conservative surgical technique and minimization of blood loss in existing procedures are both relevant challenges in modern obstetrics. **Methods:** Retrospective analysis of the results of surgical treatment of PAS from 2015 to 2025, depending on the method of reducing uterine blood flow. **Results:** A total of 753 operative deliveries in patients with PAS were performed within a 10-year timeframe. From 2015 to 2017, the main methods of bleeding prevention were ligation of the internal iliac arteries and temporary occlusion of the common iliac arteries (100 patients) with an average blood loss of 2424 ml and a hysterectomy rate of 2.48%. Since 2017, our own technique of combined compression hemostasis has become the main method of surgical hemostasis (642 patients) with an average blood loss of 1286 ml, and a hysterectomy rate of 1.48%.

424 treated patients with PAS since 2020, were divided into groups by intraoperative topographic classification (Palacios-Jaraquemada JM, 2020), according to which the types Type T0 (164 patients) corresponds to FIGO grade 2, and T1-T4 (260 patients) correspond to FIGO grade 3. Depending on the PAS type, an average blood loss and a hysterectomy rate were as follows: Type 0 - 721 ml, 0%; Type 1 - 1011 ml, 0.42%; Type 2 - 1427 ml, 0%; Type 3 - 2014 ml, 2.9%; Type 4 - 2234 ml, 0%, respectively. In 2025, temporary aorta balloon occlusion with intraoperative contact duplex ultrasound navigation was introduced for PAS Type 2-4 cases. To date, 11 conservative surgeries have been performed with an average blood loss of 478 ml. Postoperative course was uneventful in all cases. **Conclusion:** In the vast majority of cases, modern surgical techniques and hemostasis methods prevent the need for hysterectomy and massive intraoperative blood loss in patients with PAS.

FEAR OF CHILDBIRTH: DOES PARITY MATTER?

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Problem Statement: Fear of childbirth (FOC) is a multifaceted psychological phenomenon that can significantly influence the maternal experience, affect delivery outcomes, and impact decision-making during pregnancy. It varies widely across populations and is influenced by factors such as parity, prior experiences, and cultural context. The aim of this study was to compare levels of FOC between nulliparous and multiparous women and to examine associations with obstetric history and delivery outcomes. **Methods:** This prospective observational study was conducted at a tertiary medical center between May 2024 and May 2025. Participants completed the W-DEQ-A questionnaire following written informed consent. Maternal demographics, obstetric history, and neonatal outcomes were extracted from medical records. Fear levels were classified according to established W-DEQ-A score thresholds. Comparative analyses between nulliparous and multiparous women were conducted, with multivariable adjustment for potential confounders. **Results:** A total of 296 women participated in the study: 121 nulliparous and 175 multiparous. Fear of childbirth (any level) was reported by 79.3% of nulliparous and 62.1% of multiparous women. Nulliparous women demonstrated significantly higher mean fear scores

and a greater proportion with high-level fear compared with multiparous women. They also exhibited higher cesarean delivery rates, particularly emergency cesareans, and increased NICU admissions (Figure 1). Within the multiparous group, those with high or severe fear were more likely to have a history of cesarean section or assisted vaginal delivery. These associations remained significant after adjustment for education level, participation in childbirth preparation courses, and high-risk pregnancy follow-up. **Conclusion:** Nulliparous women exhibit significantly higher levels of fear of childbirth compared to multiparous women. Nevertheless, a substantial proportion of multiparous women also experience high or severe fear, particularly those with complicated obstetric histories. These associations remained significant after adjustment. Routine assessment of FOC during pregnancy may help identify at-risk women and guide tailored interventions to improve maternal and neonatal outcomes.

Disclosure of Interest: The authors declare no conflicts of interest.

Figure 1. Maternal characteristics and levels of fear of childbirth (WJMA scores) in nulliparous versus multiparous women. Continuous data are presented as mean $\pm$ SD, and categorical data as percentages. Bold p-values (p 0.05) indicate statistical significance.

Variable	Nulliparas (n=121)	Multiparas (n=175)	p-value
Maternal age (years)	28.7 $\pm$ 5.3	31.3 $\pm$ 5.3	< 0.001
Cesarean section (%)	32 (26.4)	26 (14.9)	0.017
Mean WJMA total score	52.5 $\pm$ 12.8	45.6 $\pm$ 19.2	0.001
Low fear ($\leq$ 37)	25 (20.6)	67 (38.2)	< 0.001
High fear ($>$ 37)	25 (19.0)	18 (10.2)	0.039
Severe fear or more ($\geq$ 85)	4 (3.3)	6 (3.4)	1.0

THE EFFECT OF A PRENATAL YOGA-SUPPORTED CHILDBIRTH PREPARATION EDUCATION BASED ON SELF-EFFICACY THEORY ON FEAR OF CHILDBIRTH AND CHILDBIRTH SELF-EFFICACY IN PRIMIPAROUS WOMEN: A STUDY PROTOCOL

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Problem statement: Childbirth preparation education is a key component of prenatal care, helping pregnant women prepare cognitively for birth. Evidence shows that these programs enhance self-efficacy and reduce childbirth fear, whose fear is strongly associated with low self-efficacy. There are different approaches to childbirth preparation education in the literature. Although interventions grounded in Bandura's self-efficacy theory—incorporating mastery experiences, vicarious learning, verbal persuasion, and emotional regulation—are limited. But they show promise because of their positive effects. Incorporating prenatal yoga into self-efficacy-based education may offer additional benefits in improving women's confidence in managing childbirth. However, little is known about this combined approach. This study protocol evaluates the impact of an online childbirth preparation program, supported by prenatal yoga and grounded in self-efficacy theory, on fear of childbirth and self-efficacy in primiparous women.

Method: This parallel-group, randomized controlled trial will include 52 low-risk pregnant women between 28 and 32 weeks of gestation. All participants will receive a childbirth preparation education program, while the intervention group will additionally participate in a prenatal yoga program. Both intervention components are structured according to Bandura's self-efficacy theory, incorporating mastery experiences, vicarious learning, verbal encouragement, and regulation of physiological-emotional states. The six-week intervention will be delivered online. Data will be collected using a descriptive information form, the Wijma Delivery Expectancy/Experience Questionnaire, and the Childbirth Self-Efficacy Inventory. Measurements will be taken before randomization and after the intervention. **Results:** Group differences will be analyzed following the intervention, and findings will be reported according to the predefined hypotheses. It is expected that the intervention group will demonstrate significantly lower fear of childbirth and higher childbirth self-efficacy compared to the control group. Integrating prenatal yoga into childbirth education is anticipated to strengthen self-efficacy by aligning with Bandura's theoretical framework. **Conclusion:** This study protocol presents a theoretically grounded, prenatal yoga-supported, feasible, accessible, and innovative childbirth preparation education program. If proven effective, it may contribute to developing a more comprehensive and evidence-based approach in clinical practice by enhancing primiparous women's childbirth self-efficacy and coping skills.



Keywords: childbirth self-efficacy, fear of childbirth, prenatal yoga, childbirth preparation, self-efficacy theory, theory-based intervention

RISK FACTORS AND PREVALENCE OF OBSTETRIC ANAL SPHINCTER INJURIES IN QUATERNARY CARE CENTER IN SOUTHERN THAILAND: A CASE-CONTROL STUDY

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Problem statement: The study aimed to identify the prevalence and potential risk factors of obstetric anal sphincter injuries (OASIS) at Songklanagarind Hospital, a quaternary care center in Southern Thailand, from January 2006 to December 2022. Additionally, the study aimed to investigate maternal morbidities associated with severe perineal lacerations. **Methods:** This retrospective case-control study included pregnant women who delivered vaginally at Songklanagarind Hospital between 2006 and 2022. The dataset comprised women who delivered live birth singletons of any fetal presentations and gestational age. Patients were divided into two groups based on the severity of perineal laceration: the OASIS (case) group and the non-OASIS (control) group. The control group was selected using simple random sampling at a 1:4 case-to-control ratio within the same year of delivery. This sampling approach was designed to detect risk factors with an odds ratio (OR) of ≥ 2 , assuming 80% power and a significant level (alpha) of 0.05. Differences in categorical variables between the groups were evaluated using the chi-square test. Differences in continuous variables were evaluated using the t-test. Univariable and multivariable logistic regression analyses were performed to identify independent risk factors associated with OASIS. **Results:** Over the 17-year study period, 24,116 pregnant women delivered live singleton births vaginally at Songklanagarind Hospital. Among them, 141 women had OASIS, resulting in a prevalence of 0.58%. The control group comprised 564 pregnant women. Four variables were identified as statistically significant independent risk factors: parity (adjusted odds ratio (aOR), 4.32; 95% confidence interval (95%CI) 2.61-7.16, comparison between primiparous and multiparous women (reference)), route of delivery (aOR 4.42; 95%CI 2.06-9.46, comparison between forceps-assisted delivery and normal labor (reference)), longer second stage duration (aOR 2.16, 95%CI 1.41-3.31), and higher birthweight (aOR 3.41, 95%CI 2.01-5.81). Among women with OASIS, two reported fecal incontinence, one reported stress urinary incontinence, and one developed a rectovaginal fistula. **Conclusion:** The significant risk factors of OASIS are primiparity, forceps-assisted delivery, longer second stage duration and higher birthweight

DEVELOPMENT OF A GYNECOLOGICAL AND OBSTETRIC EXAMINATION GARMENT, ITS EFFECT ON PRIVACY PERCEPTION AND SATISFACTION: RANDOMIZED CONTROLLED TRIAL

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Problem statement: During gynecological examinations and the childbirth process, lack of attention to privacy and exposure of the perineal area may lead to feelings of shame in women. This study aimed to develop a gynecological and obstetric examination garment and to investigate the effect of the developed product on women's perception of body privacy and satisfaction levels. **Methods:** The design and development of the examination garment were carried out by the project team. A randomized controlled experimental study was designed. The study group was selected using the simple random sampling method. Data were collected in the delivery unit of a university hospital using the "Individual Information Form", "Body Privacy Scale in Gynecology and Obstetrics" and a "Patient Satisfaction Questionnaire." The intervention group (n=42) wore the newly designed examination garment, whereas the control group (n=42) received standard hospital care. The study received support from the TÜBİTAK-1005 project, and a "Utility Model" certificate has been obtained from the Turkish Patent Institute. **Results:** The final version of the garment was developed based on feedback from

patients and healthcare professionals. A garment designed for use in the delivery unit was produced in the form of pants, featuring two skirt-like panels at the front and back, with an open crotch area and a special side pocket for storing underwear. Participants in the intervention and control groups were homogeneous in terms of demographic and obstetric-gynecological characteristics. The intervention group scored significantly higher than the control group on the total score of the Body Privacy Scale as well as on the subscales of "General Privacy," "Rights and Privacy," and "Clinical Privacy" (p<0.05). No significant difference was found in the "Ethics and Privacy" subscale (p>0.05). Satisfaction levels were significantly higher in the intervention group compared to the control group (p<0.05). **Conclusion:** The newly developed gynecological and obstetric examination garment was effective in enhancing patients' sense of privacy and satisfaction. It is recommended that such garments be implemented in hospitals and healthcare facilities to improve the quality of care and increase patient satisfaction. The developed garment can be used in obstetrics and gynecology outpatient clinics to enhance patient privacy.

OTHER

POSTPARTUM REVERSIBLE VASOCONSTRICTION SYNDROME - A RARE BUT SEVERE CAUSE OF POSTPARTUM HEADACHE

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Postpartum reversible cerebral vasoconstriction syndrome (RCVS), also known as postpartum cerebral angiopathy, is an uncommon but potentially serious cause of thunderclap headache. Early diagnosis is challenging and there may be a misdiagnosis due to nonspecific clinical presentation and frequently normal initial imaging studies. We report a case of a primigravid woman in her early 30s who developed a sudden, severe holocranial headache on the 4th postpartum day, with no associated neurologic findings. Initial head CT, CTA, CTV and MRI showed no abnormalities. However, DSA revealed multifocal segmental narrowing of intracranial arteries, with complete reversibility after 3 months, consistent with reversible cerebral vasoconstriction syndrome. The patient was treated with oral nimodipine and experienced gradual symptom resolution. There was no complication associated, with no recurrence so far.

ORAL PRESENTATION 18:

GYNECOLOGY: CASE REPORT(STUDY) / TECHNOLOGICAL INNOVATIONS / OTHER / GYNECOLOGY

GYN CASE REPORT / STUDY

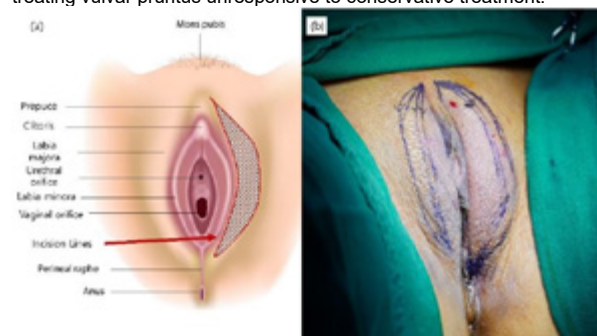
EFFECTIVENESS OF LABIAPLASTY MAJORA IN TREATING VULVAR PRURITUS UNRESPONSIVE TO CONSERVATIVE TREATMENT: A CASE SERIES

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Problem statement: This case series aimed to evaluate the efficacy and safety of labiaplasty majora using a crescent-shaped incision for treating vulvar pruritus unresponsive to conservative treatment.



Methods: Three patients with chronic vulvar pruritus underwent labiaplasty majora. Symptom severity and quality of life were assessed



preoperatively and postoperatively using a Numerical Rating Scale (NRS) and the Dermatology Life Quality Index (DLQI). Histopathological findings, complications, and recurrences were evaluated. **Results:** Preoperative NRS scores were 10, 9, and 7, which decreased to 1 in all patients postoperatively. The DLQI scores improved from 29, 11, and 16 to 0. No recurrence was observed during the follow-up period (238–725 days). Histopathological examination revealed syringoma, hyperkeratosis with mild inflammatory changes, and lymphocytic infiltration. Minor scarring was noted in two patients. **Conclusion:** Labiaplasty majora is a safe and potentially effective alternative for managing refractory

RUPTURED OVARIAN ECTOPIC PREGNANCY WITH HISTOLOGICAL EVIDENCE OF ASSOCIATED ENDOMETRIOSIS: A RARE CASE REPORT

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Problem statement: Ovarian ectopic pregnancy is an extremely rare and potentially life-threatening form of extrauterine gestation, representing 0.15–3% of all ectopic pregnancies. Its nonspecific clinical presentation often mimics more common conditions such as tubal ectopic pregnancy or ovarian cysts, leading to diagnostic delays and frequent misdiagnosis. Transvaginal ultrasonography findings are frequently equivocal, and definitive diagnosis requires intraoperative assessment and histopathological confirmation. This condition carries a high risk of haemorrhagic shock and may threaten fertility, making early recognition and fertility-preserving surgery decisive. **Methods:** A 26-year-old nulliparous woman (G0P0) with no relevant medical history presented with 10 days of diffuse abdominal pain, predominantly in the right hypochondrium, associated with diarrhoea and vomiting. Laboratory evaluation revealed elevated inflammatory markers, and the serum beta-hCG test was positive—although preoperative serum levels of beta-hCG were unavailable; later results confirmed a level of 2275 U/L. Transvaginal ultrasound showed a normal uterus with trilaminar endometrium, a heterogeneous right adnexal mass (51×42×39 mm), and moderate free pelvic fluid. Abdominopelvic computed tomography (CT) demonstrated high-density fluid consistent with hemoperitoneum, without active bleeding. With suspicion of ruptured ectopic pregnancy, exploratory laparotomy was performed. **Results:** Approximately 200 mL of hemoperitoneum was identified intraoperatively. The right ovary was ruptured, with periovarian haemorrhagic material and active bleeding, while both fallopian tubes and utero-ovarian ligaments appeared normal. A partial right oophorectomy was performed to preserve fertility, followed by pelvic toilette. The postoperative course was favourable: the patient was discharged on day 4 with beta-hCG of 343 U/L, which decreased to 28.7 U/L at 14-day follow-up. Histopathology confirmed ovarian ectopic pregnancy fulfilling Spiegelberg's criteria and revealed associated endometriosis, despite no prior symptoms suggestive of the disease. **Conclusion:** Ovarian ectopic pregnancy should be considered in reproductive-age women presenting with abdominal pain, positive beta-hCG, and adnexal mass. While clinical and imaging findings may suggest the diagnosis, confirmation requires both intraoperative evaluation and histopathological criteria. This case also highlights the coexistence of endometriosis, reinforcing its possible role in the pathogenesis of ectopic implantation. Early recognition and timely surgical management are critical to reduce morbidity and optimize fertility preservation.

Disclosure of Interest: None declared.

ASYMPTOMATIC MIGRATION OF RING PESSARY INTO RECTUM WITH DUAL RECTOVAGINAL FISTULAE

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Background: Pessaries are widely used for conservative management of advanced pelvic organ prolapse, with complications most often related to local erosion or infection. Fistula formation is uncommon, with

an estimated prevalence of up to 3%, and migration into the rectum with dual tract formation is exceedingly rare. Regular follow-up is essential to avoid such sequelae, although the clinical course may be surprisingly silent. Although conservative management is effective in many cases, surgical intervention - including fistula repair and, when necessary, diversion ostomies - remains indicated for large, chronic, recurrent, or otherwise complicated cases. **Case Presentation:** A 71-year-old woman with pelvic organ prolapse, managed for five years with a ring pessary, was awaiting surgical correction for stage IV cystocele. She was lost to follow-up for two years. Subsequent examination revealed partial migration of the pessary into the rectum. Palpation revealed part of the ring in the vagina and another segment in the rectum, and traction from either side failed to achieve its removal. The pessary had gradually eroded, creating two rectovaginal fistulous tracts, one on each side of the ring. Both tracts had completely epithelialised around the pessary, preventing direct communication between the vagina and rectum. The patient was asymptomatic, had no abnormal discharge, altered bowel habits or faecal leakage, and reported only discomfort from the persistent prolapse. A multidisciplinary surgical strategy was undertaken in collaboration with the gynaecology and general surgery teams. The pessary was cut for removal, followed by a total vaginal hysterectomy, classical anterior colporrhaphy, and McCall's culdoplasty. The fistulous tracts were then excised, vaginal mucosal flaps were advanced, and a laparoscopic loop sigmoid colostomy was performed to protect the repair. The procedure was uneventful, with no intraoperative complications. **Conclusions:** This case illustrates that long-standing pessary use can result in rare but significant complications, particularly when appropriate follow-up is not undertaken. Complete migration into the rectum with formation of two epithelialised rectovaginal tracts may remain clinically silent, potentially delaying diagnosis. Management requires careful preoperative planning to ensure optimal anatomical and functional outcomes.

ECTOPIC ADRENOCORTICAL TISSUE IN PARA-OVARIAN TISSUE

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Background: Ectopic adrenocortical tissue (EACT) refers to the presence of adrenal cortical cells in aberrant anatomical sites, most commonly identified incidentally. While relatively frequent in neonates and young males—particularly within the genitourinary tract—EACT is exceptionally rare in adult females. Its embryologic origin is attributed to the migration of adrenocortical precursors with the developing gonads. Although typically asymptomatic, EACT warrants recognition due to its potential for hormone secretion or neoplastic transformation. **Case:** We present the case of a 76-year-old woman, Gravida 2 Para 2 (2002), who consulted for a three-month history of right hypogastric pain radiating to the back and right lower extremity. Transvaginal ultrasonography revealed a unilocular right ovarian cyst with anechoic content, with no solid components or papillary projections. The patient subsequently underwent exploratory laparotomy with total abdominal hysterectomy and bilateral salpingo-oophorectomy. Gross examination revealed multiple intramural and subserosal leiomyomas and a smooth-walled ovarian cyst. Histopathological analysis confirmed a benign ovarian cyst and uterine leiomyomas. Notably, an incidental focus of ectopic adrenocortical tissue was identified in the para-ovarian region. The patient exhibited no clinical or biochemical features suggestive of hormone hypersecretion. Her postoperative recovery was unremarkable.

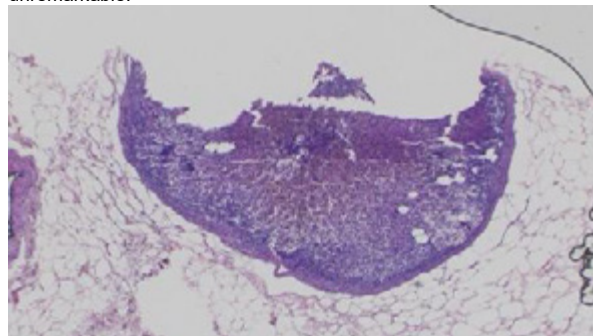


Figure 1. Photomicrograph showing the ectopic adrenocortical tissue in para-ovarian tissue.



Conclusion: This case underscores a rare incidental finding of ectopic adrenocortical tissue within the para-ovarian region of an elderly female. Although such tissue is usually asymptomatic, it may possess functional or neoplastic potential. Accurate histopathological identification is essential to prevent diagnostic confusion, particularly in the context of adnexal masses. Awareness of this rare entity facilitates appropriate documentation, surgical management, and surveillance when clinically indicated.

A RARE CASE OF ECTOPIC COMPLETE MOLAR PREGNANCY

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Background: While ectopic and molar pregnancies are relatively common individually, their coexistence as ectopic molar pregnancies are extremely rare, with an estimated incidence of 1.5 per million pregnancies. Clinical and ultrasonographic findings often resemble typical non-molar ectopic pregnancies, making preoperative diagnosis challenging. Definitive diagnosis is established through histopathologic examination, which enables appropriate post-treatment surveillance for potential persistence or malignant transformation. **Case:** We report the first documented case of ectopic molar pregnancy in the Philippines and one of few reported globally. A 25-year-old primigravida woman presented with amenorrhea, hypogastric pain, a positive pregnancy test, and hemodynamic instability. Ultrasonography revealed a left adnexal mass and massive hemoperitoneum. She was diagnosed with a ruptured tubal pregnancy and underwent exploratory laparotomy with left salpingectomy. Histopathologic examination of the excised fallopian tube showed features consistent with ruptured tubal pregnancy. The products of conception exhibited hydropic villi with atypical trophoblastic proliferation, raising suspicion for molar pregnancy. Immunohistochemical staining with p57 demonstrated absence of expression in villous cytotrophoblasts and stromal cells, confirming the diagnosis of a complete hydatidiform mole. Serial beta-human chorionic gonadotropin (β -hCG) levels were monitored weekly until nonpregnant levels were achieved, followed by monthly surveillance for six months. No evidence of persistent disease or malignant transformation was observed during follow-up. **Conclusions:** This case report underscores the critical role of routine histopathologic examination in ectopic pregnancies as molar pregnancies, though very rare, may occur in extrauterine sites. Accurate diagnosis is essential to guide subsequent follow-up and reduce risk of complications. Comprehensive patient counseling, close β -hCG surveillance, and strict adherence to contraception during the monitoring period are key components of post-treatment care.

GYN TECHNOLOGICAL INNOVATIONS

LAPAROSCOPIC ETHANOL SCLEROTHERAPY AMONG WOMEN WITH INFERTILITY AND ENDOMETRIOMA: A CASE SERIES IN A LOW RESOURCE SETTING

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Problem Statement: Pelvic endometriosis with Endometrioma, is associated with infertility, with 30–50% of patients experiencing reduced fecundity. Laparoscopic oophorocystectomy remains the standard of care but risks inadvertent removal of healthy ovarian tissue, reducing ovarian reserve. Laparoscopic ethanol sclerotherapy offers a fertility-preserving alternative by inducing fibrosis of the endometrioma lining, while sparing ovarian follicles. **Methods:** Three patients with endometriomas and infertility undergoing ovulation induction underwent laparoscopic drainage with ethanol sclerotherapy. **Case 1:** A 36-year-old with bilateral endometriomas (bilobed 5 x 4 cm, and 6 x 5 cm). After drainage and irrigation, 20 mL of 95% ethanol was instilled into each cyst via a 14F Foley catheter, retained for 20 minutes, and aspirated. **Case 2:** A 30-year-old with a 9 x 7 cm left endometrioma, which ruptured intraoperatively on mobilization. A 24F Foley catheter was inserted through the widened incision, with 40 mL of ethanol instilled and retained for 20 minutes. **Case 3:** A 37-year-old with a 6 x 6 cm right endometrioma. Intraoperative ultrasound guided cyst mapping and catheter placement. Ethanol was instilled through a cut tip 14F foley catheter to secure placement. **Results:** Ethanol sclerotherapy was successfully performed in all cases without intraoperative complications

or ethanol spillage. Several technical considerations were identified: Endometrioma size, volume, and lobules influence drainage and catheter placement. Secondary trocar positioning should be adapted to incision site and adequate drainage. Adhesions increase rupture risk during mobilization. Catheter size should match incision width; larger catheters preferable for ruptured cysts. Instrument choice impacts incision control—monopolar spatula may minimize incision compared to L-hook; while flexible suction catheters drain bilobed cysts more effectively than rigid cannula. Intraoperative ultrasound improved accuracy of instillation. **Conclusion:** Large endometriomas (≥ 4 cm) in infertile women with limited resources for assisted reproductive technology poses a management dilemma: cystectomy can reduce ovarian reserve, while conservative approach affects ovarian function, delaying time to pregnancy. Laparoscopic ethanol sclerotherapy is a practical, tissue-sparing alternative to cystectomy. This technique is feasible, effective, and safe using readily available laparoscopic instruments, catheter, and ultrasound. Further prospective studies are needed to validate long-term reproductive outcomes, including recurrence, ovulation induction response, and pregnancy rates.

A METHODOLOGICAL APPROACH TO ADNEXAL TORSION: DR. SACHIN'S CRITERIA

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Background: Introduction Adnexal torsion, the sixth most common gynaecological emergency, occurs when both the ovary and fallopian tube twist along the vascular pedicle, limiting venous outflow and arterial flow. It affects approximately 2–15% of women in their reproductive years. Early detection raises the possibility of preserving the ovary and avoiding potentially fatal consequences. There are no clear rules or surgical procedures for adnexal torsion management at present; so, their management is subjective, and no comparison of the several surgical methods applied for this condition can be made. **Materials and methods:** 44 instances with adnexal torsion were operated on and prospectively monitored for many characteristics, including age, common side involvement, USG and MRI abnormalities, cyst size, number of turns, pregnancy after ligament plication, and recurrence. The criterion was established by Dr. Sachin Naiknaware.

1. Do detorsion and ovarian cystectomy if adnexal torsion and ovarian cyst are ≤ 5 cm.
2. If the utero-ovarian ligament length is equal to more than 5 cm, then do utero-ovarian ligament plication.
3. In situations of recurrent torsion and in cases of torsion in premenarcheal girls, the "hot dog in bun" technique is used to plicate the utero-ovarian ligament.
4. If PCOD is the source of torsion, do detorsion plus utero-ovarian ligament plication plus PCOD drilling and produce ovarian suppression for three to six months.

Findings: By removing the subjectivity that is already prevalent, Dr Sachin's criteria will help to standardize the management approach for adnexal torsion care. It will stop the recurrence; cases may be objectively compared, and the therapy technique for adnexal torsion will be standardized. **Conclusion:** In summary, Dr. Sachin's criteria will increase uniformity in torsion therapy by reducing subjectivity in the treatment of adnexal torsion. Using this criterion by every working surgeon will assist in validating it and getting general acceptability.

MECHANICAL ENUCLEATION OF FIGO TYPE 1 MYOMAS: OPTIMIZING FERTILITY AND BLEEDING OUTCOMES

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Problem Statement: Submucous leiomyomas are a frequently encountered condition in gynecologic practice, often presenting as heavy menstrual bleeding, infertility, and recurrent pregnancy loss. In women with infertility, submucous myomas have been associated with reduced implantation and live birth rates, as well as an increased risk of miscarriage. Hysteroscopic myomectomy remains the standard minimally invasive treatment for submucous myomas; however, the procedure carries a reported 9.1% incidence of intrauterine adhesion (IUA) formation. To address this concern, various modifications in hysteroscopic myomectomy techniques have been developed to minimize the risk of postoperative IUA. **Methods:** We report the case of a 28-year-old nulligravida with abnormal uterine bleeding and primary



infertility, found to have multiple uterine myomas, the largest being a FIGO type 1 submucosal myoma at the posterior wall measuring 3.58 × 2.87 × 2.69 cm. The patient received three doses of gonadotropin-releasing hormone agonist (GnRH 3.75 mg intramuscularly), resulting in a reduction of the myoma size to 1.50 × 1.27 × 0.96 cm. She subsequently underwent hysteroscopic en bloc enucleation. The myoma–myometrium interface was identified, and careful cold mechanical dissection was performed using a Collins knife to progressively separate and detach connective bridges between the myoma and adjacent myometrium. No electrosurgery was used to avoid thermal damage to the endometrium and minimize the risk of intrauterine adhesions. Continuous cold dissection allowed the myoma to progressively protrude into the uterine cavity, converting the lesion from FIGO type 1 to type 0, thereby facilitating complete enucleation. Final resection was achieved with the classic slicing technique using a 45° loop electrode. **Results:** Postoperative ultrasound at three months confirmed complete resection with preservation of the surrounding myometrium. This case underscores the value of preoperative GnRH agonist therapy combined with cold mechanical hysteroscopic enucleation as a fertility-preserving strategy in the management of submucosal myomas. **Conclusion:** Administration of GnRH agonist effectively reduced the size of the myoma, thereby facilitating mechanical enucleation of the intramural component without the need for electrosurgery. Limiting the extent of dissection minimized the endometrial trauma and reduced the risk of intrauterine adhesion formation, ultimately preserving future fertility potential.

AESTHETIC GYNECOLOGY AS AN ADJUNCT TO REPRODUCTIVE MEDICINE: EVIDENCE, FUNCTIONAL BENEFITS, AND FUTURE PERSPECTIVES

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Background: Women's reproductive health is now understood more as a continuum of fertility, gynecologic well-being, and sexual quality of life. Aesthetic gynecology has been previously regarded as purely cosmetic but now offers functional interventions such as vaginal laser, platelet-rich plasma (PRP), and radiofrequency therapy. These treatments have been promising to improve pelvic floor function, vaginal atrophy, and sexual health—all potentially in some way impacting reproductive outcomes. **Objective:** This abstract will determine if the utilization of aesthetic gynecology treatments, used responsibly, would be able to benefit the overall reproductive health of women, particularly fertility, treatment compliance, and quality of life. **Methods:** A narrative overview of the literature was performed, including publications between 2010–2025, indexed in PubMed and Scopus. Clinical trials, observational studies, and meta-analyses of vaginal regenerative therapies and aesthetic treatments were included for sexual function, vaginal health, fertility treatment compliance, and psychosocial effects. **Results:** There is evidence that vaginal laser and PRP therapy significantly improves symptoms of genitourinary syndrome of menopause (GSM), vaginal laxity, and sexual function scores. Improved self-esteem and sexual health have been linked with higher compliance to fertility treatment and fewer discontinuations. While direct evidence is sparse linking aesthetic gynecology with conception rates, initial studies suggest a positive trend in the restoration of vaginal health indicators that may precondition reproductive interventions. Controversies regarding standardization, long-term safety, and approval (e.g., FDA warnings for energy-based devices) persist. **Conclusion:** Aesthetic gynecology is not cosmetic enhancement alone; it is potentially an add-on to reproductive medicine as a way of treating functional, sexual, and psychological dimensions of women's well-being. More high-quality evidence is needed to delineate its role in fertility and offer standard guidelines. With inclusion of evidence-based aesthetic gynecology in reproductive care, practitioners are able to accommodate women's holistic well-being and reproductive interests more effectively.

GYN OTHER

MODE OF DELIVERY AND PERINEAL TRAUMA IN WOMEN WITH VULVAL DISEASE: IMPACT ON HEALING, ONCOLOGICAL SAFETY AND LONG TERM-OUTCOMES

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Problem Statement: Mode of delivery in women with Vulval disease requires careful considerations. Severe Dermatoses such as Lichen sclerosus and Lichen planus and pre cancerous conditions like VIN (under surveillance) and women following the ablative or laser therapy are at increased risk of perineal trauma related complications. At present there are no established guidelines to support decision making and evidence remains limited regarding healing, recurrence, on oncological safety following childbirth in this population. **Methods:** We performed a narrative review of published literature and observational data from the specialist vulva clinics. Outcome assessed included the mode of delivery, episiotomy, perineal tears, wound healing, recurrence or progression of disease and long term functional or oncological outcomes. **RESULTS:** Severe Vulval Dermatoses: Vaginal birth is generally possible; However perineal trauma or episiotomy may trigger Koebnerisation, worsen scarring, increased risk of adhesions, fissures and long term sexual dysfunction. Caesarean section may be considered in extensive disease or where severe introital narrowing is present. VIN under Surveillance: Although VIN is intraepithelial, occult invasion may exist. Trauma from Episiotomy or tears risks seeding malignant cells into deeper structures and scarring can mask recurrence. Post-Laser or ablative therapy for VIN: Scar tissue reduces the elasticity and impairs vascularity, predisposing to wound breakdown or poor healing after perineal trauma. Delivery planning should account for the fragility of previously treated areas. Invasive Vulval Carcinoma: Vaginal delivery through malignant tissue is contraindicated; Caesarean section is recommended to avoid tumour disruption and spread. Overall, women with vulval disease undergoing vaginal delivery are at higher risk of wound complications and recurrent disease compared with unaffected women. **Conclusion:** Women with vulval disease require individualised delivery planning. While vaginal birth remains feasible in many, risks of perineal Trauma, including poor healing, scarring and malignant potential must be carefully balanced. Elective Caesarean section is appropriate in severe dermatoses, VIN with uncertain margins, post Laser therapy with scarring or invasive disease. MDT between obstetrics and Vulva specialist is essential to optimise maternal and neonatal outcome. Further studies are needed as no specific guidance exists currently to inform practice.

The authors declare no conflict of interest

GYNECOLOGY

RISK FACTORS OF RECURRENCE AFTER LAPAROSCOPIC ADENOMYOMECTOMY

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Problem statement: To analyze the risk factors of recurrence after laparoscopic adenomyomectomy, so as to provide theoretical basis for the preoperative evaluation and the selection of surgical methods for patients with adenomyosis. **Methods:** 68 patients underwent laparoscopic adenomyomectomy in our hospital, who were selected as research subjects. Laparoscopic scissors were used to remove adenomyosis lesions and intrauterine balloon was used to guide the endometrial site. We collected the data about the age, preoperative VAS score of dysmenorrhea, menstrual volume, preoperative and postoperative GnRH-α treatment, preoperative uterine volume, preoperative serum CA125 value, adenomyosis types (diffuse or limited type), and being combined with endometriosis or not. We followed up the patients regularly to analyze the relationship between these factors and postoperative recurrence. **Results:** The average follow-up time was 27.43 months. The recurrence rates at 12 months, 24 months and 36 months after operation were 8.82%, 14.71% and 17.65%, respectively. Multivariate logistic regression analysis showed that preoperative VAS score of dysmenorrhea (OR=6.914, 95%CI 1.291-37.019, P=0.024) and uterine volume (OR=8.8834, 95%CI 1.750-45.085, P=0.008) are the independent risk factors for postoperative recurrence. **Conclusion:** The high preoperative VAS score of dysmenorrhea (≥7 scores) and large uterine volume (≥200 cm³) will increase the risk of postoperative



recurrence, so it is necessary to perform complete evaluation and select the appropriate operation method before operation to reduce the recurrence.

NAVIGATING MENSTRUAL STIGMA, CONCEALMENT AND RESISTANCE: A QUALITATIVE STUDY OF LIVED EXPERIENCES

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Problem statement: Menstruation is a natural biological process, yet it is shaped by stigma, silence, and societal norms that contribute to feelings of shame and concealment. These pressures can influence how women manage menstruation, discuss symptoms such as menorrhagia or dysmenorrhea, and seek medical care. While menstrual stigma has been documented, little is known about how concealment and openness are enacted in daily life. **Methods:** We conducted a qualitative study using in-depth narrative interviews with 33 Dutch women and people who menstruate. Interviews explored experiences, perceptions, and practices surrounding menstruation. Data were thematically analyzed to identify patterns in how societal norms, stigma, and menstrual etiquette shape menstrual management. **Results:** Participants described menstruation as something that should be hidden physically, verbally, and emotionally. Social expectations were reinforced through unspoken rules and interactions, leading to fears of visible leakage, embarrassment when carrying menstrual products, and reluctance to disclose symptoms such as heavy bleeding or pain. These dynamics often contributed to shame and could hinder openness in healthcare encounters. At the same time, some participants described deliberate acts of openness—sharing experiences or openly discussing symptoms—as forms of resistance to the concealment imperative. This tension between concealment and openness was central to how menstruation was managed in daily life. **Conclusion:** The study highlights a central controversy in menstruation: while societal norms and stigma continue to enforce concealment, individuals increasingly engage in acts of openness and resistance. This tension reveals how menstruation remains caught between silence and visibility. Recognizing and addressing these contested norms is essential for shifting cultural attitudes and fostering more open conversations about menstruation.



IVF OTHER

ACCEPTANCE AND PERSPECTIVE AND ITS ASSOCIATED FACTORS TOWARD SURROGACY AMONG OBSTETRICIANS AND GYNECOLOGISTS IN THE POGS ACCREDITED INSTITUTIONS IN METRO MANILA, PHILIPPINES: A CROSS SECTIONAL STUDYLorielee Cruz¹, Lylah Reyes¹, Romerico Torres¹, Anna Belen Alensuela¹

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Problem statement: Infertility affects approximately 17.5% of the global population, with one in ten Filipinos experiencing it. While Assisted REPRODUCTIVE Technologies (ART) such as surrogacy offer solutions, these raise ethical, legal, and religious concerns—especially in the Philippines, where no specific laws exist to regulate surrogacy. **Methods:** A cross-sectional analytical study was conducted using a self-administered, validated questionnaire based on the Gestational Surrogacy Attitudes Scale (GSAS). Stratified random sampling was employed among OB-GYN residents, fellows, and consultants from eight selected POGS-accredited institutions. Demographic data, perspectives, and acceptance levels on psychosocial, ethical, financial, and religious aspects of surrogacy were collected and analyzed. **Results:** A total of 359 respondents participated, predominantly female (95.3%), Roman Catholic (83.8%), and aged between 25 and 87 years (mean age: 42). Although a greater number of OB-GYNs had negative (N=224) than positive (N=135) acceptance towards surrogacy, awareness was significantly associated with favorable perception (p<0.001). Age was the only demographic factor significantly influencing acceptance; older OB-GYNs were more likely to have negative views. Religious affiliation, particularly among Protestants and other Christians, was associated with lower odds of positive acceptance (adjusted ORs: 0.68 and 0.15, respectively). Perception was generally altruistic rather than commercial, and many respondents did not align their views with their religion's stance. **Conclusion:** While overall acceptance of surrogacy among OB-GYNs in Metro Manila remains mixed, positive perceptions are evident, especially among younger, female, Catholic, and married practitioners. Religion had less influence on perception than social and professional factors. These findings underscore the need for comprehensive education and clear ethical and legal frameworks to guide surrogacy practices in the Philippines.

HEALTH AWARENESS AND 24-HOUR MOVEMENT BEHAVIOUR: CONTROVERSIAL PREDICTORS OF QUALITY OF LIFE IN INFERTILE WOMENViktoria Premusz^{1,2,3,4}, Eszter Skriba⁴, Gabor Szmatona⁴, Zoltan Tandor⁴, Alexandra Makai^{1,2}, Jozsef Bodis^{3,4,5}, Kalman Kovacs^{3,4,5}, Akos Varnagy^{3,5}¹Institute of Physiotherapy and Sport Sciences, Faculty of Health Sciences, University of Pecs, Pecs, Hungary²Physical Activity Research Group, Szentgothai Research Centre, University of Pecs, Pecs, Hungary³National Laboratory on Human Reproduction, University of Pecs, Pecs, Hungary⁴Doctoral School of Health Sciences, Faculty of Health Sciences, University of Pecs, Pecs, Hungary⁵Department of Obstetrics and Gynaecology, Clinical Centre, University of Pecs, Pecs, Hungary

Problem statement: Infertility is accompanied by psychosocial burdens and reduced quality of life, often comparable to chronic disease. Lifestyle and health awareness factors are increasingly emphasised in clinical practice, but their exact role remains debated—particularly the paradoxical effects of fertility awareness. **Methods:** A cross-sectional study was conducted in four Hungarian fertility centres among 361 women (aged 18–45 years) with diagnosed infertility. Validated questionnaires assessed health literacy (BRIEF), fertility awareness (FAS), physical activity (GPAQ-H), sleep quality (AIS), and quality of life (WHOQOL-BREF, FertiQoL). Correlations and generalised linear models were applied (p<0.05). (clinicaltrials.gov NCT06795568). **Results:** Although 77.8% of participants reported adequate fertility knowledge, objective awareness scores reached only 48.5% of the maximum. Fertility awareness correlated positively with recreational physical activity

(p=0.156; p=0.003). Recreational activity showed positive associations with all quality-of-life domains, e.g., psychological well-being (r=0.177; p=0.002). Sedentary time correlated negatively with psychological well-being (r=-0.109; p=0.037) and social relationships (r=-0.118; p=0.024). Sleep duration correlated positively with FertiQoL (r=0.192; p<0.001), while sleep problems correlated negatively (r=-0.339; p<0.001). Predictors of higher infertility-specific quality of life included higher health literacy (p=0.041), better sleep quality (p<0.001), and lower sedentary time (p=0.038). Unexpectedly, greater fertility awareness predicted poorer outcomes (p=0.017). **Conclusion:** Health literacy, sleep, and movement behaviours are crucial for quality of life in infertility care. Yet, higher fertility awareness may paradoxically worsen outcomes—highlighting a clinical controversy and the need for carefully balanced, multi-component interventions.

Disclosure of Interest: The research was supported by the NKFI FK-147404 and RRF-2.3.1-21-2022-00012 projects. The authors have no conflict to declare.

REPRODUCTIVE GENETICS

A CLINICAL STUDY TO UNDERSTAND THE EPIGENETIC STATUS (DNA METHYLATION) OF VARIOUS GENES INVOLVED IN THE PATHOGENESIS OF POLYCYSTIC OVARY SYNDROMELekha Saha¹, Kajal Rawat¹, Pradip Kumar Saha², Rama Walia³¹Pharmacology, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, INDIA, Chandigarh, India²Obstetrics and Gynaecology, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, INDIA, Chandigarh, India³Endocrinology, Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, INDIA, Chandigarh, India

Problem Statement: Polycystic ovary syndrome (PCOS) is a complex endocrine and reproductive disorder. It affects about 8 to 13% of reproductive aged women globally, with an increased prevalence to more than 25% in severely obese women. PCOS has a highly complex etiology influenced by both genetic and environmental factors via epigenetic modifications. Epigenetic changes are changes in gene expression without the change in underlying DNA code and structure. These are the heritable changes in gene activity and expression that occur without alteration in DNA sequence. Altered DNA methylation in the peripheral and umbilical cord blood, as well as in ovarian, adipose tissue, granulosa cells and skeletal muscle of women with PCOS, suggesting the involvement of DNA methylation in the PCOS pathogenesis. Therefore, this study aimed to examine the methylation status of several genes associated with pathogenesis of PCOD. **Methods:** Thirty women (30) diagnosed with PCOS were assessed for phenotyping, hormonal parameters, metabolic parameters and DNA methylation status. Hormonal parameters like testosterone, progesterone, LH and FSH were measure by ELISA kits. Metabolic parameters like fasting blood glucose, HbA1C, insulin, total cholesterol, HDL, LDL etc were also measured. Gene specific % methylation levels were estimated using MethySYBR technique based on methylation specific quantitative PCR. **Results:** Out of 30 patients, 11 were nonobese and 19 were obese with an average age of 22 years. The testosterone and progesterone levels were significantly high in the obese PCOS women as compare to control women. The LH/FSH ratio was significantly high in the PCOS women. Total cholesterol was significantly high in the PCOS women as compare to control. Other metabolic parameters were altered in the PCOS women. Genes involved in DNA methylation maintenance (TET1 and UHRF1), insulin signaling and metabolic functions (IGFBPL1 IRS2, FOXO1 and PTEN), regulation of cellular proliferation (CDKN2B and CDKN1A), and reproductive function and hormone signaling (SF1) showed altered methylation. **Conclusion:** This study highlights the role of epigenetic modifications in the pathogenesis of PCOS, with novel methylation changes observed in key genes involved in insulin signaling, cell cycle control, and steroidogenesis.



EFFECT OF AUTOLOGOUS PLATELET-RICH PLASMA INTRAUTERINE INFUSION ON CLINICAL PREGNANCY RATE AND LIVE BIRTH RATE AMONG WOMEN WITH IMPLANTATION FAILURE: A SINGLE CENTER STUDY

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Problem Statement: Successful endometrial implantation depends on the coordinated interaction between a viable embryo and a receptive endometrium. Implantation failure remains a persistent challenge in assisted reproductive technology (ART). Over the years, several interventions have been explored to overcome this issue, including the use of autologous intrauterine platelet-rich plasma (PRP). PRP, which is enriched with growth factors and cytokines, has emerged as a promising adjunctive therapy in ART, with growing evidence supporting its role in improving endometrial receptivity and implantation outcomes. However, its effectiveness remains underexplored, particularly among Southeast Asian populations, including Filipino women. **Methods:** A retrospective cohort study was conducted at the Philippine Center for Assisted Reproduction Inc. from January 2022 to April 2024. The study included 30 women with one or more implantation failures, divided into two groups: those who received intrauterine PRP infusion (n=15) and those who did not (n=15). Baseline characteristics, gynecologic and medical conditions, IVF-related variables, and reproductive outcomes were collected and analyzed using chi-square and Fisher's exact tests, with a significance level set at 5%. **Results:** Among all participants, 33.33% achieved clinical pregnancy, and 20.00% had live births. A significantly higher proportion of live births was observed in the PRP group compared to the control group (p = 0.05). No significant association was found between PRP use and clinical pregnancy or timing of pregnancy termination. Other demographic and clinical variables, including age, number of implantation failures, embryo grading, and medical conditions, showed no significant differences between groups. **Conclusion:** Autologous intrauterine platelet-rich plasma (PRP) infusion significantly improved live birth rates among women with previous implantation failure undergoing assisted reproductive technology. No significant associations were found between PRP use and clinical pregnancy, secondary infertility factors or pregnancy termination outcomes. These findings suggest that PRP may be a promising adjunctive treatment in enhancing ART success, particularly in resource-limited and diverse populations such as Filipino women. This treatment could help lower the cost of ART for these women, which is particularly significant in developing countries.

CASE REPORT/STUDY

OVARIAN REJUVENATION WITH PLATELET-RICH PLASMA IN ASSISTED REPRODUCTION: A CASE STUDY

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Problem Statement: Infertility remains a global health concern, particularly for women with poor ovarian response (POR), defined by low oocyte yield despite controlled ovarian stimulation. POR is frequently associated with diminished ovarian reserve and advanced maternal age, limiting the success of assisted reproductive technologies (ART). Intraovarian platelet-rich plasma (PRP), an autologous product enriched with growth factors and cytokines, has been proposed as a strategy to restore ovarian function. Evidence is still limited; this case study explores the impact of PRP on in vitro fertilization (IVF) outcomes. **Methods:** One woman with POR undergoing IVF was evaluated before and after intraovarian PRP administration. PRP was prepared from autologous venous blood using two centrifugation steps: a "soft spin" to separate plasma containing platelets, followed by a "hard spin" to concentrate platelets, with the lower third collected as PRP. A total of 1 mL was infused transvaginally into the ovarian cortex during the follicular phase (cycle days 5–12). **Results:** Platelet concentration rose from 2.59×10^3 to 2.85×10^4 . After PRP, hormonal markers improved: AMH rose from 0.33 to 1.03 ng/mL, FSH decreased from 6.49 to 5.8 mIU/mL, LH from 4.37 to 1.9 mIU/mL, and estradiol from 136 to 68.9

pg/mL. Follicular count increased from 3 to 5, with 4 oocytes retrieved compared to 3 previously. All retrieved oocytes matured to MII (4 vs. 2 pre-PRP), while MI and P1 oocytes were absent. Fertilization rose from 2 to 4, maintaining a 100% rate. On day 2, embryo quality improved from 4A and 4C to 4A, 5A, 6A, and 5B, increasing the quality rate from 50% to 100%. By day 5, development advanced to BL5AA, BL4BC, BLBC (day 6), and one arrested embryo, reaching a quality rate of 25%. All embryos were cryopreserved. No adverse effects occurred. **Conclusion:** Intraovarian PRP demonstrated hormonal improvement, enhanced follicular response, higher oocyte maturity, and better embryo quality in this POR case. These findings suggest PRP may be a feasible, well-tolerated adjunct in ART, though larger controlled trials are needed to confirm efficacy and safety.

Nothing to disclose.

UTERINE PATHOPHYSIOLOGY

HIGHER RISK OF VILLOUS MATURATION AND VASCULAR PLACENTAL DISORDERS LINKED TO ALTERED IMMUNE RESPONSE IN TERM DECIDUA AFTER ENDOMETRIOSIS-RELATED INFERTILITY: IMPACT OF SURGERY PRIOR TO ART TREATMENT

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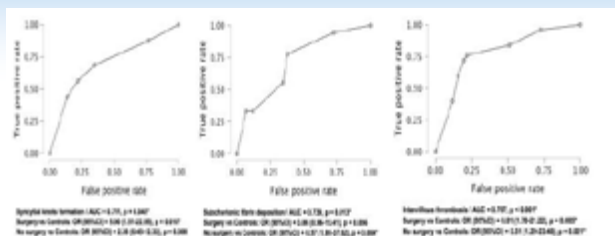
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Problem statement: Endometriosis is linked to altered endometrial immune reactions, contributing to infertility or perinatal complications. CD56-positive uterine natural killer (NK) cells have crucial role in placentation. Study explores impact of surgery prior to assisted reproductive technology (ART) treatment on placental histopathology in women with endometriosis-related infertility, according to the CD56-positive NK cell count in term decidua.

Methods: Case-control study examined term placentas from women with endometriosis-related infertility and healthy controls. Placentas were prepared and analyzed following standardized protocol, by senior perinatal pathologist blinded to the assigned group, according to Amsterdam Placental Workshop Group Consensus. Immunohistochemical analysis of CD56-positive NK cells in basal decidua was conducted using primary CD56 antibody, following standardized protocol. CD56-positive cells were quantified as the total cell count per 1mm² of basal decidua. **Results:** Placentas of 22 endometriosis patients with surgery, 14 of patients without surgery and 40 of healthy controls were included. Increased syncytial knotting (40.9% vs. 21.4% vs. 10%, p = 0.017) and intervillous thrombosis (54.5% vs. 50% vs. 15%, p = 0.002) were frequent in patients with surgery, while subchorionic fibrin depositions were higher in patients without surgery compared to other groups (50% vs. 31.8% vs. 10%, p = 0.006). The lowest median of CD56-positive NK cell count in term decidua was found in patients with prior surgery compared to other groups [16.8, IQR 28 (25th to 75th percentile, 0-28), vs. 20.6 (38.5, 3-41.5), vs. 24.5 (40.7, 3.5-44.25)], without significant differences. Higher risk of increased syncytial knotting was found in women with surgery (AUC = 0.811, p = 0.010). Intervillous thrombosis risk was elevated in both surgical and non-surgical endometriosis groups (AUC = 0.787, p = 0.001), while subchorionic fibrin deposition risk was increased in the non-surgical group (AUC = 0.739, p = 0.013), adjusted for reduced CD56 NK cell count (Figure 1). **Conclusion:** Findings suggest altered innate immunity in endometriosis-related infertility, reflected by reduced CD56-positive NK cells. The lowest NK cell counts in women with prior endometriosis surgery may indicate higher disease severity and contribute to increased risks of villous maturation and vascular malperfusion placental disorders in ART pregnancies.

The authors declare no conflicts of interest.





MODERATED E-POSTER SESSION 02: FETOMATERNAL MEDICINE – LABOR AND DELIVERY

PREVALENCE AND RISK FACTORS OF POSTOPERATIVE COMPLICATIONS FOLLOWING CESAREAN SECTION AT RAMATHIBODI HOSPITAL

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Background: Cesarean section (CS) is one of the most commonly performed surgical procedures worldwide, with rates continuing to rise. Understanding postoperative complications and their associated risk factors is essential for improving the quality of maternal care and reducing adverse outcomes. **Objective:** To investigate the prevalence and risk factors of postoperative complications following cesarean section at Ramathibodi Hospital and to establish baseline data for improving maternal care quality.

Methods: This retrospective cohort study reviewed electronic medical records of 235 women who underwent cesarean section at Ramathibodi Hospital between 2022 and 2024. Data were analyzed using descriptive statistics, trend analysis, and multiple logistic regression to identify risk factors associated with postoperative complications. **Results:** The mean maternal age was 31.8 ± 5.6 years, the mean BMI was 23.1 ± 4.8 kg/m², and the mean gestational age was 36.8 ± 3.2 weeks. The overall prevalence of maternal complications, both short-term and long-term, was 1.3%. Preterm delivery occurred in 28.9% of cases, with a corresponding neonatal intensive care unit (NICU) admission rate of 28.9%. The mean decision-to-delivery interval was 65 minutes, with only 17.4% of cases meeting the recommended 30-minute target. Multiple logistic regression analysis identified significant risk factors, including low gestational age ($p < 0.05$), prolonged decision-to-delivery interval ($p < 0.05$), and the presence of maternal comorbidities ($p < 0.05$). **Conclusions:** Although the maternal complication rate was low at this tertiary center, the high rates of preterm delivery and NICU admissions are concerning. The prolonged decision-to-delivery interval highlights a key area for quality improvement.

Clinical Implications: Healthcare systems should prioritize reducing decision-to-delivery intervals to align with international standards, strengthen antenatal care protocols, and implement systematic approaches to managing maternal comorbidities to enhance both maternal and neonatal outcomes.

Keywords: Cesarean section, Postoperative complications, Decision-to-delivery interval, Maternal outcomes.

Conflict of Interest Statement: The authors have no conflicts of interest to disclose.

EFFECTIVENESS OF NURSING PROTOCOL COMPLIANCE IN THE PREVENTION AND MANAGEMENT OF POSTPARTUM HEMORRHAGE AFTER VAGINAL DELIVERY: A RETROSPECTIVE STUDY IN A SECONDARY CARE HOSPITAL

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Background: Postpartum hemorrhage (PPH) remains a leading cause of maternal mortality worldwide, constituting a critical obstetric emergency requiring immediate intervention and systematic management protocols. **Objective:** To determine PPH's incidence and risk factors, evaluate nursing protocol compliance effectiveness, and analyze the relationship between protocol adherence and clinical outcomes. **Methods:** This retrospective analytical study examined 161 women who delivered vaginally at Ramathibodi Chakri Naruebodindra Hospital between August and November 2023. Participants were stratified into three groups based on blood loss volume: 500 ml, those receiving complete protocol-based care ($n=28$) demonstrated significantly lower PPH rates (3.6% vs. 41.7%,

$p=0.002$), reduced hospital length of stay (4.3 vs. 5.1 days, $p=0.001$), and decreased blood transfusion requirements (3.6% vs. 50.0%, $p<0.001$). Response time to blood loss events was significantly faster in the complete compliance group (3.8 vs. 8.5 minutes, $p<0.001$). The most frequently omitted protocol steps were medication and procedure verification (70.0% compliance), risk assessment documentation (75.0% compliance), and multidisciplinary team communication of patient history (75.0% compliance). **Conclusions:** Complete adherence to nursing protocols significantly reduces PPH incidence and associated complications. Healthcare institutions should prioritize strict protocol compliance, focusing on the least performed steps, and enhance multidisciplinary communication systems to optimize maternal care quality and patient safety outcomes.

Keywords: Postpartum hemorrhage, Nursing protocol, Risk factors, Effectiveness, Postpartum care

Conflict of Interest Statement: The authors have no conflicts of interest to disclose.

PULMONARY ASPERGILLOSIS IN PRIMIGRAVIDA PRESENTED IN EARLY POSTPARTUM: TO HOST OR NOT TO HOST – CASE REPORT OF ALTERED IMMUNITY IN PREGNANCY

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Problem statement: Pulmonary aspergillosis (PA) in the postpartum period is an exceptionally rare condition, commonly associated with immunocompromised states. Literature report similar, but severe cases of invasive aspergillosis in pregnancy or postpartum, often with cerebral, orbital, or disseminated involvement, followed by high maternal and fetal morbidity and mortality. While immunosuppression is a risk factor, these cases occurred in previously healthy or only mildly compromised women, suggesting that pregnancy-related immunological modulation may play a role in susceptibility. **Methods:** Relevant history, laboratory, and imaging data were retrospectively retrieved from the medical records of University Hospital Center Split, with full adherence to patient confidentiality and data anonymization. **Results (Case report):** Case report describes primiparous woman who developed PA in the early postpartum period, i.e. 7th day of postpartum. She presented to the Emergency Gynecology Department of the University Hospital Centre Split with complaints of weakness and dyspnea. Initial assessment excluded acute gynecological condition. Following consultations with neurology, cardiology, and pulmonology specialists, the diagnosis of pulmonary sequestration with an aspergilloma focus was established, measuring cavitation diameter of 9cm, and the patient was referred for further evaluation and surgical management. She subsequently underwent lung lobectomy of left inferior lobe, with an uneventful postoperative course. Antenatal care and delivery were both conducted at the same clinic, with suspicion of intrahepatic cholestasis of pregnancy. Moreover, patient did not present with pulmonary symptoms during pregnancy course. It is noteworthy that the pregnancy was achieved through medically assisted reproduction, initiated for primary infertility due to male factor and additional maternal comorbidities. Histopathological examination of lung specimen showed congenital bronchiectasis with reactive changes from aspergillosis involvement. **Conclusions:** Case contributes to limited but growing evidence suggesting that invasive and non-invasive PA can occur in postpartum women, underscoring the importance of heightened clinical awareness, early diagnostic work-up, and multidisciplinary management strategies. This addresses several underlying questions, primarily the role of pregnancy-associated immunosuppression in the clinical manifestation of disease. Additional include an epidemiological discussion of potential etiological factors and possibility of pregestational asymptomatic disease. Finally, there are still management dilemmas regarding therapeutic approach of PA in pregnancy.

Disclosure of Interest: The authors declare no conflicts of interest.



ENHANCING BLOOD BOOKING PROCEDURES IN THE LABOR ROOM: EXPERIENCE FROM RAMATHIBODI CHAKRI NARUEBODINDRA HOSPITAL

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Background: Blood reservation for mothers in labor at Ramathibodi Chakri Naruebodindra Hospital traditionally used the Grouping & Crossmatching method, which involves detailed blood typing and compatibility testing. **Objective:** This retrospective comparative study aims to optimize blood reservation processes by evaluating the transition from Grouping & Crossmatching to Typing & Screening, with a comprehensive analysis of immediate and potential long-term impacts. **Results:** Data were collected from 400 deliveries between January 2023 and January 2024, divided into two groups: 200 cases using Grouping & Crossmatching and 200 cases using Typing & Screening. The study conducted a multi-dimensional assessment that included immediate operational efficiency, long-term impact analysis, and comprehensive cost-benefit evaluation. Immediate operational efficiency was assessed through the adoption rate of the blood reservation method, blood preparation time, and actual blood transfusion rates. Long-term impact analysis included projected resource utilization trends, potential workflow optimization, and sustained clinical safety indicators. The cost-benefit evaluation covered direct financial costs of blood reservation, resource allocation efficiency, and possible long-term economic benefits. Results demonstrated a significant increase in Typing & Screening method usage from 0% to 86.5%, while the actual blood transfusion rate remained constant at 0.5%, indicating no compromise in patient safety. The cost analysis revealed approximately 300 THB savings per blood reservation, totaling an estimated 60,000 THB in cost reduction for the 200-patient sample. **Conclusions:** Preliminary long-term projections suggest sustained efficiency improvements and potential systemic benefits in blood management; however, the authors recommend continued monitoring and comprehensive longitudinal studies to validate these initial findings.

Keywords: Typing & Screening blood reservation, Grouping & Crossmatching blood reservation, Blood transfusion, Delivery room

UTERINE RUPTURE FOLLOWED BY EMERGENCY HISTERECTOMY DURING LABOR: A CASE REPORT

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Problem Statement: Uterine rupture is a serious obstetric emergency involving the tearing of the uterine wall, most commonly during labor in women with prior uterine scars (e.g., from cesarean sections), though it may also occur in unscarred uteri. Clinical signs include sudden abdominal pain, fetal heart rate abnormalities, signs of maternal shock, and changes in fetal station. Diagnosis is primarily clinical and confirmed surgically. Immediate laparotomy is essential, often requiring fetal delivery and uterine repair. In cases of extensive damage or hemorrhage, hysterectomy may be necessary. This case highlights key warning signs of uterine rupture and underscores the importance of early recognition. **Methods:** Review of a case of uterine rupture in a pregnant woman admitted to the emergency department of Hospital Beatriz Angelo (HBA). **Results:** A healthy 35-year-old woman, with two prior uncomplicated deliveries (one cesarean for breech presentation and one vaginal birth), was admitted at 37 weeks and 2 days in spontaneous labor. On admission, she had 3 cm cervical dilation, oligohydramnios, and a non-reassuring cardiotocography (CTG). Despite regional analgesia, she reported persistent pelvic pain. On later evaluation, the cervix was difficult to assess, the fetal position had changed to transverse lie (previously cephalic), and free-floating fetal parts were palpable. CTG showed multiple decelerations and signal loss, without recorded contractions. An emergency cesarean section was performed due to strong suspicion of uterine rupture. The fetus was found free in the abdominal cavity. A live female infant (2735g) was delivered with Apgar scores of 7/9/9 and cord blood gas showing metabolic acidosis. Intraoperative findings revealed a large uterine rupture at the prior cesarean scar, extending to the left broad ligament and round ligament, along with a 5 cm bladder dome rupture. A bladder repair and total hysterectomy with adnexal preservation were performed due to irreparable uterine damage. Postoperative recovery was uneventful. The patient was stable, discharged on day 3 with a urinary catheter, and successfully voided after catheter removal on day 15. The newborn was also discharged in good health. **Conclusion:** Early recognition of uterine rupture

signs and prompt surgical intervention are essential to achieve favorable maternal and neonatal outcomes.

TRENDS AND OUTCOMES OF EMERGENCY CEASAREAN SECTION IN A TERTIARY HOSPITAL: A 3 YEAR RETROSPECTIVE ANALYSIS

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Background: Cesarean section (CS) rates have been increasing globally, exceeding the WHO-recommended range of 10-15% in many countries. While CS can be life-saving when medically indicated, unnecessary procedures may lead to adverse maternal and neonatal outcomes. Understanding trends and risk factors for emergency CS is crucial for optimizing maternal care. **Objective:** To investigate trends, indications, risk factors, and outcomes of emergency cesarean section in a tertiary hospital setting. **Methods:** A retrospective descriptive study was conducted on 800 patients who underwent emergency CS at a tertiary hospital from 2021-2023. Data were systematically collected from medical records and analyzed using descriptive statistics and correlation analysis to identify risk factors and outcomes. **Results:** The primary indications for emergency CS were failure to progress (38.3%), fetal distress (17.8%), and previous CS (15.0%). The mean decision-to-incision interval was 66.05 minutes, which exceeded optimal timeframes and was significantly associated with NICU admission (29.9%). Lower gestational age emerged as a significant predictor of NICU admission. Additional risk factors for emergency CS and adverse neonatal outcomes included elevated pre-pregnancy weight, higher BMI, maternal comorbidities, twin pregnancy, preterm birth, prolonged labor, and umbilical cord or placental abnormalities. Maternal complications were rare (0.1%), indicating good maternal safety outcomes. **Conclusions:** Emergency CS in this tertiary hospital was predominantly marked by failure to progress, with decision-to-incision intervals exceeding recommended timeframes. The prolonged interval was associated with increased NICU admission rates, while lower gestational age represented an additional significant risk factor. Despite high neonatal morbidity, maternal complications remained minimal. **Clinical Implications:** These findings highlight the need for improved emergency CS care protocols to reduce decision-to-incision intervals and optimize perinatal outcomes in tertiary care settings.

Keywords: Emergency cesarean section, Decision-to-incision interval, Neonatal outcomes, Tertiary hospital, Maternal safety

Conflict of Interest Statement: The authors have no conflicts of interest to disclose.

MODERATED E-POSTER SESSION 03: GYNECOLOGY – CASE REPORT/STUDY

UNVEILING SWYER'S SYNDROME: A CASE OF A FEMALE PHENOTYPE WITH XY KARYOTYPE

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Problem Statement: Swyer syndrome is a rare disorder of sexual development caused by deletion or mutation of genes in the SRY region on the Y chromosome. We present a case of Swyer syndrome in a 23-year-old phenotypic female who consulted for primary amenorrhea, subsequently revealing 46, XY genotype. **Methods:** A 23 year old female reported primary amenorrhea and inadequately developed breasts. Her past medical and family history was unremarkable. On general examination she had stable vital signs, normal BMI, eunuchoid habitus with above the 95th percentile in the mean standing height of adult Filipino females. Underdeveloped breasts with hypopigmented areola Tanner stage 2 were noted. Pubic hair, also Tanner stage 2, was sparse while axillary hair was absent. The external genitalia was of female type with a vaginal orifice. Thyroid function tests and creatinine were normal. Her fertility profile revealed elevated serum FSH and LH while prolactin and testosterone were normal. Pelvic ultrasound showed a hypoplastic uterus and small ovaries while MRI could not delineate the uterus with non-visualized ovaries and adnexal masses. Karyotyping presented a 46, XY genotype. A diagnostic laparoscopy demonstrated a vestigial uterus with normally presenting fallopian tubes. Gonads were noted at the ends of either sides measuring 1.5 cm in largest diameter for each. She underwent laparoscopic excision of vestigial uterus, bilateral salpingectomy and bilateral gonadectomy. Histopathology of bilateral gonads showed



focal areas displaying primitive germinal cells, extensive fibrosis and areas with adipose tissues. **Results:** After a clear diagnosis of Swyer Syndrome, the need for a multidisciplinary approach was evident. Due to a high risk for germ cell malignancies, a prophylactic bilateral gonadectomy was done. Hormone replacement therapy to address estrogen deficiency was considered to develop and maintain secondary sexual characteristics and for bone mass accrual "catch up". Psychosocial management by counsellors or psychologists will help the index patient and her family adapt to the condition. When desirous of pregnancy, assisted fertility treatments are available. **Conclusion:** This case demonstrates the history and physical examination findings consistent with Swyer Syndrome and highlights the importance of early diagnosis and appropriate management.

MOSAIC TURNER SYNDROME PRESENTING WITH AMBIGUOUS GENITALIA WITH A MIXED OVARIAN GERM CELL TUMOR IN A FILIPINO ADULT: A CASE REPORT

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Problem Statement: This is a case of a 24-year-old Filipino with ambiguous genitalia who was randomly assigned as female at birth and subsequently reared as such. The patient exhibited a phallic-like anatomical feature at birth. Secondary male sexual characteristics emerged at 13 years of age but menarche did not occur. The patient stands 137cm with an arm span of 145cm. The patient had thick facial and axillary hair without apparent laryngeal prominence. Breast development at Tanner Stage I. The abdomen was soft, nontender with the superior pole of palpable mass at three fingerbreadths above the pubic symphysis.



External genitalia showed pubic hair development at Tanner Stage V, a phallus-like structure that measures 3cm from the base, small vaginal opening with separate urethral opening. **Methods:** CT-Scan revealed a solid looking midline pelvo-abdominal mass measuring 10.59x10.44x8.11cm with 469ml volume, suggestive of Malignant Ovarian New Growth with unknown laterality. No normal looking uterus, cervix nor ovaries seen. Cytogenetic studies showed a mosaic 45X/45X with deletion in the q arm of chromosome X at band Xq13 observed in two of the cells analyzed. The plan was to proceed with exploratory laparotomy, unilateral salpingo-oophorectomy. During laparotomy, the uterus was small and densely adherent to the posterior bladder with both fallopian tubes and right ovary grossly normal. The left ovary was converted to a 14x8cm friable mass. Vaginoscopy and hysteroscopy were performed with note of right and left ostia, external cervical os and vaginal wall.

Results: Histopathology results showed Mixed Germ Cell Tumor with 90% Yolk Sac Tumor and 10% Mature Teratoma of the Left Ovary. Postoperative plan includes standard postoperative chemotherapy and Hormonal Replacement Therapy with both Estrogen and Progesterone. **Conclusion:** This report emphasizes the importance of early identification and management of patients with ambiguous genitalia and Turner syndrome. Multidisciplinary approach is warranted in the management. Factors in the process of sex assignment, such as diagnosis, karyotype, appearance of the external genitalia, type of gonads present, need for surgical interventions to provide consistency with the sex of rearing, use of hormonal therapy, potential for fertility, parental wishes, and parental cultural beliefs should be considered.

CILIARY BODY LEIOMYOMA IN A 20-YEAR OLD FEMALE: A CASE REPORT AND REVIEW OF LITERATURE

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Problem statement: A 20-year-old nulligravid consulted for gradual blurring of vision with foreign body sensation, tearing, and redness and with an associated fleshy mass on the sclera of the right eye.

Methods: Histopathology and immunohistochemical (IHC) stains were compatible with leiomyoma. Eventual glaucoma and ocular hypertension complicated the disease. Intraocular leiomyomas are rare smooth muscle tumors commonly seen in the ciliary body, iris, and choroid plexus. Prevalence favors presence in females, but male affection has been reported. Some intraocular leiomyomas have tested positive for progesterone receptors but none has revealed presence of estrogen receptors. **Results:** Of recorded cases of intraocular leiomyomas, majority have presented with progressive blurring of vision while few remained asymptomatic or with stable tumors. Visual symptoms are attributable to tumor size and mass effect. **Conclusion:** This expounds on the importance of monitoring the progression of the disease, amelioration of symptoms, and exploring the possibility of hormonal therapy for patients with persistent disease.

No interests to be disclosed.

TWO CASES OF UNEXPECTED UTERINE MALIGNANCIES IDENTIFIED DURING A PROSPECTIVE FERTILITY STUDY ON SURGICAL VERSUS CONSERVATIVE MANAGEMENT OF ADENOMYOSIS AND UTERINE FIBROIDS

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Problem statement: We present two cases of malignancies identified intraoperatively in patients that were enrolled in the prospective REAdME (receptivity of endometrium in patients with adenomyosis, uterine myomas and endometriosis) study aiming to investigate the clinical and molecular impacts of fertility-limiting diseases on endometrial receptivity and reproductive outcomes. Two case reports of mesonephric-like adenocarcinoma (MLA) and low-grade endometrial stromal sarcoma (LG-ESS) are presented, both diagnosed following fertility-enhancing surgeries in patients who had been preoperatively diagnosed with benign diffuse adenomyosis.

Methods: A 42-year-old patient with expected diffuse adenomyosis with typical symptoms and ultrasound features, scheduled for cytoreductive surgery. A 44-year-old patient with presumed adenomyosis based on prior transcervical biopsy, scheduled for laparoscopic resection. Both patients were preparing for assisted reproductive treatment. The first case involved diagnostic laparoscopy followed by elective suprapubic laparotomy and open debulking of diffuse adenomyosis. The second case was managed via 3D laparoscopic adenomyosis resection using a four-port approach and standard instrumentation in Trendelenburg position.

Results: In both cases, uterine wall reconstruction was performed using a four-petal flap technique. The first patient subsequently underwent open hysterectomy with systematic pelvic lymphadenectomy and adjuvant chemotherapy and is treated in our hospital. The second patient's oncological care continues at another institution. Histopathology revealed MLA in the first case and LG-ESS in the second. Within the REAdME cohort, more than 106 fertility-sparing procedures have been performed to date for diffuse adenomyosis, uterine fibroids, and deep endometriosis, with only these two cases of unexpected malignancy. **Conclusion:** These cases highlight the risk of occult malignancy in patients with presumed benign uterine pathology. In particular, in diffuse adenomyosis, surgical intervention may reveal rare but significant oncological diagnoses that would otherwise remain undetected.

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SHOULD MEDICAL MANAGEMENT BE FIRST LINE IN THE TREATMENT OF UTEROCUTANEOUS FISTULAS? TWO SUCCESSFUL CASES OF MANAGEMENT WITH GNRH ANALOGUES

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Problem statement: Uterocutaneous fistula (UCF) is a rare complication of caesarean section (CS), myomectomy, or uterine surgery - presenting with cyclical bleeding or abdominal wall swelling. Standard treatment is surgical but this often compromises fertility. Hormonal therapy with gonadotropin-releasing hormone (GnRH) agonists or progestins can induce amenorrhoea, promote tract healing, and allow spontaneous closure. **Methods:** Two cases of UCF following caesarean section were managed conservatively with GnRH agonist therapy (leuprolide acetate 11.25 mg intramuscular depot injections). Clinical symptoms and radiological changes were assessed over treatment cycles. **Results:** Case 1: A 34 year old woman who had had three CS and an open myomectomy had cyclical bloody discharge from her suprapubic scar. Her recovery was complicated by a wound infection and a sinus noted in the midline managed with antibiotics. Subsequently, the sinus opening retracted producing cyclical blood stained discharge with menses. A 3-month trial of intramuscular leuprolide acetate 11.25 mg (Prostap 3 DCS) significantly reduced fistula output, and a second dose after 3 months resulted in cicatrization and complete cessation of symptoms. Case 2: A 37-year-old woman presenting post-CS with progressive abdominal swelling. MRI revealed a 4.5 x 4.2 cm rectus collection with a 3.5 cm tract communicating between the anterior uterine wall and skin. She opted for conservative management with leuprolide acetate 11.25 mg GnRH analogue injections. Follow-up MRI at three months showed reduction of the collection to 3.7 x 1.3 cm and the tract to 2 cm, with symptomatic improvement. A second course is planned and due for re-assessment in a further 3 months. **Conclusion:** Our two cases represent the 9th and 10th patient with UCF reported to respond to medical management. Of eight prior cases, five received GnRH agonists and three received depot medroxyprogesterone acetate. Treatment duration ranged from two to six months. Small tract size of 5mm and 6 month therapy duration were commonly cited as predictors of success. Hormonal suppression can provide clinical and radiological improvement and should be considered first-line in small UCFs or in patients desiring fertility preservation in order to defer complex surgery.

PARASITIC FIBROIDS IN A 45 YEAR-OLD FEMALE WITH NO HISTORY OF GYNECOLOGIC SURGERY- CASE REPORT AND DISCUSSION

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Problem Statement: A parasitic leiomyoma is a subserosal, pedunculated fibroid that has twisted on its stalk, detached from the uterus, and attached to nearby pelvic and abdominal structures. Once attached, it survives by recruiting blood vessels from its host structures. Like other leiomyomas, a parasitic leiomyoma is a benign tumor composed of smooth muscle cells from the uterine myometrium, is sensitive to estrogen and other hormones, and can rarely transform into a malignant uterine sarcoma. These tumors can be asymptomatic and incidentally discovered on imaging, or they can present with abnormal uterine bleeding, pelvic pain/pressure, or changes in bowel and bladder habits. A history of prior gynecologic surgery, including myomectomy or hysterectomy, can significantly increase the risk of parasitic fibroids due to iatrogenic seeding of fibroid fragments onto nearby pelvic structures. **Method:** Case report-institutional review board (IRB) exempt. **Results:** A 45 year-old multiparous female with a past medical history of extensive uterine fibroids noted on pelvic ultrasound, and no history of gynecologic surgery presented with worsening pelvic pain/pressure, cramping, increased abdominal girth, and menorrhagia. She underwent a bilateral uterine artery embolization (UAE) for her fibroids, which controlled her signs/symptoms for two years. Further evaluation with pelvic MRI confirmed the continued presence of multiple fibroids, albeit with interval decrease in size. She elected to undergo definitive treatment with a robot-assisted radical laparoscopic hysterectomy with bilateral salpingoophorectomy and ureterolysis. During the surgery, she was noted to have extensive

adhesions, multiple uterine fibroids, and the presence of parasitic fibroids extending to the bladder and anterior abdominal wall, with suspicion of endometriosis. The surgery was successful, and a 2-month follow-up CT Abdomen/Pelvis with contrast confirmed complete absence of pelvic masses. The patient's sign/symptoms successfully resolved, and a follow-up Pelvic MRI two years later found no fibroids. **Conclusion:** Parasitic fibroids are normally discovered in patients with a history of invasive gynecologic surgeries, but our patient was discovered to have extensive parasitic fibroids during her first gynecologic surgery despite no history of invasive pelvic procedures. This patient benefited from the combination of GnRH analog and surgery, with an excellent outcome.

RADIOLOGIC EVALUATION OF RETAINED INTRAUTERINE CONTRACEPTIVE DEVICE (IUD) OR A MISSING IUD THREAD - CASE REPORT WITH DISCUSSION

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Problem Statement: Intrauterine device (IUD) is a highly effective method of long term contraception. It is available in a variety of forms including hormonal and non-hormonal (copper IUD) forms. While IUD insertion is quick and generally considered safe, when the IUD thread is missing it may be difficult to identify the hormonal IUDs compared with Copper-IUD. Radiological evaluation of missing IUD thread requires different imaging modalities to reach a definitive diagnosis and guide management. This case discusses different imaging modalities for missing IUD thread. **Method:** case report-institutional review board (IRB) exempt. **Results:** multiparous female with missing IUD that was seen within the endometrial cavity but patient unable to retrieve in the office. **Conclusion:** The copper containing IUD is hyperechoic and radiopaque while the hormonal IUD is only hyperechoic at the distal and proximal ends of the arms, but radiopaque due to the barium sulfate coating. Thus, in cases of suspected expulsion without witness of the expelled device, an endovaginal or pelvic ultrasound is recommended as well as x-rays to exclude perforation or migration. In cases of suspected perforation, displacement or embedment without identification of an IUD on ultrasonography, the next best step would be plain X-ray of the abdomen/pelvis as well. This allows for visualization of the T-shaped device, both hormonal and copper-containing. If the IUD is embedded within soft tissue it may be more difficult to see on x-rays. Ultimately, if there is perforation, fragmentation, or embedment, CT scans may be warranted for surgical planning and evaluation for complications such as abscess formation or bowel injury. In other countries, the material and shape of IUD may be different. In China, for instance, they use stainless steel ring IUD which will show up differently on imaging.

THORACIC AND PELVIC ENDOMETRIOSIS - A CASE REPORT

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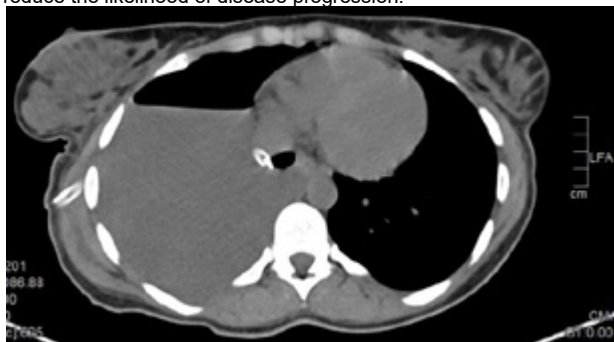
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Problem statement: Description of a rare clinical case of endometriosis from the Gynecology and Thoracic Surgery Department at Beatriz Ângelo Hospital. **Methods:** Data were collected using computerised clinical records in the Sorian® programme at the Beatriz Ângelo Hospital. **Results:** Female, 29 years old, no medical history, nulliparous. History of chest pain and cyclic dyspnea, severe dysmenorrhea and two painful abdominal wall nodules (umbilical hernioplasty and appendectomy scars) that enlarged during menses for 4 years. Admitted to the pulmonology ward due to recurrent extensive right-side pleural effusion, with incarcerated and almost completely collapsed lung. (Picture 1). She underwent pleural and diaphragmatic biopsy on the right side, which revealed endometrial tissue and started goserelin. Pleurectomy with decortication on the right side was performed by elective thoracotomy without complications. Regarding the gynecological evaluation, the ultrasound revealed two fibroids (one posterior transmural type 3-5 55x46x69mm and another fundal intramural type 5 32x35x34mm). Evaluation of the posterior fundus was limited by the posterior wall fibroid. Pelvic MRI was consistent with ultrasound findings. After completing 4 months of goserelin, she was submitted to diagnostic laparoscopy, identifying complete obliteration of the



posterior fundus. Myomectomy and excision of abdominal wall nodules were performed. After the surgery she started dienogest+ethinyl estradiol, remaining amenorrheic. Currently she's asymptomatic. **Conclusion:** Despite ultrasound and MRI evaluation, the severity of thoracic endometriosis and the nodules suggestive of endometriosis in the abdominal incisions led to the anticipation of extensive pelvic endometriosis, which was not verified intraoperatively. Although thoracic endometriosis disease can be the affected cavity, this reflects an atypical presentation. The case report is consistent with Sampson's theory of retrograde menstruation (endometrial cells undergo retrograde movement through the fallopian tubes into the peritoneal cavity), being more exuberant on the right side. As there is variability in its presentation, a high level of clinical suspicion is necessary to provide a timely diagnosis and reduce the likelihood of disease progression.



SPONTANEOUS CONCEPTIONS WITHIN SIX MONTHS POST-CHEMOTHERAPY FOR GESTATIONAL TROPHOBLASTIC DISEASE: A CASE SERIES OF VARIED PREGNANCY OUTCOMES

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Problem statement: Gestational trophoblastic disease (GTD) represents a placental malignancy spectrum often affecting women of reproductive age. Chemotherapy is the cornerstone treatment including single-agent (e.g., methotrexate (MTX)) or multi-agent regimens (e.g., EMA-CO) achieving high remission rates. Single-agent regimens like MTX preserve fertility, while EMA-CO may hasten menopause by 3 years but rarely cause permanent infertility in young patients. However, conception within 6–12 months post-chemotherapy raises risks of miscarriage and recurrent GTD, necessitating contraception and close monitoring during this interval. This case series evaluates various pregnancy outcomes in 3 GTD patients after chemotherapy. **Methods:** Case series. **Results:** This case series describes 3 women who conceived spontaneously six months following chemotherapy for stage I GTD. All patients achieved normal serum β -hCG levels postpartum. The first patient, a 22-year-old woman with a International Federation of Gynecology and Obstetrics (FIGO) 2000 scoring system scores 6, initially received single-agent chemotherapy but developed resistance, requiring escalation to seven cycles of multi-agent EMA-CO. She subsequently conceived and delivered a term female infant weighing 2715 g without congenital anomalies. The second patient, a 28-year-old woman with FIGO score 6, underwent two cycles of MTX chemotherapy. She conceived but experienced an inevitable abortion, and performed manual vacuum aspiration (MVA). The third patient, a 20-year-old woman with FIGO score 7, received seven cycles of EMA-CO chemotherapy. She conceived and delivered a small-for-gestational-age female infant weighing 2025 g, with renal anomaly. **Conclusion:** GTD patients require contraception for at least one year following successful chemotherapy. Nonetheless, if spontaneous conception occurs within this timeframe, pregnancy termination is not indicated; rather, it requires rigorous antenatal care (ANC) monitoring.

MODERATED E-POSTER SESSION 04: GYNECOLOGY

THE ROLE OF TRANSVAGINAL ULTRASOUND IN THE DIFFERENTIAL DIAGNOSIS OF URINARY INCONTINENCE: A

CASE SERIES OF UNDERLYING GYNECOLOGIC MALIGNANCIES

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Problem statement: Urinary incontinence (UI) is a prevalent condition among women, typically assessed through physical examinations, urodynamic study, and other standard diagnostic methods. However, watery or blood-tinged vaginal discharge resulting from underlying gynecological malignancies may mimic UI, particularly when exacerbated by increased intra-abdominal pressure. Although not routinely included in UI evaluations, transvaginal ultrasound (TVUS) can reveal critical findings that might otherwise remain undetected. **Cases:** Four women presenting with UI symptoms were ultimately diagnosed with gynecologic malignancies. In each case, abnormalities such as endometrial thickening or adnexal masses were identified using TVUS, prompting suspicion of malignancy. Histopathological analysis confirmed diagnosis of endometrial or fallopian tube carcinoma. These diagnoses might have been overlooked if only routine UI evaluations were performed. **Conclusion:** TVUS serves as a valuable adjunctive tool in the evaluation of UI, particularly when atypical features, such as watery discharge, spotting, or unremarkable urodynamic findings, are observed. Selective use of TVUS may improve diagnostic accuracy and facilitate earlier detection of serious gynecologic conditions.



ENDOMETRIAL STROMAL NODULE IN A 36-YEAR-OLD FEMALE PRESENTING WITH ABNORMAL UTERINE BLEEDING: A RARE CASE REPORT FROM NORTH INDIA

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Introduction: Endometrial stromal nodule (ESN) is a rare tumour of the endometrium, and benign counterpart of endometrial stromal sarcoma (ESS) occurring in the age group of 40–50 years. We report a case of ESN in a 36-year-old female, presenting with degenerative leiomyomatous polyp associated with abnormal uterine bleeding and anaemia. **Case Presentation:** A 36-year-old female P3L3 with Abnormal Uterine Bleeding (AUB) presented to the emergency ward with a history of irregular bleeding per vagina since last 2 months. Previous menstrual history was regular with average flow for a duration of 3–4 days after every 28–30 days. On general physical examination she was well preserved with mild pallor. On per abdomen examination size of uterus was 18–20 weeks pregnant uterus size, non-tender and mobile. On per speculum examination cervix and vagina was normal. On bimanual examination, bilateral adnexa free with size of the uterus of 20 weeks pregnant uterus. USG examination enlarged uterus with few heterogeneously hypoechoic lesions in the uterus, and distended uterine cavity. Patient underwent total abdominal hysterectomy under general anaesthesia. Her post-operative period was uneventful. She was discharged on 6th post operative day with good condition. On histopathological examination representative sections showed presence of endometrial stromal nodule on microscopic examination. **Discussion and Conclusion:** Endometrial stromal nodules (ESNs) are a rare type of uterine tumour, and their incidence rate is estimated to be about 2 per million women. They are a subtype of endometrial stromal tumors, which also include low-grade and high-grade endometrial stromal sarcomas. ESNs are considered benign, as they do not infiltrate the myometrium. ESNs are cured by complete excision and never recurs, while ESS, even low-



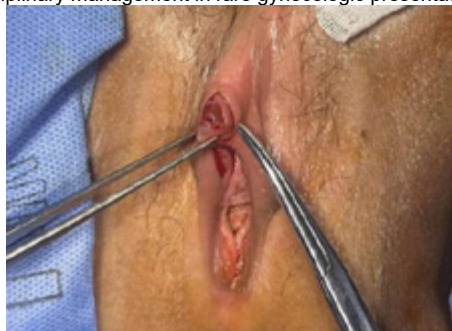
grade, may recur years later and can metastasize. Histologically, both resemble proliferative-phase endometrial stroma, but invasion pattern differentiates them. ESS may be low- or high-grade, the latter showing marked atypia and higher mitoses. ESS and ESN are two different entities in the spectrum of endometrial stromal tumours, and the distinction is important because ESN is benign, while ESS is malignant (low-grade or high-grade). Diagnosis is important as ESNs are benign whereas ESS are malignant.

CLITORAL HEMANGIOMA: A RARE PRESENTATION OF VASCULAR LESION- A CASE REPORT

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Problem statement: A 48-year-old woman presented with a recently identified clitoral lesion associated with minimal bleeding and discomfort during sexual contact. She had no history of trauma, prior genital lesions nor hormonal therapy. Physical examination revealed a 1.5-centimeter, nontender, well-circumscribed, compressible, and violaceous lesion, with rough edges on the clitoral glans. These findings suggest a vascular etiology. **Methods:** Transperineal ultrasonography showed a homogenous, hypoechoic mass with well-defined margins and abundant color Doppler flow, consistent with a vascular lesion. Excision biopsy was performed. **Results:** Histopathologic evaluation revealed thin-walled blood vessels lined by flattened endothelial cells without atypia nor dysplasia, confirming a clitoral hemangioma. **Conclusion:** Although rare, clitoral hemangiomas should be included in the differential diagnosis of vulvar lesions. Clinical suspicion, imaging, and individualized treatment is essential. This case contributes to the limited literature available and highlights the importance of multidisciplinary management in rare gynecologic presentations.



REDUCTION IN DAYTIME AND NIGHTTIME VASOMOTOR SYMPTOMS (VMS) FREQUENCY AND SLEEP DISTURBANCES WITH ELINZANETANT: POST-HOC POOLED ANALYSES FROM OASIS-1 AND -2

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Problem statement: Menopause symptoms can be very bothersome, particularly at night. In the pivotal, Phase III OASIS-1 and -2 trials, elinzanetant, a dual neurokinin (NK-1 and NK-3) receptor antagonist, significantly reduced frequency and severity of menopausal vasomotor symptoms (VMS; also known as hot flashes), and reduced sleep disturbances, versus placebo. We report two separate pooled (OASIS-1 and -2) post-hoc analyses evaluating elinzanetant's effect on menopause symptoms by day and night; the first assessed daytime/nighttime VMS frequency, the second assessed sleep disturbances in higher/lower-VMS

subgroups. **Methods:** Menopausal women experiencing ≥ 50 moderate-to-severe VMS/week were randomised 1:1 to once-daily elinzanetant 120 mg for 26 weeks or placebo for 12 weeks, followed by elinzanetant for 14 weeks. Participants recorded daytime and nighttime VMS using the Hot Flash Daily Diary. Sleep disturbances were assessed using Patient-Reported Outcomes Measurement Information System Sleep Disturbance–Short Form 8b (PROMIS-SD-SF-8b) total T-scores. For the post-hoc sleep analysis, participants were stratified by baseline VMS frequency (≥ 12 /day [higher-VMS], < 12 /day [lower-VMS]). A mixed model for repeated measures was used to estimate differences, elinzanetant versus placebo, in least squares (LS) mean change from baseline to Week (W) 1, W4, and W12 for daytime VMS, nighttime VMS, and PROMIS-SD-SF-8b, the latter in higher/lower-VMS subgroups; one-sided p-values are indicative. **Results:** Overall, 796 participants were randomized to elinzanetant (n=399: higher-VMS=184, lower-VMS=214, missing=1) or placebo (n=397: higher-VMS=185, lower-VMS=212). Baseline characteristics were similar between treatment arms. For both daytime and nighttime VMS frequency, greater LS-mean changes from baseline were observed with elinzanetant versus placebo across timepoints (daytime VMS: -1.09 [W1], -1.78 [W4], -1.83 [W12]; nighttime VMS: -1.08 [W1], -1.44 [W4], -1.52 [W12]; all p.0.0001; Table). Likewise, for PROMIS-SD-SF-8b total T-scores, greater LS-mean changes from baseline were observed with elinzanetant versus placebo across timepoints in both VMS subgroups (higher-VMS: -5.06 [W1], -5.80 [W4], -5.47 [W12]; lower-VMS: -4.68 [W1], -4.94 [W4], -4.34 [W12]; all p.0.0001; Table). Elinzanetant subgroup PROMIS-SD-SF-8b total T-scores moved from "moderate" to "normal" sleep disturbance category, per established cutoff points. **Conclusion:** Elinzanetant effectively reduced frequency of daytime/nighttime moderate-to-severe VMS, and reduced sleep disturbances irrespective of baseline VMS frequency, compared to placebo, among menopausal women.

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CLINICAL EVALUATION FOR RETAINED INTRAUTERINE CONTRACEPTIVE DEVICE (IUD) – CASE REPORT AND DISCUSSION

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Problem Statement: An Intrauterine device (IUD) is one of the most reliable methods of contraception. Complications with IUD use are rare but include expulsion, method failure and uterine perforation. The expulsion rate of IUDs is between 2-10% in the first year. Perforation is even more uncommon- occurring in 1.1-1.4/1000 IUD insertions. When a patient presents for an IUD removal and strings cannot be visualized, several steps can be pursued to evaluate the location of the IUD. Here we present a case of a retained IUD and subsequent diagnostic workup and removal. **Methods:** The following is a case report, hence, institutional review board (IRB) exempt.

Case Report: The patient is a 42 year old G4P4 who presented to the clinic for IUD removal. On exam the strings were unable to be visualized and therefore unable to be removed in the office. A transvaginal ultrasound (TVUS) was obtained and showed a malpositioned IUD in the lower uterine segment along with multiple fibroids. The patient went for hysteroscopy with dilation and curettage in an outpatient operating room setting. The IUD was visualized on hysteroscopy and removed without difficulty. Pathology from curettage showed fibroid tissue with no hyperplasia or malignancy. **Conclusion:** A retained IUD is a problem most OBGYNs will encounter in their career. Appropriate evaluation and workup is needed to ensure timely removal of the IUD. If strings are not visualized, a cytobrush can be used to attempt to retrieve the strings if they are resting above the external os. If this is unsuccessful, a TVUS can be obtained. If the IUD is identified in the uterine cavity, hysteroscopy can be utilized to remove the IUD under direct visualization. If the IUD is not identified on TVUS, an abdominal x-ray can be obtained to evaluate if the IUD has perforated the uterus. Rarely, a CT or MRI may be needed to further delineate location. If the IUD is not visualized on x-ray, it is likely expelled and no further workup is necessary. If the IUD is located in the abdominal cavity, diagnostic laparoscopy would be the next appropriate step for identification and removal.



RELEVANCE OF MINIMALLY INVASIVE GYNECOLOGIC SURGERY RESIDENCY CURRICULUM IN THE PRACTICE OF FILIPINO OBSTETRICIAN GYNECOLOGISTS: A RETROSPECTIVE CROSS-SECTIONAL STUDY

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Problem Statement: Minimally invasive gynecologic surgery (MIGS) was incorporated into residency training programs in the Philippines in 2015. Despite its inclusion, the curriculum's relevance to the actual practice of General Obstetrician-Gynecologists (OBGYNs) has not been formally evaluated. Assessing this is essential to determine whether training equips practitioners with the skills and knowledge required for contemporary clinical practice. **Methods:** A retrospective, cross-sectional analytical study using the Context-Input-Process-Product (CIPP) evaluation model was conducted among 100 general OBGYN specialists trained in Philippine Obstetrical and Gynecological Society-accredited institutions (2020–2024). A validated questionnaire was used. **Results:** Ninety percent of respondents considered the MIGS curriculum relevant to their practice. However, fewer than 50% demonstrated strong theoretical knowledge: identifying MIGS-eligible patients (44%), recognizing complications (41%), and creating post-op instructions (45%). Sixty-eight percent identified pathological conditions well via hysteroscopy/laparoscopy. Many did not meet procedural requirements: diagnostic hysteroscopy (47%) and laparoscopy (52%). Most had access to essential tools—hysteroscopy (83%) and laparoscopy (87%) instruments, towers, and trained nurses/technicians. Eighty-nine percent reported MIGS educator availability, mainly Reproductive Medicine and Gynecologic Endoscopy consultants. Only 1–2% felt uncomfortable discussing indications/complications. Notably, the presence of Reproductive Medicine and/or Gynecologic Endoscopy educators was significantly associated with the perceived relevance of the MIGS curriculum. **Conclusion:** While most practitioners find MIGS training relevant, gaps in theoretical knowledge and hands-on experience persist. The MIGS residency curriculum did not make relevant impact on the practice of General OBGYN.

MODERATED E-POSTER SESSION 05: FETOMATERNAL MEDICINE – CASE REPORT/STUDY & OTHER

CASE REPORT/STUDY

BANDL RING DURING CESAREAN SECTION – CASE REPORT AND MULTIDISCIPLINARY MANAGEMENT

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Problem Statement: A Bandl ring is a pathological retraction ring formed due to disproportionate thickening of the upper and thinning of the lower uterine segment during prolonged or obstructed labor. Though rare, it poses significant maternal and fetal risks, including trauma to the fetal head, neck, and shoulders, with potential long-term sequelae such as cerebral palsy. Historically associated with high infant mortality, timely recognition and coordinated surgical–anesthetic management are essential to improve outcomes. **Methods:** Case report; institutional review board (IRB) exempt. **Case Report:** A 26-year-old primigravida at 39 weeks and 5 days gestation presented with contractions, vaginal bleeding, and preeclampsia with severe features. Arrest of descent prompted an emergency cesarean section. Intraoperatively, a Bandl ring was noted, creating difficulty with safe delivery of the baby. Surgical maneuvers included extension of the uterine incision, with consideration of T- or U-shaped incisions to facilitate delivery. From the anesthesia standpoint, in addition to pre-operative epidural analgesia, augmentation with nitrous oxide for maternal anxiolysis and uterine relaxation is an option. Uterine relaxing agents such as nitroglycerin or terbutaline may also be considered in such settings, though they carry risks of maternal hypotension and postpartum hemorrhage. General anesthesia remains an option if other strategies fail. The baby was delivered successfully, and the remainder of the case proceeded without complication. **Conclusion:** Bandl ring, though rare, represents a surgical and anesthetic

emergency. Optimal outcomes require prompt recognition and multidisciplinary approach. From a surgical perspective, timely incision extension (including T- or U-incisions when necessary) is critical, while anesthetic strategies such as adjuvant nitrous oxide or uterine relaxing agents may facilitate delivery. Early recognition, preparation, and team-based training — including simulation of rare scenarios — can minimize maternal and neonatal morbidity and mortality.

THE SILENT CRISIS: UTERINE VARICOSITY RUPTURE IN TWIN PREGNANCY—A TICKING TIME BOMB

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Problem Statement: Atraumatic spontaneous rupture of uterine varicosities during pregnancy is a potentially lethal complication that is likely misdiagnosed because of its rarity and usually it is detected at the time of delivery. The diagnosis of ruptured uterine varicosities has rarely been made preoperatively and mostly detected at the time of delivery. Differential diagnoses include obstetric and non-obstetric conditions hence a detailed history taking and physical examination is a must. **Methods:** This is a case of a 32-year old primigravida at 32 weeks age of gestation, twin pregnancy, with an otherwise uneventful pregnancy, presented with an acute onset of abdominal pain without any history of trauma and prior comorbidities. The clinician faces with a puzzling diagnostic dilemma and challenging management scheme of this case. Careful history taking and physical examination with the aid of laboratory work-ups and ultrasound were utilized for prompt diagnosis. **Results:** The patient presented with non-specific symptoms of acute abdominal pain with detected intraperitoneal fluid collection amounting to approximately 100 ml on whole abdominal ultrasound. A drop in the hemoglobin levels and tachycardia suggested an impending hemorrhagic shock with intra-abdominal origin. Patient delivered by emergency primary low segment transverse cesarean section to a live set of preterm, female twins, both with an APGAR score of 8 remaining 9 and weighed 1710 grams for twin A and 1610 grams for twin B, both were appropriate for gestational age. There was noted spontaneous rupture of uterine varicosities located on the bilateral uterine cornu. Adequate hemostasis and evacuation of blood clots in the pelvic cavity were done. Postoperative period was uneventful without the need of blood transfusion and the patient was discharged on the fifth operative day. **Conclusion:** This case was presented to emphasize the need for careful post-delivery monitoring not only for revealed postpartum hemorrhage, but also for this rare life-threatening cause of obstetric shock wherein a correct and early operative intervention can save a precious young life.

REFRACTORY NAUSEA AND VOMITING IN PREGNANCY - PATHOGENESIS AND MANAGEMENT

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Problem Statement: Nausea with vomiting is common in pregnancy with a prevalence of 50 to 90% of pregnancies having nausea or nausea with vomiting. Most cases of nausea and vomiting will resolve by mid-trimester. Refractory nausea and vomiting in pregnancy may be secondary to severe hyperemesis gravidarum, gastroparesis, gastrointestinal dysmotility, Helicobacter pylori, etc. Management of refractory nausea and vomiting is very challenging. **Method:** case report, hence, institutional review board (IRB) exempt. **Results:** A 29-year-old G4P3003 at 30 weeks and 1 day gestation admitted onto the antepartum service with refractory nausea and vomiting in pregnancy. History of three vaginal deliveries with severe hyperemesis gravidarum and chronic marijuana use during pregnancy which she blamed on her hyperemesis gravidarum. She had a 30 Lb weight loss, ketonuria, hypokalemia, hypoalbuminemia, hypoproteinemia, anemic with hemoglobin of 9.7 showing normocytic, normochromic anemia. Fetal monitoring showed a normal reactive fetal heart rate and ultrasound showed 30% growth. She was treated with steroids, vitamin B6, metoclopramide, ondansetron, Benadryl, etc without success. She had a PICC line placed and removed because of technical problems and feeding tube that was subsequently removed as well. Placed on a combination of antiemetics, nutritional with dietary counseling and



education. A combination of therapeutic measures led to a successful pregnancy. She finally made it to 39 weeks of gestation, had elective induction of labor with good obstetric outcomes. **Conclusion:** a case of refractory nausea and vomiting in pregnancy managed with antiemetics, steroids, feeding tube and peripheral venous access for at home hydration. This is an excellent opportunity to discuss the pathogenesis of nausea and vomiting in pregnancy and the intricate management of refractory nausea and vomiting in pregnancy.

OTHER

EFFECTS OF PRE-PREGNANCY BODY MASS INDEX AND GESTATIONAL WEIGHT GAIN ON NEWBORN BIRTHWEIGHT

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Problem statement: Pre-pregnancy body mass index (pBMI) and gestational weight gain (GWG) are key determinants of newborn birthweight. The objective of our research was to estimate the effect of pre-pregnancy BMI on GWG and their effect on newborn birth weight. **Methods:** The study was conducted from May to August of 2025 at Department of Obstetrics and Gynecology, University Hospital Center Osijek and was approved by required ethical boards and financed by Faculty of Dental medicine Osijek Institutional project: IP-FDMZ-2024.2025-07. The participants agreed to participate in the study and signed informed consents. Data was collected from their medical history, and a questionnaire containing general sociodemographic data and gynecologic and obstetric history. **Results:** A total of 192 pregnant women were included. Mean age of participants was 31,01 (20-43) years, gestational age at birth was 39+5 (37+0-41+3) weeks. Mean pBMI was 25,26 (17,47-41,66) kg/m². They were divided into 4 groups by their pBMI. Out of them 1,00% was underweight, 60,9% average, 21,9 were overweight and 16,1% were obese. After calculating GWG they were divided into GWG categories based on guidelines by Institute of medicine into those who gained too little weight 15,6%, adequate weight 26,6% and those who gained too much weight during pregnancy 57,8%. Newborns were divided into 3 groups based on their birth weight small for gestational age (SGA) 3,6%, average for gestational age 68,8 and large for gestational age (LGA) 27,6%. Women who gained too much weight for their pBMI were more likely to be in overweight and obese group (p=0,003 and p= 0,001). pBMI was not statistically significantly related to LGA or SGA (p=0,151). Regarding newborn weight and total GWG, there was a statistically significant difference (p=0,036) where newborns born from mothers who gained more during pregnancy were more likely to be LGA and vice versa regarding SGA (p=0,036). **Conclusion:** While GWG was shown to have a significant impact on neonatal birth weight in regards of SGA and LGA, pBMI didn't have such impact. However pBMI had an impact on GWG where women who had larger pBMI were more likely to gain too much weight for their BMI category during pregnancy.

MEDICAL COMPLICATIONS IN PREGNANCY PRETERM DELIVERY PREVENTION AND TREATMENT

EFFECT OF DOXYLAMINE/PYRIDOXINE 10/10MG PROLONGED-RELEASE CAPSULES ON QUALITY OF LIFE IN WOMEN WITH NAUSEA AND VOMITING OF PREGNANCY: NOVEL RESULTS OF THE CARIBENE STUDY

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Problem statement: Nausea and vomiting in pregnancy (NVP) is a prevalent condition (50-90%) that affects the quality of life (QoL) of pregnant women; however, there are no clinical data evaluating this impact. The endpoints of the Caribene Study is to evaluate the effect of Doxylamine/Pyridoxine 10/10 mg prolonged-release capsules on QoL and NV intensity in pregnant women. **Methods:** Phase IV, multicenter, open-label, single arm clinical trial. Pregnant women (18-45 years, gestational age -GE- 5-12 weeks) with NVP (PUQE-24≥6) were included. NV of different etiology were excluded. Posology was established titrating from 0-0-2 capsules per day (morning/afternoon/evening) up to 1-1-2 for 14 days of treatment, with symptoms assessed using the PUQE-24 questionnaire (3-15 points). The primary endpoint assessed ΔQoL (day14 vs. day1) using the NVPQoL questionnaire, with 4 dimensions (physical symptoms, fatigue, emotions and limitations) and score ranging from 30 [best] to 210 [worst]; reduction implies improvement in PUQE-24 and NVPQoL questionnaires. Other objectives were CdV at different times, NVE intensity, and different dosages. Data expressed as median (Q1;Q3), unless indicated. **Results:** 49 women were evaluated [mean age 32.6 (SD 4.4) years, GE 8.4 (1.4) weeks, with NV from 5.5 (1.4) weeks, baseline NVPQoL of 116.6 (SD 40.2) and PUQE-24, 8.0 (Q1 7.0; Q3 10.0). After treatment, a mean improvement of 12.2% was observed in QoL at day 7 [-21.1 points (SD 34.6)], with further improvement to 37.9% at day 14 [-33.6 (SD 33.1)](p<0.001 vs. baseline). All dimensions improved at day 14 (p<0.05). An early improvement in the intensity of the NVE was found to be 28.6% from the first day, 66.7% at 7 days, and continued to improve to 80% at 14 days. In addition, the treatment is effective in completely resolving (100% reduction) vomiting within 4 days. Women escalated (73.46%) resulting in 14 different dosages, with 1-1-2 being the most frequently used (47.7%). Only one mild adverse reaction was reported (2.0%). **Conclusions:** Doxylamine/pyridoxine 10/10mg prolonged-release capsules with it's dosing options demonstrate a rapid therapeutic action, reducing symptom intensity by 30% after only the first day. Furthermore, are the only intervention demonstrated to significantly improve their physical and social well-being.

MODERATED E-POSTER SESSION 06:

ART/IVF/INFERTILITY – GENETICS & GENOMICS, INFERTILITY/ ENDOCRINOLOGY

GENETICS & GENOMICS

LACTYLATION-RELATED HUB GENES TKT PROMOTE PREECLAMPSIA VIA REPROGRAMMING OF MACROPHAGE THROUGH PARP1/CGAS-STING PATHWAY

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Objective: This study is aimed to explore the lactylation-related hub genes, better understand the mechanism of lactylation in preeclampsia and help provide more useful and promising treatment strategies. **Methods:** Preeclampsia placenta data and lactylation-related gene set data were obtained from GEO and Genecards. The cross-expressed genes between preeclampsia and lactylation were taken as target genes using WGCNA and venn analyses. Hub genes were screened through protein-protein interaction network. The potential functions of the hub genes were explored on GeneMANIA. The immune level of preeclampsia was evaluated on basis of different algorithms. CIBERSORT was used to calculate the scores and analyze the correlation between immune cell subgroups in preeclampsia and hub genes. qPCR were used in a mouse PE model to verify the mRNA expression of SOD1,MIF,and TKT obtained from bioinformatics; flow cytometry and immunofluorescence were used to detect the phenotype of macrophages (RAW264.7 and THP-1) induced by hypoxia reoxygenation in vitro. qPCR and Western Blot were used to detect the expression of TKT,PARP1,cGAS and STING, and metabolic indicators were detected using assay kits; Finally, TKT was knocked down in the mouse PE model, and macrophage phenotype, mouse pathology, biochemistry (urine protein, blood pressure, and offspring photos) and other indicators were observed. **Results:** Three lactylation-related hub genes of preeclampsia (SOD1, MIF, TKT) were obtained. We confirmed that TKT expression is upregulated in macrophages induced by hypoxia in vitro, leading to increased lactate production, inhibition of PARP1 expression, activation of the cGAS-STING signaling axis, and induction of macrophage metabolic reprogramming towards M1 polarization. Overexpression of TKT



further amplified these effects, whereas knocking down TKT resulted in reduced lactate production and PARP1 expression, inhibition of the cGAS-STING signaling axis, ultimately suppressing macrophage M1 polarization and reversing metabolic reprogramming. Additionally, in the mouse PE model, TKT knockdown was found to inhibit these pathways, weaken macrophage metabolic reprogramming, and ultimately suppress PE progression. **Conclusion:** This study reveals several key preeclampsia lactylation genes and related functional signaling pathways. Among these, the TKT gene, which exhibits the most significant difference in expression, has been confirmed to enhance lactate production. It induces metabolic reprogramming in macrophages via the PARP1/cGAS-STING signaling axis, ultimately contributing to the progression of PE.

INFERTILITY/ENDOCRINOLOGY

ASSESSING CELLULAR IMMUNE CAUSES IN REPRODUCTIVE FAILURE USING A SINGLE NATURAL KILLER CELL TEST

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Problem Statement: Several studies have shown a significant association between immunological abnormalities and reproductive failure (RF). Previous research has demonstrated the effectiveness of immunotherapy such as intravenous immunoglobulin (IVIg) in RF patients with immune dysfunction. Peripheral blood immune markers such as natural killer (NK) cell level, NK cell cytotoxicity, T helper (Th)1/Th2 ratio, and Th17/regulatory T cell (Treg) ratio have been implicated in RF. However, these tests are often costly and technically demanding, which limits routine use. Among them, peripheral blood NK cell level is the most widely studied in RF and is the most accessible and cost-effective. We aimed to determine the cut-off value of a single NK cell level test that could identify immune abnormalities in women with reproductive failure without performing multiple immunologic tests. **Methods:** This retrospective study was conducted at Konyang University Hospital from January 2008 to December 2023. Women aged 18–45 years with RF—defined as ≥ 2 consecutive miscarriages or ≥ 3 implantation failures—who underwent immune testing before pregnancy were included. Cellular immune abnormalities were defined as NK cell level $\geq 16.1\%$; NK cell cytotoxicity abnormal in ≥ 2 of 3 E:T ratios; Th1/Th2 ratio ≥ 36.2 (TNF/IL-10); and Th17/Treg ratio ≥ 1.096 according to our previous studies. A receiver operating characteristic curve was used to determine the optimal NK cell cutoff value from the three-marker panel listed above. **Results:** A total of 1,116 RF women underwent tests for NK cell level, NK cell cytotoxicity, and Th1/Th2 ratio. Using a receiver operating characteristic curve of the three-marker panel listed above, the optimal NK cell level cutoff level was 14.925% (56.8% of sensitivity, 76.7% of specificity, and $p = 0.019$). Testing this single marker alone identified 57.54% of RF women with cellular immune abnormalities, while only 8.5% of immunologically normal individuals were falsely classified as positive. **Conclusion:** Peripheral blood NK cell level is a simple, accessible, and cost-effective single marker to detect immune dysfunction in women with RF. These findings suggest that peripheral NK cell level alone may be an effective initial screening tool in resource-limited settings. However, further studies are warranted to validate these findings.

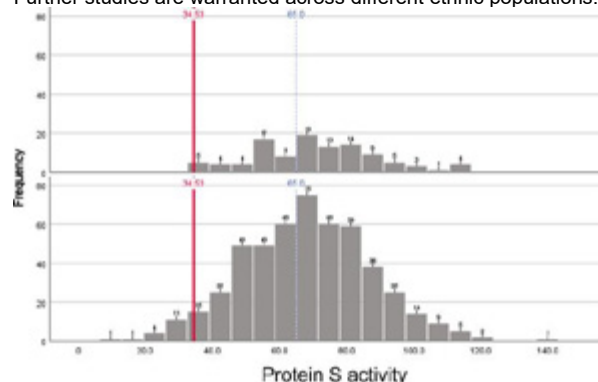
REFINING DIAGNOSTIC CRITERIA: PROPOSAL OF A NEW REFERENCE RANGE OF PROTEIN S ACTIVITY IN WOMEN WITH REPRODUCTIVE FAILURE

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Problem statement: Reproductive failure (RF), encompassing infertility and recurrent pregnancy loss (RPL), affects a substantial proportion of women. Thrombophilia may contribute to RF; however, existing reference ranges for thrombophilic markers are not tailored to women of reproductive age, potentially reducing diagnostic accuracy. This study aimed to propose a new reference range derived from a population of women within this age group. **Methods:** We retrospectively analyzed 503 women with idiopathic RF and 106 fertile controls who visited Konyang University Hospital, Daejeon, South Korea. Thrombophilic markers - including activities of protein C and protein S, and plasminogen activator inhibitor-1 (PAI-1) level—were measured. Current reference ranges were compared with new ranges calculated as mean $\pm$ 2SD from the fertile control group. Group differences and associations with idiopathic RF were

assessed using t-tests, chi-square tests, and logistic regression analysis. **Results:** No significant differences in protein C and protein S activities were observed between the two groups, whereas PAI-1 levels were significantly lower in the idiopathic RF group compared with controls (28.2 ± 22.5 vs. 35.3 ± 24.6 ng/mL, $p = 0.007$). Interestingly, PAI-1 was inversely associated with RF risk (OR 0.988, $p = 0.004$). New reference ranges were established as follows: protein S activity, 34.53% (vs. current 65%); PAI-1, 84.57 ng/mL (vs. current 43 ng/mL). Protein C activity was similar to the current reference range: 72.03% (vs. current 70%). Applying these new thresholds, protein S deficiency prevalence decreased from 35.8% to 0% in controls and was observed in 4.4% of idiopathic RF patients ($p = 0.021$). Elevated PAI-1 prevalence decreased from 32.1% to 7.5% in controls and from 17.7% to 5.0% in RF patients ($p = 0.287$). **Conclusion:** Current reference ranges for protein S activity may be inappropriate for reproductive-age women and could lead to overdiagnosis of thrombophilia. The proposed new reference range of 34.53% improves diagnostic specificity for idiopathic RF. PAI-1 levels may not be reliable for thrombophilia screening in Asian women with idiopathic RF due to various confounding factors. Further studies are warranted across different ethnic populations.



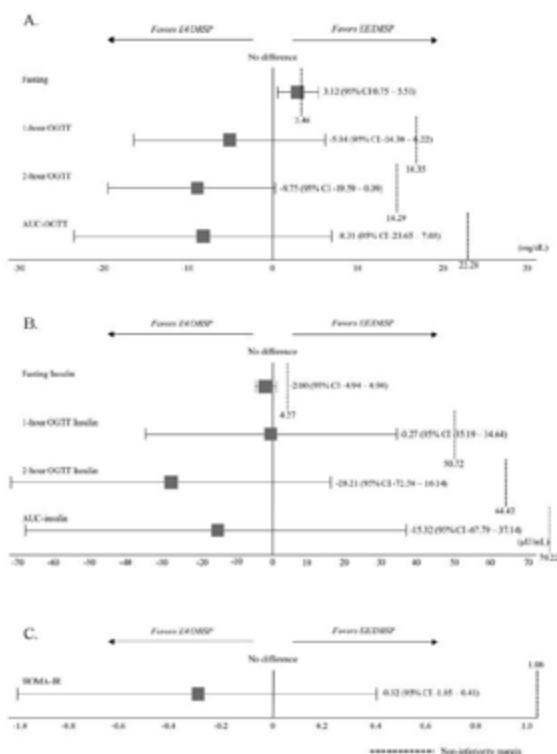
EFFECTS OF ESTETROL/DROSPIRENONE VERSUS ETHINYL ESTRADIOL/DROSPIRENONE ON GLUCOSE TOLERANCE IN WOMEN WITH POLYCYSTIC OVARY SYNDROME: A RANDOMIZED CONTROLLED TRIAL

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Problem statement: Are combined oral contraceptives containing estetrol/drospirenone (E4/DRSP) non-inferior to those containing ethinyl estradiol/drospirenone (EE/DRSP) in terms of glucose tolerance in women with polycystic ovary syndrome (PCOS)? **Methods:** This open-label, randomized crossover trial was conducted from January 2024 to January 2025. Women with PCOS, diagnosed according to the modified 2003 Rotterdam criteria, received three cycles of either E4 15 mg/DRSP 3 mg or EE 30 mcg/DRSP 3 mg. After a two-month washout, participants crossed over to the alternate regimen for three further cycles. Glucose tolerance (via 75 g oral glucose tolerance test [OGTT]), insulin levels, and homeostatic model assessment for insulin resistance (HOMA-IR), were compared between treatments. **Results:** Of 66 women enrolled, 61 completed both treatment phases. Baseline characteristics were comparable. No significant differences were observed in the mean changes in 2-hour OGTT (E4/DRSP: 4.65 mg/dL [95% confidence interval (CI) -2.27 to 11.66] vs. EE/DRSP: 14.40 mg/dL [95% CI 7.50 to 21.29]; $p = 0.05$; upper boundary for non-inferiority margin of 14.29), 1-hour insulin levels (-1.04 μ U/mL [95% CI -25.94 to 23.86] vs. -0.77 μ U/mL [95% CI -25.24 to 23.70]; $p = 0.99$; upper boundary for non-inferiority margin of 50.72), or HOMA-IR (0.28 [95% CI -0.24 to 0.80] vs. 0.60 [95% CI 0.09 to 1.11]; $p = 0.39$; upper boundary for non-inferiority margin of 1.06). **Conclusions:** E4/DRSP was not inferior to EE/DRSP in its effects on glucose tolerance, insulin levels, and HOMA-IR, supporting its use as a potential oral contraceptive option in women with PCOS.





FAVOURABLE MODULATION OF THE VAGINAL MICROBIOME WITH A MYO-INOSITOL AND PROBIOTIC-BASED NUTRACEUTICAL IN WOMEN OF REPRODUCTIVE AGE: RESULTS FROM THE INOBIOTIC STUDY

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Problem statement: The vaginal microbiome (VM) is classified into five Community State Types (CST), of which CST I-II are associated with favorable reproductive outcomes, while CST IV-V are associated with poorer prognosis. CST III is considered intermediate. Probiotics may help restore microbial balance, but clinical trials are required to confirm efficacy, safety, dosage and route of administration. This study evaluated the effect of a nutraceutical containing myo-inositol, folic acid, melatonin, vitamin D, zinc, and five probiotics (*Lactobacillus acidophilus* PBS066, *L. reuteri* PBS072, *L. plantarum* PBS067, *L. rhamnosus* LRH020 and *B. animalis* subsp. *lactis* BL050 (5×10^9 CFU)) on VM modulation towards more favorable environments for fertility. **Methods:** This single-center clinical study randomized 150 healthy women (aged 18–45) with regular menstrual cycles into two groups: a treatment group (1 sachet/day for a cycle) and a control group (no intervention). Vaginal samples were collected at T0 (baseline) and at T4 (follicular phase of the following cycle), for 16S rRNA metagenomic analysis. CST and taxonomic changes were assessed using hierarchical clustering. Safety was also evaluated. **Results:** 148 women completed the study (74 per group). In the treatment group, 25.6% of women transitioned to more favorable CSTs (from CST IV–V to CST I–II–III, and from CST III to CST I–II) compared to 8.9% in control group ($p=0.03$). Among women with baseline CST-IV, 28.6% of treatment group transitioned to more favorable profiles (CST I–II–III) compared to 0% in the control group ($p=0.032$). Taxonomic analysis in this subgroup showed a significant increase in *Lactobacillus* abundance (7% to 30%, $p \leq 0.01$) and a decrease of *Atopobium*, (26% to 21%, $p \leq 0.01$) in the treated group. Trends toward reduction were observed for *Prevotella* and *Gardnerella* ($p=0.06$ and $p=0.09$, respectively). No changes were observed in the control group ($p \leq 0.05$). Three mild adverse events were reported. **Conclusion:** Daily supplementation with this nutraceutical for a 28-

day cycle proved to be safe and effective in modulating VM, as it nearly tripled the likelihood of transitioning to CSTs more favorable for fertility. In addition, almost one in three women (29%) with CST IV experienced a positive shift and boosted the abundance of *Lactobacilli*.

MODERATED E-POSTER SESSION 07: ART/IVF/INFERTILITY – MIXED SUBTOPICS

FERTILITY PRESERVATION

THE USE OF EX-VIVO IN-VITRO MATURATION OF OVARIAN TISSUE OOCYTES FOR FERTILITY PRESERVATION IN OVARIAN CANCER/BORDERLINE OVARIAN TUMOURS - A DISCUSSION OF TWO PATIENTS

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Problem statement: Fertility preservation in ovarian cancer is often challenging. Traditional fertility preservation techniques, such as ovarian tissue cryopreservation or oocyte retrieval, may not always be suitable, especially in cases where immediate cancer treatment is necessary or where hormonal stimulation is contraindicated. Ex-vivo in-vitro maturation of ovarian tissue oocytes (OTO-IVM) offers a promising alternative in these women by enabling the retrieval and maturation of immature oocytes outside the body from the oophorectomy tissue specimen. **Methods:** This case series describes two female patients with ovarian tumours who underwent planned concomitant OTO-IVM of oocytes during their oncologic surgeries. **Results:** The two patients presented to KK Women's and Children's Hospital Oncofertility Clinic in June 2025. The first patient was a 35-year-old married nulliparous woman. She had undergone a left ovarian cystectomy in May. The histology of the left ovarian cyst was grade 1 endometrioid carcinoma. A staging CT thorax abdomen and pelvis post-operatively showed an incompletely removed left ovarian tumour and peritoneal thickening (which may possibly be due to post-surgical changes versus peritoneal carcinomatosis). In view of the findings, the patient was counselled for completion left salpingo-oophorectomy, fertility sparing staging surgery, with considerations for complete debulking if the disease was advanced. The patient was kept for OTO-IVM intraoperatively if either or both ovaries were removed. Three immature oocytes were retrieved from the left ovarian tissue specimen with 1 resultant embryo frozen. The second patient was a 31-year-old married nulliparous woman. She presented with bilateral large ovarian masses on a background history of previous bilateral cystectomy for borderline ovarian tumour. Her preoperative AMH was 0.62ng/ml. She was planned for her oncologic surgery with frozen section, keep in view staging surgery. The patient opted for oocyte cryopreservation via OTO-IVM in the event that one or both ovaries were removed. Unfortunately, no oocytes were retrieved in her case. **Conclusion:** These cases underscore the critical role of a multidisciplinary team — involving gynaecologic oncologists, fertility specialists, and embryologists — in planning and executing individualised fertility preservation strategies. Such collaboration ensures that oncologic safety is maintained while optimising the reproductive future of young women facing ovarian tumours.

PROMISING RESULTS IN FERTILITY PRESERVATION IN A COHORT OF 365 WOMEN, A 6-YEAR PROSPECTIVE STUDY

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Problem statement: Fertility preservation is a concern for women due to the delayed age at childbearing and the shift in lifestyle. We would like to share the results from our center, which are more promising than the current literature. **Methods:** In the last 6 years, we have performed 443 oocyte preservation cycles in 365 patients, some of whom required more than 1 cycle to achieve our goal, which is, based on our results, 10 MII per patient. We performed a 6-year prospective follow-up study, where the average age of women



who preserved eggs was 35 and we excluded those who used their vitrified oocytes in association with fresh retrieval. **Results:** Of the 443 cycles, the average number of oocytes obtained was 12.5 (9.8 MII), only 2% had no oocytes nor MII obtained. 328 of these cycles have been performed from 2022 onwards, given greater social awareness of fertility prevention. If we consider this subgroup, the average age has increased to 37 years, but the number of oocytes obtained and MII has been very similar, 13 and 10 respectively. So far, only 24 patients have used their vitrified oocytes, considering 21 for our study after excluding 3 who did fresh retrieval as well. The average age was 34.7 years at the time of preservation, the survival rate at thawing was 91%, with an average of 11.3 devitrified MII per patient and 3.1 usable embryos obtained (good quality or transferable if PGT-A). Three of them did not obtain embryos (14.3%; average age 36.6 years). The remaining 18 have already been transferred, with 1.1 transfers per patient (14 fresh and 6 frozen-thawed embryo transfers), resulting in a pregnancy rate of 83.3%, a clinical pregnancy rate of 77.7%, a twin pregnancy rate of 28.6%, a biochemical miscarriage rate of 6.7% and no clinical miscarriages. All clinical pregnancies are currently ongoing and there are already 10 live births. **Conclusion:** Given the promising results, we encourage our patients to vitrify their oocytes before the age of 35, where the success rate at our center exceeds 75% for having a child at home.

CLINICAL ART/IVF

EARLY OR LATE PROGESTIN INITIATION IN OOCYTE DONORS? A TWO-CENTER RANDOMISED NON-INFERIORITY TRIAL

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Problem statement: It has been shown that exogenous progesterone can efficiently avoid LH raise during progestin-primed ovarian stimulation (PPOS) cycles, but the best moment to start it is still a matter of debate. We wondered if adding progesterone as early as the first day of stimulation (early PPOS; ePPOS) or at the fifth day (late PPOS; lPPOS) was equally effective in preventing LH surge maintaining the same oocyte and embryo quality. **Methods:** Multicenter, randomized, non-inferiority trial performed in two Spanish fertility clinics during 2022 and 2023. Only first-cycle oocyte donors were eligible, who underwent controlled ovarian hyperstimulation with rFSH 225 IU/day plus oral medroxyprogesterone acetate (MPA) 10 mg/day, starting on day 1 or day 5 of the ovarian stimulation. Sample size was powered enough to detect a difference of at least 2 mature (metaphase-II; MII) oocytes. The statistical analysis was performed through Student's T and χ^2 tests. The number of MII oocytes obtained in each group was the primary endpoint; spontaneous ovulation, fertilization rate and transferable blastocyst rate formation were the secondary endpoints. **Results:** 323 ovarian stimulation proceeded to analysis (164 ePPOS; 159 lPPOS). Stimulation length and total gonadotrophin dose were similar. Mean oocyte yield in ePPOS group was 19.0 (SD 8.9) versus 18.7 (SD 9.0) in lPPOS, with a difference of 0.3 oocytes (95% CI -1.697 to 2.212). No cases of spontaneous ovulation occurred. Embryo outcomes were assessed on a subset of 146 ICSI cycle (73 por group). Fertilization rates were comparable: 72.2% (ePPOS) and 70.3% (lPPOS) ($p=0.262$). Neither the rate of transferable blastocysts formation showed any differences (62.2% vs 56.6%, $p=0.104$). **Conclusion:** In donor cycles, lPPOS is non-inferior to ePPOS for MII oocyte yield, with no increase in premature ovulation and no meaningful differences in fertilization or transferable blastocyst rates. Starting MPA on stimulation day 5 offers a more convenient approach for egg donors due to fewer days of progestin exposure, without any detrimental effect on laboratory outcomes.

OPTIMIZATION OF IVF PROGRAMS FOR PATIENTS WITH ENDOMETRIOSIS: ENVIRONMENTAL ANALYSIS FOR EMBRYO CULTURE

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The average age of the patients included in the study was 31.9 ± 1.9 years at the time of entry into the assisted reproductive technology (ART) program. The patients' data were divided according to POSEIDON criteria: 10 patients had an antimüllerian hormone

(AMH) level of 1.2 ng/ml (Group 1), while 23 patients had 1.2 ng/ml (Group 2). In Group 1, endometriosis was identified at stages I and II in 55% of the patients, while in Group 2, this percentage was 35%. Accordingly, 45% of patients in Group 1 and 65% in Group 2 had endometriosis at stages III and IV, according to ASRM classification. The total dose of follicle-stimulating hormone (FSH) administered in Group 1 was 2914 ± 300 IU, while in Group 2, it was 2341 ± 136 IU, with the differences being close to statistical significance ($p = 0.055$). The average number of retrieved oocytes was 5.3 ± 1.3 in Group 1 and 12.3 ± 1.2 in Group 2, with a statistically significant difference ($p = 0.003$). The number of blastocysts obtained was 1.7 ± 0.4 in Group 1 and 3.0 ± 0.5 in Group 2 ($p = 0.09$). Live birth rates were 22.2% in Group 1 and 35.8% in Group 2. The findings suggest that various culture media significantly impact embryo viability and quality in patients with ovarian endometriosis. Among the 33 patients who underwent in vitro fertilization (IVF), an increase in the percentage of viable embryos was observed during the culture stage. The study compared the effects of high-viscosity and low-viscosity oils on embryo cultivation. High-viscosity oil provided more stable conditions, reducing the frequency of incubator openings and minimizing CO2 fluctuations, leading to improved embryo protection and development. Consequently, utilizing high-viscosity oil for embryo culture may offer more stable and optimal conditions compared to low-viscosity oil, underscoring the importance of individualized approaches in ART for women with endometriosis to enhance IVF success rates.

EMBRYOLOGY

LIMB BODY WALL COMPLEX: A CASE SERIES

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Limb body wall complex (LBWC) is a rare, sporadic wide spectrum of severe anomalies in the body wall. Etiology is unknown but most accepted theory is early embryonal dysplasia. According to this, there will be an abnormal embryonic folding related to malfunctioning of the body wall ectodermal placode. This leads to defective closure of embryonic abdominal wall, umbilical abnormality and persistence of extra embryonic coelom communicating with the abdominal cavity. **Methods:** The diagnosis of this condition can be established by ultrasound which can detect this anomaly as early as first trimester. Limb body wall complex is a lethal anomaly hence it has to be differentiated from treatable causes like omphalocele or gastroschisis. Autopsy is the gold standard of diagnosis. **Results:** In all of the three cases presented, it has been shown with the following common findings: All has the same blood type, "O" positive. All partners are farmers, and maternal age below 35yo. **Conclusion:** This paper aims to present cases of Limb body wall complex, identify common risk factors that might have contributed to the development of the syndrome, and describe a suitable management plan. Correlation of the syndrome with medical and socio demographic factors was done to identify other possible risk factors for early diagnosis, timely and proper management. Thorough perinatal counselling is the primary goal of management of these diagnosed cases.

Keywords: Limb body wall complex, embryonal dysplasia, early ultrasound



CASE 1: BC CASE 2: RB CASE 3: AB

CASE REPORT/STUDY

INDIGO AMNIOINSTILLATION TO RULE OUT PPROM IN DI-DI TWIN GESTATION - CASE REPORT AND DISCUSSION

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Problem Statement: The diagnosis of preterm premature rupture of membranes (PPROM) in pregnancy at 30 weeks gestation is challenging enough, moreso, when you have twin pregnancy. Expectant management with administration of antibiotics and steroids would be appropriate in a stable patient. Immediate delivery may be necessary if there is maternal or fetal compromise. **Method:** Case report, hence, institutional review board (IRB) exempt. **Results:** A 24-year-old G3P1011 at 30 weeks, dichorionic-diamniotic (di-di) twin pregnancy was admitted to antepartum unit with concern for premature, prelabor rupture of membranes (PPROM). A sterile speculum examination with Nitrazine test was positive, and ferning test was inconclusive. Given the maternal-fetal risks of PPROM, it was decided that patient should be treated antibiotics and steroids for lung maturity. However, after nearly a week of observation disclosed no additional leakage of fluid, and fetal monitoring was reassuring, work-up for PPROM was restarted. Ferning, nitrazine, and rapid immunoassay for PAMG-1 were all negative. Maternal Fetal Medicine (MFM) recommended amnioinstillation of indigo dye, the gold standard for evaluating equivocal cases of PPROM. The MFM group performed the procedure with a total of 10 mL of indigotindisulfonate in sodium saline injected into the amniotic sac of Twin A. Attempts to access Twin B's sac were precluded by fetal positioning and lack of accessible window. Evaluation for the passage of dye was assessed with serial tampon placement. After twenty-four hours of observation the patient was found to have passed no dye. **Conclusion:** A 24-year-old @ 30-weeks, di-di twin gestation admitted to rule out PPROM was found not ruptured after amnio-instillation of indigotindisulfonate. Clinicians faced with a similar presentation may also take note that while under ideal conditions the dye should be instilled into each gestational sac, it may only be necessary to access the sac of the presenting gestation, as rupture proximal to the cervix would be of greatest concern for evaluating leakage of dye. Furthermore, as is the case with this patient, if significant time has passed since suspected rupture of membranes, one might suspect re-sealing and be reassured with no leakage after the amnioinstillation test.

TRANSIENT GESTATIONAL DIABETES INSIPIDUS IN THE POSTPARTUM PERIOD: A CASE REPORT

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Gestational diabetes insipidus complicates 2 to 4 in 100,000 pregnancies and is postulated to be due to increased placental vasopressinase. It is more commonly diagnosed in the third trimester due to peak levels of the hormone and rarely postpartum due to its declining levels. This paper presents a case of a 35-year old, Gravida 2 Para 1 (1011) with a history of chronic hypertension who presented with new-onset bipedal edema and a newly-diagnosed postpartum preeclampsia with severe features seven days postpartum. Further investigation revealed postpartum diabetes insipidus after presenting with voluminous urine output measuring 14,090 mL and a urine osmolality of 151 MOSM/kg. This paper expounds on the importance of having a high index of suspicion for pregnancy-associated diabetes insipidus in patients with large amounts of dilute urine as well as on the significance of proper monitoring, patient-directed management, and counselling for future pregnancies.

EHLERS-DANLOS SYNDROME IN PREGNANCY - MANAGEMENT CHALLENGES AND MULTIDISCIPLINARY APPROACH

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Problem Statement: Ehlers-Danlos syndrome (EDS) is a group of heritable connective tissue disorders characterized by joint hypermobility, skin hyperextensibility, and tissue fragility. The hypermobile subtype of Ehlers-Danlos syndrome (hEDS) is the most common form of EDS to be seen in pregnancy. While the majority of pregnant patients hEDS will have an uneventful course, there is the potential for complications including recurrent joint dislocations, local anesthetic resistance, pelvic girdle instability, autonomic dysregulation (eg, postural orthostatic tachycardia syndrome), and perineal lacerations and postpartum hemorrhage (PPH). Multidisciplinary including maternal-fetal medicine (MFM), anesthesia, rheumatology, physical therapy, and genetics to optimize maternal and fetal outcomes. **Method:** case report, hence, institutional-review-board (IRB) exempt. **Results:** A 25 year old G4P0030 female with a history of hypermobile Ehlers-Danlos syndrome, rheumatoid arthritis, asthma and obesity (BMI 46.82) presenting at 38w4d gestation to the hospital with blood pressure of 170/90. She denied headache or visual changes/scotomata. Her pregnancy was complicated by three prior first-trimester miscarriages. She had minimal prenatal care with her last documented OB visit at 16w6d. Laboratory tests were remarkable for mild anemia (Hgb 10.7) and a reactive non-stress test. She reports that the Ehlers-Danlos disease (hypermobile type) was diagnosed by her primary care provider last year and confided by a rheumatologist, in addition to rheumatoid arthritis (RA). She was started on meloxicam with benefit but quit when pregnancy was diagnosed at five weeks gestation. Following close collaboration with the anesthesia team, MFM, her hypertensive urgency was managed effectively, subsequently delivered and was discharged home in stable condition with close outpatient follow up. **Conclusion:** Whereas she had an excellent outcome, it is important to review the important steps in managing patients with Ehlers-Danlos-syndrome in pregnancy. **Antepartum consultation** with anesthesia to discuss potential TMJ instability, cervical spine issues, and airway concerns due to difficult intubation noted in EDS. **Mode of delivery** is dependent on obstetric factors but exercise care with episiotomy and perineal repairs because of risk of delayed wound healing. **Active management of the third stage of labor** (oxytocin-uterotonics) to prevent postpartum hemorrhage (PPH). **Postpartum:** Monitor closely for delayed wound healing, hematoma formation, etc.

TECHNOLOGICAL INNOVATIONS

ADJUVANT AUTOLOGOUS PLATELET-RICH PLASMA GEL FOR DECREASING BLOOD LOSS IN POSTERIOR PLACENTA PREVIA: A CASE SERIES AND LITERATURE REVIEW

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Problem statements: Placenta previa increases the risk of massive hemorrhage during operation, even with numerous methods employed for bleeding prevention. **Methods:** Autologous platelet-rich plasma (PRP) is an autologous blood product characterized by a platelet concentration exceeding baseline levels within a reduced plasma volume. **Results:** We present two cases of pregnant women with posterior placenta previa who underwent elective cesarean delivery with adjunctive autologous PRP gel application to the placental bed. In case 1 (placenta previa totalis), estimated intraoperative blood loss was 400 mL, with 10 mL postoperative blood loss at 24 hours. Preoperative hematocrit was 34.4%, decreasing to 29.4% postoperatively. In case 2 (low-lying posterior placenta previa), estimated intraoperative blood loss was 500 mL, with 50 mL postoperative blood loss at 24 hours. Preoperative hematocrit was 32.8% with a postoperative hematocrit of 32%. No blood transfusions were required in either case. **Conclusion:** Adjuvant autologous PRP gel may have the potential to reduce blood loss in placenta previa. Further optimization of PRP preparation protocols for pregnant women and validation through large-scale clinical trials are warranted to establish its effectiveness and generalizability.

Keywords: plate rich plasma, PRP, placenta previa, case report

Disclosure of interest: The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.



THE SURVIVAL OF SINGLETON AFTER SECOND TRIMESTER DEMISE IN TWO FETUSES IN TRIPLET PREGNANCY-CASE REPORT AND MANAGEMENT APPROACH

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The incidence of triplets is 1 in 7300 pregnancies, according to Helin's law. Triplets have increased perinatal risks, including premature delivery, intrauterine growth restriction, fetal discordance, intrauterine demise and congenital malformations. Premature delivery before 34 gestational week occurs in approximately 70% in triplets, compared to 20% in twins and around 5% in singletons. At 25 weeks of gestation, ultrasound revealed a diamniotic, dichorionic triplet pregnancy with fused placentas. The two fetuses shearing one amniotic sac showed 25 % discrepancy, compared to the single fetus in the other sac with difference in amniotic fluid level, showing possible underlying complication such as a twin-to-twin transfusion syndrome. Due to abnormal Doppler findings presenting fetal compromise, termination of pregnancy was necessary to prevent further complications. The risks and potential outcome were explained to the parents, who decided continue the pregnancy. The death of two fetuses in the same amniotic sac was present at the control ultrasound scan, one week later. Corticosteroids were applied prior delivery. With second caesarean section were delivered- a live newborn measured 1050 grams/31 centimeters, with Apgar score 7 and 8. and two dead fetuses 650 and 590 grams/28 and 27 centimeters respectively. There was macroscopic evidence of first degree maceraton in one dead fetus and signs of recent death in the other fetus. The discordance of newborns was 40%. Macroscopically, the placenta displayed a the margins of placentas distinguishable on maternal site. On the fetal surface, both fetuses within the same sac has twisted umbilical cords sharing a single placental insertion point. (see picture below). After 10 weeks, the newborn was discharged from the hospital, weighing 1900 grams and measuring 46 centimeters, without serious sequels. The newborn stayed at neonatal intensive care unit and received necessary interventions such as a respiratory support, nutrition management and appropriate drugs. Compared to dichorionic survivors of a co-twin fetal demise, monochorionic survivors have a higher rate of later demise, preterm birth and neurodevelopmental impairment. For these pregnancies, it is important to diagnose chorionicity accurately and promptly and amniocyt to prevent serious complications as neurological impairment, intrauterine death and preterm delivery.



Ultrasound scan from the pregnancy can be provided by the author

MODERATED E-POSTER SESSION 09:
GYNECOLOGY – GYNECOLOGICAL ONCOLOGY/OTHER/CASE REPORT

GYNECOLOGICAL ONCOLOGY

APOPTOSIS AND METASTASIS INHIBITION EFFECTS OF MELONIS PEDICELLUS EXTRACTS ON BREAST CANCER CELL LINES

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Objectives: This study was designed to examine apoptosis and metastasis inhibition effects of Melonis Pedicellus (MP) extracts on breast cancer. **Methods:** Apoptosis and cell migration inhibition effects were tested with 4T1 cells. To investigate apoptosis, we measured cell cytotoxicity, reactive oxygen species (ROS), and morphological change of cell, mitochondria, and cell nucleus. Also,

we measured expression of Ki 67 to investigate the inhibition of cell proliferation. To investigate cell migration inhibition effects, we conducted wound healing assay and analysis of matrix metalloproteinase-2 (MMP2) and MMP9 mRNA expression. At last, we analyzed phosphorylation of extracellular signal regulated kinase (P-ERK) and phosphorylation of p38 (P-p38) expression to verify the mechanism of apoptosis. **Results:** After treating 4T1 cells with 25, 50, 75, 100, 250, 500 µg/ml of MP, cell toxicity and morphological change of cell were observed compared to the control group. Also, when 4T1 cells were treated with 500 µg/ml of MP, ROS expression, mitochondria fission, condensation of cell nuclei, and decreased expression of Ki 67 were observed. After treating 4T1 cells with 500 µg/ml of MP and conducted scratch wound healing, migration wound healing area was decreased compared to the control group, and mRNA expression of MMP2 and MMP9 also decreased. Furthermore, P-ERK and P-p38 expression both increased compared to the control group, but only P-p38 expression was statistically significantly increased. **Conclusions:** MP might have anti-cancer effects on breast cancer by apoptosis and metastasis inhibition.

Key Words: Melonis Pedicellus, Breast Cancer, Apoptosis, Cell Cytotoxicity, Metastasis

NON-PUERPERAL UTERINE INVERSION SECONDARY TO CARCINOSARCOMA MANAGED WITH HAULTAIN PROCEDURE

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Problem Statement: Uterine inversion is classically obstetric. Non-puerperal uterine inversion (NPUI) is rare, accounting for fewer than 15% of cases, with malignancy implicated in 15–20%. Carcinosarcoma-related NPUI is particularly uncommon and presents significant diagnostic and intraoperative challenges. We report a rare case of malignant NPUI underscoring the importance of surgical adaptability and multidisciplinary care. **Methods:** A 62-year-old, G5P5, postmenopausal woman presented with eight months of postmenopausal bleeding, later progressing to a non-reducible introital mass with foul-smelling bloody discharge, urinary retention, and constipation. Transvaginal ultrasound revealed a thickened endometrium, prolapsed endometrial mass, and right ovarian new growth. Biopsy showed an atypical spindle cell tumor. She was scheduled for exploratory laparotomy with total abdominal hysterectomy, bilateral salpingo-oophorectomy (TAHBSO), and surgical staging. **Results:** Intraoperatively, a 14 × 11 × 4 cm irregular, lobulated uterine mass with hemorrhage, necrosis, and fibrosis was noted, prolapsing to the hymenal ring, resulting in a complete uterine inversion. Surgery was further complicated by dense rectosigmoid and appendiceal adhesions, requiring general surgery referral for adhesiolysis. Huntington's procedure failed due to a rigid cervical constriction ring. Haultain's posterior cervical incision enabled successful reinversion, restoring anatomy and permitting safe TAHBSO with tumor debulking. Histopathology confirmed malignant mixed Müllerian tumor (carcinosarcoma) with 50% myometrial invasion, metastatic spindle cell sarcoma involving appendix and fallopian tube, borderline ovarian mucinous cystadenoma, and low-grade appendiceal mucinous neoplasm. The constellation of findings reflected an aggressive Müllerian-derived malignancy with multi-organ involvement. **Conclusion:** This case illustrates the formidable surgical challenge of malignant NPUI. Delayed recognition and distorted anatomy hindered safe hysterectomy until Haultain's procedure re-established normal landmarks. In malignancy-associated inversions, Huntington's traction alone may fail, whereas Haultain's incision reliably relieves the constriction ring. Beyond technical management, this case emphasizes the value of oncologic surveillance in postmenopausal inversion, the role of multidisciplinary collaboration, and the necessity of intraoperative adaptability. This contributes to the limited literature on carcinosarcoma-related NPUI and highlights Haultain's enduring role as a life-saving corrective technique.



A CASE OF PAPILLARY CARCINOMA ARISING IN STRUMA OVARIUM IN A NULLIGRAVID: THE PREDICAMENTS OF DISCOVERY OF MALIGNANCY AFTER MINIMALLY INVASIVE SURGERY

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Problem Statement: Struma ovarii (SO), a rare type of ovarian teratoma, accounts for 1–5% of all ovarian teratomas. Malignant transformation, particularly into papillary carcinoma, is exceptionally rare. This rarity and the nonspecific clinical symptoms, which often mimic other benign ovarian masses, make diagnosis and management difficult. The absence of standardized treatment guidelines for malignant struma ovarii (MSO) means that management is often extrapolated from protocols for conventional thyroid and ovarian cancers. An additional ethical dilemma arises when patient preferences, such as the desire for fertility, influence treatment decisions, which can lead to incomplete surgical staging.

Methods: This is a case report of a 41-year-old nulligravid woman who presented with incidental ovarian cysts. Initial transvaginal ultrasound suggested benign dermoid cysts. Due to her desire for pregnancy, she underwent a bilateral laparoscopic oophorectomy. CA-125 and CEA were slightly elevated. Postoperatively, the definitive diagnosis relied on histopathological examination. Management involved a referral to endocrinology for co-management, as well as long-term follow-up and serum thyroglobulin monitoring. **Results:** Postoperative histopathology revealed papillary thyroid carcinoma, follicular variant, arising in struma ovarii in the right ovary. The patient was managed as a case of Stage 1A papillary thyroid carcinoma. The laparoscopic approach raised concerns about incomplete staging. She was advised to undergo staging surgery and adjuvant therapy, but she was hesitant due to her desire for pregnancy. Her thyroid ultrasound and panel results were normal. The patient was advised to have a transvaginal ultrasound and serum thyroglobulin tested biannually. She spontaneously conceived after 9 months, but it resulted to an anembryonic pregnancy. She was again advised to have a staging surgery, but did not consent. **Conclusion:** This case highlights the complexities of MSO diagnosis and management, particularly when patient preferences influence treatment decisions. The absence of comprehensive staging procedures due to the initial laparoscopic approach meant the full extent of the disease could not be definitively determined. This underscores the critical importance of shared decision-making and comprehensive informed consent in such rare and complex cases. An individualized, multidisciplinary approach and vigilant long-term surveillance are essential for ensuring optimal patient care while respecting their autonomy.

OTHER

OBSTETRICS AND GYNECOLOGY TRAINEES RESEARCH ROAD MAP - CURRICULUM DEVELOPMENT - SINGLE INSTITUTION EXPERIENCE

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Problem Statement: The Accreditation Council for Graduate Medical Education (ACGME), the body responsible for accrediting all graduate medical training (internships/residencies/fellowship) programs in the United States requires resident scholarly activities. We instituted an OBGYN research-roadmap geared towards fulfilling the ACGME requirements. This entails a sustainable research curriculum that can be copied, with slight modifications, by other training programs. **Method:** Description of a curriculum development program, hence, institutional review board (IRB) exempt. It is a description of our OBGYN research curriculum and analysis of the research productivity for the department from August 1, 2020 to June 30, 2025. **Results:** Prior to starting our residency training, we expect the incoming trainees to have completed the Citi institutional review board (Citi IRB) training specific to our teaching hospital. Our OBGYN roadmap is designed to introduce the OBGYN interns or

first year trainees to the process of research starting with writing case reports. The aim is to have them presenting abstracts as soon as possible. The rest of the program is as outlined below:

Postgraduate-Year 1 (PGY-1): Ensure new trainees are Citi-IRB certified as part of their research training. Encourage active participation in ongoing research or identify possible case reports. Choose research topics and a research mentor with the help of the director of research and/or program director or with their email address and telephone number.

PGY-2: Having identified a topic or project, the trainee does a literature review followed by outlining the study objectives and methodology. The project is presented to the residency research committee for advice in planning and execution prior to submission to the University IRB. Following IRB approval, start data collection with the aid of the statistics department.

PGY-3: Collect and analyze data. Submit an abstract to the local residency research conference in mid-April of each year.

PGY-4: Write a manuscript and submit it to an appropriate peer-reviewed journal.

Conclusion: Although we expect at least one presentation by the time of graduation, our 2025 graduating residents had more than five presentations each at the time of graduation. We have a sustainable research curriculum that can be copied by other training programs.

LASER THERAPY AND HYALURONIC ACID FOR POST-CANCER VAGINAL STENOSIS: PROMISING TREATMENT OR OVERHYPED APPROACH?

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Problem Statement: Radiation-induced vaginal stenosis is a frequent late complication of pelvic radiotherapy in cervical cancer survivors, with an incidence of up to 50–60%. It can significantly impair sexual function, gynecological examination, and overall quality of life. Standard management with vaginal dilators often suffers from poor adherence and limited effectiveness. Non-hormonal alternatives, such as hyaluronic acid (HA) and fractional CO₂ laser therapy, have gained increasing attention; however, their combined use remains underexplored and debated. **Methods:** We report the case of a 40-year-old cervical cancer survivor who developed severe (CTCAE grade 3) vaginal stenosis after adjuvant chemoradiation. A non-hormonal approach combining five sessions of fractional CO₂ laser therapy with seven intravaginal injections of non-crosslinked HA (18 mg/mL) was administered over a five-year period. Patient-reported outcomes were assessed at baseline and post-treatment using the EORTC QLQ-CX24 questionnaire. A focused literature review was performed to contextualize the findings. **Results:** At baseline, the patient reported severe urinary incontinence, marked vaginal dryness, sexual inactivity, and significant body-image concerns. Following combined therapy, vaginal patency improved (reclassified as CTCAE grade 2), mucosal hydration increased, urinary incontinence decreased to mild, and sexual activity was resumed. Despite these functional improvements, reduced vaginal elasticity, occasional dyspareunia, and body-image concerns persisted. The treatment was well tolerated, with no adverse effects. Literature review revealed encouraging but heterogeneous results for HA and laser therapy individually, with minimal evidence regarding their combined application. **Conclusion:** This case highlights the potential of combining fractional CO₂ laser therapy with intravaginal HA injections as a non-hormonal strategy for radiation-induced vaginal stenosis in cervical cancer survivors. The complementary mechanisms—tissue regeneration by laser and mucosal hydration by HA—suggest possible synergistic benefit. While meaningful improvements in quality of life were observed, residual challenges and the limited evidence base underscore the need for controlled trials to determine whether this approach represents a promising standard of care or an overvalued intervention.

Disclosure of Interest: The authors declare no conflict of interest.



ABDOMINAL WALL INCISION SITE ENDOMETRIOSIS-CASE REPORT AND DISCUSSION

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Problem Statement: Endometriosis is defined as the presence of endometrial tissue outside the uterine cavity. The condition is estimated to affect 10% of women worldwide. A rare form of extra-pelvic endometriosis, known as incisional or scar endometriosis, occurs when endometrial tissue implants at a prior surgical incision site. This is estimated to occur in 0.03-0.4% of women post-cesarean section and 1.08-2% post-hysterectomy. Diagnosis is often delayed due to nonspecific symptoms, such as cyclic or chronic pain at or near an incision site, a palpable mass, and tenderness or swelling of the area. Confirmation via biopsy is needed for diagnosis. Management involves hormonal suppression, surgical excision, or a combination of both. **Methods:** Case report-institutional review board (IRB) exempt. **Results:** Our patient is a 37 year old G4P3013 who initially presented with severe dysmenorrhea and abnormal uterine bleeding. Past surgical history included cesarean section, laparoscopic cholecystectomy, and hiatal hernia repair. Hysteroscopy was performed without dilation & curettage, which revealed an atrophic endometrium with both ostia visualized, a stenotic cervix, and no polyps or fibroids. Four months later, the patient reported severe right-sided pelvic pain with continued abnormal uterine bleeding. She underwent uncomplicated robotic-assisted laparoscopic hysterectomy, bilateral salpingectomy, and lysis of adnexal adhesions. One month later, the patient presented to the emergency department with right lower quadrant abdominal pain since the surgery. A mass was found within the right rectus sheath, which she stated had been slowly enlarging. Biopsy confirmed the mass as endometriosis at the hysterectomy procedural site. Imaging studies were negative for any abnormalities. The patient was started on Lupron therapy with Norco and Motrin for pain control. One year later, she has completed the recommended Lupron dosage with improvement in pelvic pain, along with new-onset hot flashes. **Conclusion:** Incisional endometriosis is an uncommon but critical diagnosis to consider for persistent pain near a surgical site after gynecologic procedures. Timely recognition allows for effective management and can significantly improve quality of life.

MODERATED E-POSTER SESSION 10: FETOMATERNAL MEDICINE – HIGH RISK PREGNANCY

THE CLINICAL EFFECT OF ASPIRIN COMBINED WITH LOW MOLECULAR WEIGHT HEPARIN IN THE TREATMENT OF SEVERE PREECLAMPSIA

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Objectives: Preeclampsia is a common obstetric complication which is related to maternal health and infant development. Patients with preeclampsia are usually accompanied by blood hypercoagulability. Therefore, the use of anticoagulants may improve the coagulation function and clinical symptoms of patients. The purpose of our study was to analyze the efficacy and safety of aspirin combined with low molecular weight heparin in the treatment of severe preeclampsia. **Methods:** We randomly divided 124 patients into the experimental group and control group according to the admission number. Excluding 7 patients who discontinued treatment or lost follow-up, there were 59 patients in the experimental group and 58 patients in the control group. The experimental group was treated with aspirin combined with low molecular weight heparin, while the control group was treated with aspirin only. **Results:** The fibrinogen and platelet were significantly decreased, while the APTT and PT were obviously prolonged in the experimental group than those in the control group. Both the blood pressure and renal function in the experimental group were also significantly better than those in the control group. As for therapeutic effects, the effective rate of the experimental group was 89.83%, which was significantly higher than that of the control group (72.41%). **Conclusions:** Aspirin combined with low molecular weight heparin is more effective in treating severe preeclampsia,

which can significantly reduce blood hypercoagulability and improve pregnancy outcomes.

RISK FACTOR AND OUTCOME OF UNSCHEDULED DELIVERY IN PLACENTA PREVIA

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Problem statement: Patients with placenta previa have risk of vaginal bleeding in any time during pregnancy. This leads to unscheduled emergency delivery. Our objective was to identify risk factors for emergent delivery in patients with placenta previa.

Material and methods: This was a retrospective cohort study of singleton pregnancy with placenta previa. Women who had an emergent delivery were compared with women who had a planned delivery. Data were analyzed using a Student t test, chi square test, logistic regression and survival analysis. Variables included in the analyses were antenatal vaginal bleeding, premature rupture of membranes, placenta adhesion, types of placenta previa, parity and perinatal characteristics. **Results:** 188 women with placenta previa were enrolled and chart-reviewed. 76 (40.4%) had an emergent delivery. Women who underwent an emergent delivery delivered earlier (median 35 weeks vs 37 weeks, $p=0.002$) and were significantly more likely to have PROM, vaginal bleeding, NRFHR, malpresentation, transfusion, PPH and placental adhesion. Types of placenta previa, uterine activity and cervical length were not different between two groups. Risk of earlier emergency delivery was greater with vaginal bleeding when associated with PROM and placenta adhesion ($p0.001$). **Conclusion:** In cases of placenta previa with vaginal bleeding, the presence of PROM and placenta adhesion suggests a high likelihood of emergency preterm delivery. Therefore, it is important to be well prepared for such situations.

PLACENTAL PATHOLOGY IN WOMEN WITH EARLY AND LATE ONSET PRE-ECLAMPSIA

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Background: Preeclampsia complicates 2–8% of pregnancies and is a major contributor to maternal mortality worldwide. The severity of the clinical picture is directly related to the time of onset of the disease, which is usually defined as before 34 weeks' gestation (early-onset preeclampsia) or 34 weeks or more (late-onset preeclampsia). **Objective:** To examine placental histopathological changes in early and late onset pre-eclampsia to determine whether early and late onset preeclampsia have different aetiologies based on the histopathological findings. **Methods:** In this prospective observational study, 113 preeclamptic women with severe features were recruited after ethical clearance (NK/2215/MD/9962-63), where 57 were in the early onset Preeclampsia (EOPE) group and 56 were in the late onset Preeclampsia (LOPE) group. Placental findings were recorded into 3 categories like Placental weight percentiles corresponding to hypoplasia or hyperplasia, histological findings associated with acute or chronic inflammation, and histology consistent with vascular lesions like infarcts, decidual arteriopathy, and atherosclerosis. Placental findings were compared between patients with EOPE and LOPE. **Results and conclusion:** The mean age of women in EOPE group was 26.93 ± 4.8 years and 26.09 ± 3.9 in the LOPE. In EOPE, 31.5% of the women had hypoplastic placentas, compared to 10.7% in LOPE. When compared to the EOPE group, where no placenta was hyperplastic, the LOPE group had 37.5% of placentas that weighed more than the 90th percentile. Gross examination revealed that the EOPE group had a higher incidence of pathological infarction than the LOPE group, but this difference was not statistically significant. The EOPE and LOPE groups had comparable placental vascular lesions, such as atherosclerosis, and decidual arteriopathy. The inflammatory lesion of the placenta was found to be similar in both groups. Our study supports the theory that early and late-onset preeclampsia are indeed different subclasses of the condition.



BEHAVIORAL CHANGES AS INITIAL PRESENTING SYMPTOMS IN HELLP SYNDROME- CASE REPORT WITH DISCUSSION

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Problem Statement: Hemolysis, elevated liver enzymes and low platelet count (HELLP) syndrome is a severe form of preeclampsia associated with high rates of fetal/maternal morbidity and mortality. Delivery is almost always indicated at the time of diagnosis. Onset can be insidious and atypical- therefore providers require a high index of suspicion for diagnosis. The patient discussed here presented with behavioral changes before physical or laboratory findings for HELLP. **Method:** case report, hence, institutional review board (IRB) exempt. **Case Report:** A 29 year old G1P0 at 28w2d gestation presented with preeclampsia with severe fetal growth restriction and elevated umbilical artery dopplers. Initial laboratory tests revealed an elevated protein creatinine ratio but normal liver enzymes. Maternal fetal medicine (MFM) was consulted and recommended antepartum surveillance and inpatient observation. Two days following admission in the late evening/early morning, she complained severe anxiety and displayed an unusual behavior pattern that was attributed to a panic attack. A psychiatric consultation was obtained at that time but they would not be able to evaluate her until the afternoon. Later that morning she developed clonus and complained of severe anxiety. She made statements such as "I feel like I am going to die." Decision was made to proceed with immediate delivery via cesarean section as she was remote from delivery. Prior to the cesarean section, repeat laboratory tests showed elevated enzymes (AST 1547, ALT 1349), thrombocytopenia (platelets 92) and hemoglobin of 12.8 leading to diagnosis of HELLP syndrome. She delivered a viable male infant at 28w4d. Baby was transferred to neonatal intensive care unit (NICU) and mother was admitted to the intensive care unit (ICU). She did well postpartum and was discharged home in stable condition on postoperative day two. **Conclusion:** Common presenting symptoms of HELLP include abdominal pain, nausea/vomiting, edema, headache and visual changes. Here, we present a patient whose presentation was a behavioral change that preceded objective physical findings (clonus) and laboratory values that led to diagnosis of HELLP. This case shows that new-onset behavioral changes may be manifestations of cerebral involvement in preeclampsia and should raise suspicion for worsening preeclampsia and HELLP.

INTRAPARTUM CARDIOTOCOGRAPHIC PATTERNS AND PERINATAL OUTCOMES IN EXTREME PRETERM BIRTHS: AN EXPLORATIVE RETROSPECTIVE COHORT STUDY

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Problem statement: Interpretation of intrapartum cardiotocography (CTG) in preterm pregnancies is challenged by the lack of gestation-specific guidelines. To broaden our limited understanding, this study aims to further explore the relationship between CTG characteristics in extreme preterm labour and perinatal outcomes. **Methods:** This explorative retrospective cohort study included intrapartum CTG recordings of 73 women with a spontaneous onset of birth between 24-28 weeks of gestation from 2014-2019. Signal loss (n=73) and CTG characteristics during the last hour of the first stage of labour (n=55), and during second stage of labour (n=24) were assessed using computerised analysis. CTG characteristics were compared between foetuses with and without comprised neonatal condition, defined as either biochemical signs of perinatal hypoxia or a low 5-minute Apgar score (7). **Results:** Cardiotocographic recordings in preterm foetuses frequently displayed recognizable patterns, including baseline variability and the presence of both accelerations and decelerations. Preterm foetuses with perinatal hypoxia and/or a low Apgar score exhibited significantly more uterine contractions and variable decelerations compared to those without this outcome. Combinations of CTG characteristics typically associated with hypoxia in term foetuses appeared less pronounced in the preterm population. **Conclusion:** While CTG features were often identifiable in preterm foetuses, their clinical presentation diverged from patterns commonly seen at term, particularly under hypoxic conditions. These observations emphasize the importance of developing gestational

age-specific CTG reference ranges. Reliance on term-based criteria may lead to delayed recognition of foetal compromise or unnecessary interventions in (extreme) preterm foetuses. Adapting CTG interpretation to reflect the unique physiology of this group is essential for improving timely clinical decision-making and reducing perinatal morbidity and mortality.

GESTACIONAL DIABETES: IMPACT OF TIMING OF DIAGNOSIS ON MATERNAL AND PERINATAL OUTCOMES

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Problem statement: Gestational diabetes (GD) is a common condition in pregnancy, associated with maternal and neonatal complications. Although screening usually occurs between 24–28 weeks, some cases are diagnosed in the first trimester. This early diagnosis may reflect more severe metabolic profiles, raising the question of whether the timing of diagnosis influences the type of control instituted and obstetric and perinatal outcomes. **Methods:** Observational and retrospective study of single pregnancies complicated by GD monitored in a Portuguese peripheral hospital between January 2024 and July 2025. Pregnant women were divided into two groups according to the time of GD diagnosis (1st trimester GD - G1 vs 2nd trimester GD - G2), and clinical and obstetric variables were compared between the groups. SPSS® version 26 software was used for statistical analysis. **Results:** A total of 208 pregnant women were included, of whom 117 were diagnosed with GD in the first trimester (G1) and 91 in the second trimester (G2). The results revealed that, among the variables analyzed, only body mass index (BMI) showed a statistically significant difference between the groups (p=0.018), with the G1 group having a higher proportion of women with obesity (46.2% vs. 36.3%) compared to the G2 group. In contrast, no significant differences were found between the groups regarding the type of control (diet vs. medication; p = 0.374), mode of delivery (vaginal vs. cesarean; p = 0.687), onset of labor (spontaneous vs. induced; p = 0.194), or mean birth weight of newborns (p = 0.895). **Conclusion:** Early diagnosis of GD may reflect a more unfavorable metabolic profile, with a higher prevalence of obesity. However, the timing of diagnosis does not appear to directly influence the main obstetric and neonatal outcomes. These findings suggest that the initial metabolic profile may be more decisive than the timing of diagnosis, with potential implications for the stratification and monitoring of these pregnant women.

MODERATED E-POSTER SESSION 11:

GYNECOLOGY – GYNECOLOGY/CASE REPORT/STUDY

GYNECOLOGY

LOW-GRADE ENDOMETRIAL STROMAL SARCOMA IN A 36-YEAR-OLD FEMALE PRESENTING WITH ABNORMAL UTERINE BLEEDING: A RARE CASE REPORT FROM NORTH INDIA

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Introduction: Endometrial stromal sarcoma (ESS) is a rare malignant tumour of the endometrium, occurring in the age group of 40–50 years. We report a case of low-grade ESS in a 36-year-old female, presenting with degenerative leiomyomatous polyp associated with abnormal uterine bleeding and anaemia. **Case Presentation:** A 36-year-old female P3L3 with Abnormal Uterine Bleeding (AUB) presented to the emergency ward with a history of irregular bleeding per vagina since last 2 months. On general physical examination she was well preserved with mild pallor. On per abdomen examination, size of uterus was 18-20 weeks period of gestation, non-tender and mobile. On per speculum examination cervix and vagina was normal. On bimanual examination, bilateral adnexa was free with size of the uterus 20 weeks period of gestation. USG examination showed enlarged uterus with few heterogeneously hypoechoic lesions in the uterus, and distended uterine cavity. Patient underwent total abdominal hysterectomy. Her post-operative period was uneventful. She was discharged on 6th post operative day with good condition. On histopathological examination, representative sections from uterus showed presence of low grade endometrial stromal sarcoma on microscopic examination. Now patient is planned for bilateral oophorectomy. **Discussion and Conclusion:** Low-Grade Endometrial Stromal Sarcoma (LG-ESS) is a rare uterine malignancy, accounting for 1%



of all uterine cancers. It usually presents in women aged 40–50 years. Pathologically, LG-ESS resembles proliferative-phase endometrial stroma. The cells are small, uniform, and show minimal atypia with low mitotic activity. A hallmark is infiltrative myometrial growth with “worm-like” vascular invasion. Immunohistochemically, the tumor is typically positive for CD10, estrogen receptor (ER), and progesterone receptor (PR), and may show focal smooth muscle marker expression. Clinically, abnormal uterine bleeding is the most common symptom, followed by pelvic pain, dysmenorrhea, or a uterine mass. Diagnosis relies on histopathology, as imaging may mimic leiomyoma. The standard treatment is total hysterectomy with bilateral salpingo-oophorectomy. Hormonal therapies are useful in advanced or recurrent disease, whereas chemotherapy and radiotherapy offer limited benefit. Prognosis is generally favorable, with 5-year survival of 80–90% in early stages, though late recurrences (30–40%) necessitate long-term follow-up.

EFFECT OF ELINZANETANT ON WAKEFULNESS AFTER SLEEP ONSET: POST HOC ANALYSIS OF THE PHASE II NIRVANA PILOT STUDY IN WOMEN IN POSTMENOPAUSE

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Problem statement: Nighttime wakefulness is a common and disruptive symptom of postmenopause in women with/without vasomotor symptoms (VMS). Improvements in patient-reported sleep disturbances (PROs) were observed with elinzanetant, a dual neurokinin (NK)-targeted therapy (NK-1 and NK-3 receptor antagonist), in the OASIS trials. The double-blind Phase II NIRVANA pilot study (NCT06112756) evaluated elinzanetant's effect on objective and subjective measures of wakefulness after sleep onset (WASO) in postmenopausal women with VMS and sleep disturbances. Here, we report a post hoc analysis of WASO across measures. **Methods:** 110 postmenopausal women (mean [standard deviation; SD] age: 54.8 [4.6] years) with polysomnography (PSG)-confirmed sleep disturbances (WASO ≥ 30 minutes) and ≥ 20 moderate-to-severe VMS/week were randomized to elinzanetant 120 mg or placebo (n=55/group) once daily for 12 weeks. Sleep disturbances were assessed using gold-standard in-lab PSG (baseline, Weeks 4 and 12; 2 consecutive nights/timepoint) and continuously via the patient-reported Sleep Diary plus the Sleepiz One+ (Sleepiz AG, Zurich, Switzerland) contactless home-monitoring device, the latter in a participant subsample (n=66: 33 elinzanetant, 33 placebo). Overall treatment effects on WASO over the 12-week treatment period were estimated using a post hoc random coefficient model including all available nights for each measure. **Results:** Greater numerical reductions in WASO were observed with elinzanetant versus placebo across measures. At baseline, mean (SD) WASO in the elinzanetant and placebo groups, respectively, were 74.7 (34.8) and 82.8 (34.4) minutes with PSG; 77.7 (52.6) and 61.7 (27.6) minutes with Sleepiz One+; and 42.4 (25.7) and 45.5 (25.6) minutes with the Sleep Diary. Random coefficient modeling suggested an overall treatment effect over the 12-week treatment period (least squares mean difference [unadjusted 95% confidence interval]) favoring elinzanetant over placebo across measures (PSG: -10.1 minutes [-18.5, -1.6]; Sleepiz One+: -17.7 minutes [-27.1, -8.2]; Sleep Diary: -8.1 minutes [-14.2, -1.9]). **Conclusions:** NIRVANA is the first study to integrate gold-standard PSG, continuous home sleep monitoring, and PROs in postmenopausal women with VMS and sleep disturbances. In this post hoc analysis, greater numerical reductions

in WASO were observed with elinzanetant versus placebo across measures. Results were consistent with PROs from previous elinzanetant trials; larger confirmatory studies are needed.

Funded by Bayer.

EFFICACY OF ELINZANETANT IN PREVIOUS OR NEVER USERS OF HORMONE THERAPY FOR MENOPAUSE SYMPTOMS: A POOLED ANALYSIS OF OASIS-1 AND -2 TRIALS

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Problem statement: Effective non-hormonal therapies are needed to treat menopause symptoms. This pre-specified exploratory pooled analysis from Phase III OASIS-1 and -2 trials compared the effects of elinzanetant on vasomotor symptoms (VMS; also known as hot flashes) and sleep disturbances in menopausal women who were previous or never users of hormone therapy (HT). **Methods:** Women experiencing natural/surgical menopause aged 40–65 years with ≥ 50 moderate-to-severe VMS/week were randomized 1:1 to receive elinzanetant 120 mg or placebo for 12 weeks, then elinzanetant for 14 weeks. Participants completed hot flash daily diaries recording VMS frequency and severity. Mean daily VMS frequency and severity were calculated by averaging available weekly data, with baseline calculated from 14 days prior to treatment. Sleep disturbances were assessed using Patient-Reported Outcomes Measurement Information System Sleep Disturbance Short-Form (PROMIS SD-SF) 8b total T-scores (higher scores indicate greater sleep disturbances). Outcomes were assessed at baseline, and Weeks 1, 4, 8 and 12 in previous HT users (pHT) and never HT users (nHT) using descriptive statistics. **Results:** Overall, 226 women were pHT users, and 546 were nHT users. Baseline VMS frequency mean (standard deviation) ranged from 13.90 (7.57) to 15.44 (10.74) and severity from 2.52 (0.24) to 2.56 (0.24) across groups receiving elinzanetant or placebo. At Week 12, elinzanetant numerically reduced mean VMS frequency to 4.20 (4.07) in pHT and 4.68 (6.00) in nHT groups, compared with placebo numerical reductions to 8.50 (7.33) and 9.17 (14.52), respectively. At Week 12, elinzanetant numerically reduced VMS severity ratings to 1.66 (0.82) in pHT and 1.54 (0.83) in nHT groups, compared with placebo numerical reductions to 2.00 (0.65) and 1.90 (0.69), respectively. Baseline PROMIS SD-SF-8b total T-scores ranged from 60.05 (6.99) to 61.64 (6.63). At Week 12, elinzanetant numerically reduced scores to 49.41 (9.20) in pHT and 51.16 (7.90) in nHT groups, compared with placebo numerical reductions to 56.20 (8.11) and 54.51 (8.32), respectively. **Conclusion:** Elinzanetant numerically reduced VMS frequency and severity and improved sleep disturbances, compared with placebo. Similar findings were observed in pHT and nHT users, supporting elinzanetant's suitability for menopause symptom management, irrespective of prior HT use.

Funded by Bayer.

EFFECTS OF ELINZANETANT ON VASOMOTOR SYMPTOMS ASSOCIATED WITH NATURAL, SURGICAL, OR ENDOCRINE THERAPY-INDUCED MENOPAUSE SYMPTOMS

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Problem statement: Vasomotor symptoms (VMS), common and disruptive, may be caused by declining estrogen levels due to natural menopause, surgery, or receiving endocrine therapy (ET) for breast cancer. Here, we explore the effects of elinzanetant for treatment of VMS in women with natural, surgical, or ET-induced menopause symptoms. **Methods:** Data were pooled from OASIS-1 and -2 trials; these trials enrolled postmenopausal women aged 40–65 years experiencing natural or surgical menopause with ≥50 moderate-to-severe VMS per week (PW). OASIS-4 enrolled women aged 18–70 years with or at risk of hormone receptor positive breast cancer, receiving ET and experiencing ≥35 moderate-to-severe VMS PW. OASIS-1 and -2 participants were randomized 1:1, and OASIS-4 participants 2:1, to receive elinzanetant 120 mg or matching placebo in the first 12 weeks of these trials. This post hoc analysis descriptively assessed change from baseline to Week 12 in daily moderate-to-severe VMS frequency and severity in participants experiencing different types of menopause from OASIS-1 and -2, and OASIS-4 trials. OASIS-4 participants with prior bilateral oophorectomy were excluded from this analysis. **Results:** This analysis included 732 participants undergoing natural and 64 experiencing surgical menopause from OASIS-1 and -2, and 434 with ET-induced menopause symptoms from OASIS-4. OASIS-1 and -2 participants had a greater mean baseline daily moderate-to-severe VMS frequency than OASIS-4 participants. Mean reductions in average daily moderate-to-severe VMS frequency from baseline to Week 12 were numerically larger for participants experiencing natural or surgical menopause in comparison with participants with ET-induced menopause symptoms. Regarding daily moderate-to-severe VMS severity, mean baseline values and mean reductions from baseline to Week 12 were numerically similar for participants with natural, surgical, or ET-induced menopause symptoms. When compared with placebo, mean reductions in average daily moderate-to-severe VMS frequency and severity from baseline to Week 12 were numerically greater regardless of menopause type in all 3 trials (Table). **Conclusion:** Greater numerical reductions in daily moderate-to-severe VMS frequency and severity were observed with elinzanetant compared with placebo irrespective of the type of menopause, indicating suitability for a broad population of women with menopause symptoms, including those with breast cancer receiving ET.

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SAFETY AND TOLERABILITY OF ELINZANETANT: POOLED ANALYSIS FROM MULTIPLE CLINICAL TRIALS

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Problem statement: Well-tolerated nonhormonal treatments are needed for women experiencing vasomotor symptoms (VMS; also known as hot flashes) associated with menopause. This study assessed the safety and tolerability of elinzanetant, a dual neurokinin (NK)-targeted therapy (NK-1 and NK-3 receptor antagonist) for treatment of moderate-to-severe VMS using pooled data from 4 clinical trials. **Methods:** Pooled safety data from the 120 mg elinzanetant and placebo arms of the Phase III OASIS-1–3 trials and Phase IIb SWITCH-1 trial were analyzed. The 12-week analysis included 765 elinzanetant- and 754 placebo-treated women. In OASIS-1 and -2, women switched from placebo to elinzanetant after 12 weeks, leading to a 52-week analysis with 1113 elinzanetant- and

754 placebo-treated women. The mean age±standard deviation of women included in this analysis was 54.7±4.8 years. Safety assessments included treatment-emergent adverse events (TEAEs), liver function (regular assessment by blinded external liver safety monitoring board), endometrial safety (transvaginal ultrasound/biopsies), body weight, vital signs, and biochemical markers. **Results:** Over 12 weeks, TEAEs occurred in 50.8% of elinzanetant- versus 43.2% of placebo-treated participants, mostly mild-to-moderate (Table). Headache, fatigue, and somnolence were the most common TEAEs with elinzanetant, primarily occurring during early treatment weeks. Serious TEAEs were rare and discontinuations due to TEAEs were infrequent. Over 52 weeks, study size and exposure-adjusted incidence rates per 100 patient-years for headache were 15.48 (elinzanetant) versus 11.17 (placebo), and for fatigue 9.40 versus 4.73. No Hy's Law cases or acute liver failure were reported; 1 mild liver injury case (elinzanetant), assessed as unlikely study-drug related, resolved post treatment. Endometrial safety assessments showed no hyperplasia/malignancy. Mean values for estradiol, progesterone, luteinizing hormone, follicle-stimulating hormone, bone biomarkers, cholesterol, triglyceride, body weight, and blood pressure remained stable over time. **Conclusions:** Elinzanetant was well-tolerated over 52 weeks, with only moderately more TEAEs and discontinuations versus placebo. No concerning safety signals in hepatic, endometrial, metabolic, or bone parameters emerged. The most common TEAEs, headache and fatigue, were mild-to-moderate and transient, supporting elinzanetant's potential as a long-term dual NK-targeted therapy for menopause symptoms.

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Table. Most frequent TEAEs at Week 12 and Week 52

	Elinzanetant 120 mg N=765	Placebo N=754
Participants with ≥1 event, n (%), Weeks 1–12	389 (50.8)	326 (43.2)
TEAEs		
Headache	57 (7.5)	32 (4.2)
Fatigue	41 (5.4)	10 (1.3)
Somnolence	26 (3.4)	4 (0.5)
Serious TEAEs		
Participants with ≥1 event, n (%)	9 (1.2)	7 (0.9)
	N=1113	N=754
Participants with ≥1 event, n (%), Weeks 1–52	614 (55.2)	387 (51.3)
TEAEs EAIR/100 PY*, n (%)		
Headache	15.5 84 (7.5)	11.2 38 (5.0)
Fatigue	9.4 52 (4.7)	4.7 15 (2.0)
Somnolence	5.4 27 (2.4)	2.0 7 (0.9)
Discontinuations EAIR/100 PY*, n (%)		
Due to headache	2.0 12 (1.1)	2.1 5 (0.7)
Due to fatigue	2.2 13 (1.2)	0 0

EAIR, exposure-adjusted incidence rate; PY, person-years; TEAE, treatment-emergent adverse event.

*Study size and exposure adjusted incidence rates according to Crowe et al (2016). Results are provided per 100 person-years, where 1 person-year is defined as 365.25 days.



POST-PLACENTAL INSERTION OF INTRAUTERINE CONTRACEPTIVE DEVICE FOLLOWING CESAREAN SECTION - NEW LONGTERM CONTRACEPTIVE APPROACH

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Problem Statement: Short interval pregnancies, especially in women with a history of multiple cesarean sections, carry increased risks for adverse maternal and fetal outcomes. Immediate postplacental intrauterine device (IUD) insertion during cesarean section offers a highly effective method of long-acting reversible contraception (LARC), particularly for individuals less likely to follow up in the postpartum period. Despite its benefits, this practice remains underutilized. This case report describes the successful postplacental insertion of a levonorgestrel-releasing IUD at the time of cesarean delivery in a high-parity patient, and discusses its feasibility, safety, and relevance. **Method:** case report, hence, no institutional review board (IRB) approval needed. **Result:** A 38-year-old gravida 6, para 4 woman at 39 weeks and 3 days gestation who presented for a scheduled repeat cesarean section—her fifth overall. The patient received prenatal counselling regarding postpartum contraceptive options, risk benefits, complications and side effects discussed. She chose immediate post-placental IUD insertion. Following standard cesarean delivery and placenta removal, a Levonorgestrel IUD was inserted into the uterine cavity/fundus through the hysterotomy under sterile conditions. The strings were guided into the vagina using ring forceps prior to uterine closure. The IUD was successfully placed with confirmed positioning, and the patient remained clinically stable postpartum. Her postoperative recovery was unremarkable. Studies have shown that immediate postplacental IUD insertion has high contraceptive efficacy, with six-month continuation rates of approximately 87% and expulsion rates near 6%. Expulsion rates are notably lower following cesarean delivery (3.6%; range 0.0–21.1%) compared to vaginal delivery (14.9%; range 3.3–46.7%). These data support the growing adoption of this practice in appropriate candidates. **Conclusion:** Immediate postplacental IUD insertion during cesarean section offers a convenient, effective, and safe contraceptive option, particularly beneficial for high-risk patients such as those with multiple prior cesarean deliveries, short pregnancy intervals, etc. Cesarean delivery facilitates direct visualization and accurate IUD placement, with lower expulsion rates compared to vaginal delivery. Appropriate prenatal counselling and adherence to insertion techniques are essential for optimizing outcomes. This case supports the integration of postplacental IUD insertion into routine cesarean delivery practices to improve long-term reproductive health outcomes.

MODERATED E-POSTER SESSION 12:
FETOMATERNAL MEDICINE – MIXED SUBTOPICS

MEDICAL COMPLICATIONS IN PREGNANCY PRETERM DELIVERY PREVENTION AND TREATMENT

PREVALENCE OF UREAPLASMA UREALYTICUM AND MYCOPLASMA HOMINIS IN THE KOREAN POPULATION AND THEIR ASSOCIATION WITH PRETERM BIRTH IN SINGLETON AND TWIN PREGNANCIES

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Problem statement: Ureaplasma urealyticum (UU) and Mycoplasma hominis (MH) are intracellular bacteria associated with urogenital infections. These organisms have been implicated in adverse pregnancy outcomes, including preterm birth, but their prevalence and impact in the Korean population are not well documented. **Methods:** This single-center observational study reviewed electronic medical records of pregnant women who visited the obstetrics clinic at Gyeongsang National University Changwon Hospital from January 2017 to December 2020. A total of 1,614 pregnant women with available UU and MH test results were included. Both singleton (n=1,298) and twin pregnancies (n=316) were analyzed. Vaginal swab samples were tested using culture methods, and data on obstetric outcomes were collected. Statistical analyses included Student's t-test and χ^2 test, with p-values calculated for statistical significance. **Results:** The prevalence of UU and/or MH colonization in the lower genital tract was 36.6% (n=591/1,614). In singleton pregnancies, UU/MH positive women

had a higher incidence of preterm birth compared to the negative group (24.6% vs. 16.8%, p0.001), with an odds ratio of 1.62. Late preterm birth (34+0 to 36+6 weeks) constituted the majority of preterm births in singleton pregnancies. There was no significant difference in neonatal birth weight between the groups. In twin pregnancies, UU/MH colonization did not significantly affect preterm birth rates (p=0.106). Bacterial vaginosis was significantly associated with UU/MH colonization (p0.001), but not with increased risk of preterm birth (p=0.217). **Conclusion:** UU and MH colonization is prevalent in pregnant women in South Korea and is associated with an increased risk of preterm birth in singleton pregnancies. However, this association is not observed in twin pregnancies. Further multi-center studies utilizing both culture and PCR methods are necessary to evaluate neonatal outcomes and refine clinical management strategies.

PREGNANCY AND NEONATAL OUTCOMES IN FETAL GROWTH RESTRICTION: A RETROSPECTIVE ANALYSIS

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Problem statement: Fetal growth restriction (FGR) is the second leading cause of adverse perinatal outcomes after prematurity, posing major risks to both mother and newborn. **Methods:** A retrospective cohort study was conducted in a tertiary center using de-identified records from 2013–2022. Eligible cases were women ≥ 18 years with ICD-10 O36.5 and outcome codes Z37.0 or Z37.1, and at least one Doppler ultrasound within two weeks before delivery. Participants were grouped as: Group 1 – diagnosis after birth; Group 2 – antenatal diagnosis without Doppler abnormalities; Group 3 – antenatal diagnosis with uteroplacental and/or fetoplacental Doppler abnormalities. Statistical analysis was performed using MS Excel and SPSS; significance was set at p0.05. **Results:** A total of 682 cases were included: Group 1 (n=194, 28.4%), Group 2 (n=374, 54.8%), Group 3 (n=114, 16.7%). Mean maternal age was 30.4 ± 5.1 years. Comorbidities were present in 62.1% (n=424), most frequently hypertensive disorders (20.2%, n=138). Rates of primary hypertension and preeclampsia differed significantly (p0.001), highest in Group 3. Gestational age at diagnosis and delivery varied (p0.001), with the earliest in Group 3 (median 36 weeks). Preterm birth was most frequent in Group 3 (p0.001), where iatrogenic preterm delivery occurred 52 times more often than in Group 1. Vaginal delivery was most common in Group 1 (82.9%, p0.05), while cesarean section predominated in Group 3 (44.7%), including the highest share of emergency procedures. Neonatal outcomes varied: Group 1 had mild complications, Group 2 moderate risks with higher NICU admissions (p0.001), and Group 3 the poorest outcomes, including higher rates of NICU admission, oxygen therapy, hospitalization 5 days (p0.001), stillbirth (1.3%, 1.25-fold higher risk vs. Group 2). In Group 1, low birth weight (2500 g) was significantly associated with phototherapy for jaundice (p=0.0187), treatment for hypoglycemia (p=0.0025), infusion therapy (p=0.0047), and hospitalization 5 days (p=0.009). **Conclusion:** Maternal comorbidities were common in FGR. Doppler abnormalities indicated earlier diagnosis, higher iatrogenic preterm birth, and worse neonatal outcomes. Importantly, even when FGR was undiagnosed prenatally (Group 1), low birth weight was strongly linked to clinically meaningful morbidity. Therefore, timely diagnosis is essential to reduce risks and improve neonatal outcomes.

HIGH RISK PREGNANCY

DIAGNOSTIC VALUE OF URINE PROTEIN CREATININE RATIO QUALITATIVE VISUAL DIPSTICK TEST IN THE DIAGNOSIS OF PREECLAMPSIA IN A TERTIARY HOSPITAL

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Problem Statement: Hypertensive disorders represent the most prevalent medical complications of pregnancy, with an incidence ranging from 12% to 22%, and are widely encountered on a global scale. To this day, the quantification of proteinuria through 24-hour urine protein collection continues to be regarded as the gold standard in the diagnosis of preeclampsia. However, this method is time-consuming and may result in delays in management, potentially complicating outcomes for both the mother and the neonate. In our institution, we utilize the 24-hour urine protein determination to



detect significant proteinuria among hypertensive pregnant patients. As an alternative, Urine Protein Creatinine Ratio (UPCR) Qualitative Visual Dipstick Test has been investigated. In the Philippines, the utility of UPCR qualitative visual dipstick test in detecting significant proteinuria in gravid patients is not yet very well established. There is a paucity of local literature regarding the comparison of this test to 24-hour urine protein analysis. The aim of the study is to determine the diagnostic value of the UPCR qualitative visual dipstick test in detecting significant proteinuria, and to evaluate significant correlation among Quantitative Spot On UPCR and 24 hour urine protein determination. **Methods:** A cross-sectional study was conducted from January 2023 to January 2024 in a tertiary government hospital. A total of 246 pregnant patients with new-onset hypertension after 20 weeks' gestation were included. The UPCR Qualitative Visual Dipstick Test was performed using Abbott UroColor 10, and results were correlated with the quantitative spot UPCR and 24-hour urine protein results. **Results:** The dipstick test showed significant positive correlation with the spot UPCR ($r=0.663$, $p0.001$) and 24-hour urine protein ($r=0.584$, $p0.001$). It had a diagnostic accuracy of 60.98%, sensitivity of 51.78%, specificity of 97.96%, PPV of 99.03%, NPV of 33.57%, positive likelihood ratio of 25.37, and negative likelihood ratio of 0.49. **Conclusion:** The UPCR Qualitative Visual Dipstick Test is a rapid, accessible, and moderately accurate screening tool for proteinuria. It may be valuable in primary care and low-resource settings. In higher-level facilities, it can serve as an initial screening method while awaiting confirmatory results from standard tests. Further multicenter studies with larger sample sizes are recommended.

LABOR AND DELIVERY

UMBILICAL CORD PRESENTATION IN A CLOSED CERVIX VERSUS A DILATED CERVIX IN ACTIVE LABOR - CASE PRESENTATION AND DISCUSSION

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Problem Statement: Umbilical cord presentation, also known as funic presentation, occurs when the umbilical cord lies between the presenting fetal part and the cervical os. This condition is clinically significant because it can progress to umbilical cord prolapse, an obstetric emergency associated with cord compression, vasospasm, fetal hypoxemia, and increased risk of perinatal morbidity and mortality. Despite the potential severity, evidence-based guidelines for management remain limited, and recommendations are often based on case reports and expert opinion. **Methods:** This is a case report; Institutional Review Board (IRB) approval was not required. Two clinical cases of umbilical cord presentation at different gestational ages and cervical dilation states are presented and compared to highlight management strategies. **Results: Case A:** A grand multiparous woman presented at 27 weeks of gestation with vaginal bleeding. Ultrasound confirmed funic presentation with a closed cervix and no identifiable bleeding source. She was managed expectantly with five days of inpatient bedrest, magnesium sulfate for fetal neuroprotection and tocolysis, corticosteroids for fetal lung maturity, and Rh immunoglobulin given her Rh-negative status. She remained stable and was discharged home with precautions and instructions for pelvic rest. **Case B:** A multiparous woman presented in active labor at 39 weeks of gestation with cervical dilation to 7 cm and intact membranes. Funic presentation was identified, and given the high risk of progression to cord prolapse, she underwent an urgent low transverse cesarean section. A viable neonate was delivered without complication, and both mother and infant were discharged home on postoperative day three in stable condition. **Conclusion:** No high quality studies provide definitive recommendations regarding the mode of delivery for non-laboring, term patients with cord presentation. Current practice is based largely on anecdotal evidence and expert consensus. Expectant management with serial ultrasound and careful intrapartum monitoring may allow for vaginal delivery if funic presentation resolves prior to labor. However, in laboring patients with advanced cervical dilation, cesarean delivery is indicated due to the imminent risk of cord prolapse. These cases emphasize the importance of individualized management guided by gestational age, cervical dilation, and the dynamic nature of cord presentation.



ART/IVF/INFERTILITY
ANDROLOGY

METABOLOMIC PROFILING OF SEMINAL PLASMA IN MALE PATIENTS WITH NON-TRANSFUSION-DEPENDENT THALASSEMIA

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Problem statement: β -thalassemia is classified into transfusion-dependent thalassemia (TDT) and non-transfusion-dependent thalassemia (NTDT) based on the clinical severity. While the impact of TDT on male fertility has been reported, the effects and underlying mechanism of NTDT on male infertility remain unexplored. Omics techniques, particularly metabolomic, have been employed to expand our understanding of the pathological process. The aim of this study is to investigate differences in semen metabolomics profiles between NTDT patients and healthy controls. **Methods:** A total of 177 NTDT male patients and 196 healthy controls who underwent routine semen analysis between February 2022 and December 2024 at the Department of Obstetrics and Gynecology, Nanfang Hospital, were retrospectively analyzed. Sperm parameters, including sperm count, sperm concentration, normal sperm morphology rate, sperm motility count and sperm DNA fragmentation (SDF) were measured to assess the impact of NTDT on sperm quality. Semen samples from 31 NTDT male patients and 24 healthy controls were randomly enrolled in metabolomic analysis using liquid chromatography-tandem mass spectrometry (LC-MS/MS). **Results:** NTDT patients showed lower normal sperm morphology rate (9.16% vs 13.31%, $P = 0.016$), lower progressive motile sperm counts (26.02×10^6 vs 31.36×10^6 , $P = 0.022$), and higher percentage of SDF (23.63% vs 15.71%, $P = 0.008$), compared to controls. Metabolomics profiling revealed alterations in the semen metabolomes of NTDT patients compared to healthy controls. A total of 24 metabolites showed statistically significant differences, with three metabolites (O-Linoleoylcarnitine, N6-Carboxymethyllysine, and 1-Pyrroline-5-carboxylic acid) significantly correlating with sperm parameters. Specifically, O-Linoleoylcarnitine was positively correlated with normal sperm morphology rate (standardized coefficients = 0.339, $P = 0.027$), N6-Carboxymethyllysine was negatively correlated with progressive motile sperm count (standardized coefficients = -0.292, $P = 0.014$), 1-Pyrroline-5-carboxylic acid was negatively correlated with percentage of SDF (standardized coefficients = -0.379, $P = 0.033$). Furthermore, these differential metabolites were involved in various metabolic pathways, including fatty acid metabolism, glycation reaction, and amino acid metabolism. **Conclusion:** Alterations in semen metabolomics profiles are associated with the decline in semen quality in NTDT patients. This study provides novel insights into the pathology of impaired fertility in male NTDT patients and offers potential metabolic biomarkers for future fertility-related research.

INTRACYTOPLASMIC INJECTION OF MORPHOLOGICALLY SELECTED SPERMATOZOA FROM PATIENTS WITH MALE FACTOR INFERTILITY: CLINICAL AND EMBRYO DEVELOPMENT OUTCOMES

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Problem Statement: Sperm morphology is intricately linked to male fertility, with abnormal sperm morphology being a primary contributor to male infertility. The motile sperm organelle morphology examination (MSOME) has been developed to evaluate the subcellular organelles of sperm at high magnification. The integration of MSOME into

intracytoplasmic sperm injection (ICSI), known as intracytoplasmic morphologically selected sperm injection (IMSI), offers the potential to select sperm with superior morphological quality prior to oocyte injection. This study aims to examine the impact of morphological sperm selection using IMSI on the clinical and embryonic development outcomes in assisted reproductive technology (ART) cycles. **Methods:** A retrospective observational study was conducted on couples undergoing ART treatment for obstructive azoospermia or teratozoospermia at the Department of Obstetrics and Gynecology, Nanfang Hospital, between January 2014 and November 2020. A total of 572 IMSI or ICSI cycles were performed during the study period. The clinical and embryonic development outcomes were compared between these cycles. **Results:** In cases of obstructive azoospermia, no statistically significant differences were observed between IMSI and ICSI in terms of cleavage rates (94.5% vs. 95.9%), Day 3 top-quality embryos (27.6% vs. 28.8%), implantation rates (28.3% vs. 31.7%), pregnancy rates (48.9% vs. 51.1%), blastocyst formation rates (53.3% vs. 53.5%), or abortion rates (11.6% vs. 13.1%) ($P = 0.05$). However, the IMSI group demonstrated a significantly higher normal fertilization rate (88.6% vs. 79.1%, $P = 0.05$). In cases of teratozoospermia, both techniques yielded no significant differences in cleavage rates (94.7% vs. 95.9%), Day 3 top-quality embryos (29.4% vs. 28.9%), implantation rates (30.3% vs. 32.8%), pregnancy rates (47.2% vs. 49.6%), or abortion rates (10.4% vs. 11.1%) ($P = 0.05$). Nevertheless, the IMSI group exhibited significantly higher normal fertilization rates (69.6% vs. 77.3%) and blastocyst formation rates (56.2% vs. 68.3%) ($P = 0.05$). **Conclusion:** IMSI enhances normal fertilization rates in couples experiencing male factor infertility, including obstructive azoospermia and teratozoospermia, and improves blastocyst formation rates in azoospermia cases. IMSI may provide viable assisted reproductive options for patients with these conditions.

CRYOPRESERVATION AND CENTRIFUGATION IMPACT ON SPERM DFI: CLINICAL IMPLICATIONS FOR ASSISTED REPRODUCTION

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Problem Statement: Sperm DNA fragmentation (DFI) is an important factor in male fertility, as a high DFI is known to correlate with decreased fertilization and embryonic euploidy rates. Several factors have been proposed as contributors to increased DFI, some of which are related to semen processing techniques. While cryopreservation and centrifugation are widely used in clinical practice, their individual effects on DFI remain unclear. This study aims to clarify how each procedure—alone and combined—impacts DFI in normospermic samples. **Methods:** This prospective study included 51 normospermic patients who underwent semen analysis at Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico (Milan, Italy) between May and August 2025. Semen samples were analyzed according to WHO 2021 guidelines, and DFI was assessed using the SCSA technique. Each sample was evaluated for DFI at four different stages of processing: fresh sample (S1); fresh sample washed by centrifugation with MHM-C (Fujifilm) at 400g for 10 minutes (S2); sample cryopreserved with TYB medium (Fujifilm) and thawed according to the manufacturer's protocol (S3), and frozen-thawed sample followed by a washing step as described before (S4). **Results:** The median concentration of the seminal samples was 55 million/ml [29-80], with total motility at 57% [42-67] and progressive motility at 52% [33-61]. Morphology was 4% [2-6]. No statistically significant difference was found between the DFI of S1 and S2 (17.5 [13.2-27.2] vs. 17.6 [13.1-28.3], respectively; $p = 0.07$). In contrast, a statistical difference was observed in DFI between S1 and S3 (17.5 [13.2-27.2] vs. 20.0 [13.4-29.1], respectively; $p = 0.01$), and between S1 and S4 (17.5 [13.2-27.2] vs. 31.3 [21.6-38.8], respectively; $p < 0.001$), with a median difference of 10.0 [5.8-17.7]. A similar result was found when comparing S3 to S4 ($p < 0.001$), with a median difference of 8.8 [5.0-14.6]. **Conclusion:** Despite the limited sample size, which may limit the detection of subtle differences in DFI related to centrifugation alone in fresh samples, the data indicate that cryopreservation and centrifugation significantly affect DFI, with potential implications for fertility treatments. Larger cohorts are needed to confirm these results and to ensure their generalizability across different male infertility profiles.



IN VITRO EFFECT OF A 4% PENTOXIFYLLINE VAGINAL GEL ON SPERM MOTILITY AND VITALITY IN ASTHENOZOOSPERMIC MEN: PROSPECTIVE RANDOMIZED DOUBLE-BLIND STUDY

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Problem statement: Asthenozoospermia is a common male infertility factor, typically managed in the context of assisted reproductive technologies (ART). However, there is growing controversy around the use of male-factor interventions aimed at enhancing natural fertility beyond ART. Pentoxifylline, a non-selective phosphodiesterase inhibitor, has shown potential to enhance sperm motility, yet its clinical application is limited by lack of specific formulations and robust clinical evidence. Our study investigates the in vitro effect of a novel 4% pentoxifylline vaginal gel (PKB171 4%) on sperm parameters, as groundwork for possible in vivo application to address mild male infertility and improve spontaneous pregnancy rates. **Methods:** We conducted a prospective, randomized, double-blind, placebo-controlled study at an accredited fertility center. A total of 32 semen samples from otherwise healthy men with asthenozoospermia (total motility 40%, vitality $\geq 45\%$) were randomized 1:1 to receive either PKB171 4% pentoxifylline gel or placebo. Parameters measured included progressive motility and sperm vitality at baseline (T0) and after 45 (T45) and 180 (T180) minutes of exposure. **Results:** The two study groups showed comparable baseline demographic and seminal characteristics, including age, BMI, and semen parameters, except for a slightly higher baseline vitality in the PKB171 4% group (70.1% vs 64.7%; $p = 0.017$). At T45, progressive motility in the PKB171 4% group was significantly higher than in the placebo group (35.3% vs 28.9%, $p = 0.035$). Compared to baseline T0, motility was increased by 4.68% in samples exposed to PKB171 4% gel, while samples exposed placebo showed a 3.48% decline, being this difference statistically significant ($p = 0.028$). Additionally, at T45 samples treated with PKB171 4% gel exhibited a less pronounced decline in sperm vitality compared with placebo (-1.29% vs -3.48%, $p = 0.029$). Although improvements in motility and vitality persisted at T180 in the PKB171 4% group, differences were no longer statistically significant. **Conclusion:** In vitro exposure to a 4% pentoxifylline vaginal gel significantly enhances progressive sperm motility and better preserves vitality at 45 minutes post-exposure in men with asthenozoospermia. These findings support further prospective in vivo studies to assess this therapeutic option in cases of male infertility.

CLINICAL ART/IVF

ASSESSING BATCH-TO-BATCH VARIABILITY IN HMG PRODUCTS: A COMPARATIVE ANALYSIS OF MERIOFERT® AND MENOPUR®

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Problem statement: Meriofert® and Menopur® are both highly-purified urinary-derived human Menopausal Gonadotrophins (hMG), containing follicle-stimulating hormone (FSH), luteinising hormone (LH), and human chorionic gonadotrophin (hCG) formulated to deliver a 1:1 ratio of FSH:LH bioactivity, where LH and hCG act on the same receptor, while hCG exhibits higher bioactivity than LH. Differences in manufacturing processes may influence the FSH, hCG and LH composition required to deliver the 1:1 ratio of FSH:LH bioactivity of the final drug product, which is essential for ensuring predictable clinical outcomes. This study aims to characterise and compare the composition of Meriofert® and Menopur®. **Methods:** Three batches of Meriofert® (Institut Biochimique SA, Switzerland, and purchased in Europe) and three batches of Menopur® (Ferring Pharmaceuticals, Switzerland) were analysed. Immunoassay - Immunocontent was measured using enzyme linked fluorescent assay (ELFA) from BioMérieux. For comparison FSH, hCG and LH immunocontent values were all normalised to bioactivity. Size exclusion chromatography (SEC) was performed using a silica-based column with UV at 210 nm detection. Samples were reconstituted and/or diluted to the same bioactivity

concentration (IU/ml) for comparative analysis. **Results:** The immunoassay data confirmed that luteinising activity in both Meriofert® and Menopur® is primarily attributable to hCG and to a lesser extent to LH. However, a notable difference in intra-product variability was observed: Meriofert® exhibited a greater batch-to-batch variability in immunological hCG and FSH content - exceeding 20%, compared to less than 10% variability with Menopur®. Furthermore, Menopur® demonstrated a more consistent and uniform FSH, hCG and LH composition. Characterisation of the batches using SEC further supported these findings. Meriofert® revealed intra-product variability, as indicated by differences in the area under the curve (AUC). In contrast, Menopur® displayed a more consistent AUC profile reinforcing its uniformity across batches. **Conclusion:** The comparative analysis of Meriofert® and Menopur® using immunoassay and SEC consistently demonstrated intra-product variability in Meriofert®, both in terms of composition and chromatographic profile (AUC). Menopur®, on the other hand, showed a consistent and uniform composition across batches. Robust and consistent manufacturing processes are essential to ensure batch-to-batch consistency and a reliable clinical performance.

REPRODUCTIVE OUTCOMES FOLLOWING FSH VS FSH+hMG/LH STIMULATION: A BALANCED COHORT SUB-ANALYSIS

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Problem statement: A recent prospective observational study conducted across Spanish ART centers (Moens et al., 2025) aimed to describe IVF clinical practices, focusing on the implementation of the freeze-all strategy and its indications. Although not designed to evaluate stimulation protocols, the study excluded expected poor responders (defined as antral follicle count 5 and AMH 1.2 ng/ml; POSEIDON groups 3 and 4), resulting in a population of generally good-prognosis patients. Interestingly, 51.4% of these patients received a combined FSH + hMG/LH protocol. This unexpected pattern prompted a sub-analysis to examine whether the addition of LH activity provides reproductive benefit over FSH alone. **Methods:** This sub-analysis included patients undergoing oocyte pick-up (OPU) following controlled ovarian stimulation with FSH (n=106) or FSH+hMG/LH (n=247). To minimize baseline differences, patients were selected using an algorithm that balanced three key prognostic variables: age, anti-Müllerian hormone (AMH) and antral follicle count (AFC). The variables analyzed were number of oocytes retrieved, mature (MII) oocytes, fertilized oocytes, biochemical, clinical, and ongoing pregnancy rates. **Results:** No statistically significant differences were observed between groups in terms of age (36.52 ± 3.00 [FSH] vs 36.89 ± 2.94 [FSH+hMG/LH], $p = 0.2749$), oocytes retrieved (11.73 ± 5.65 [FSH] vs 11.63 ± 6.13 [FSH+hMG/LH], $p = 0.8875$), MII oocytes (9.44 ± 4.66 vs 9.31 ± 5.42 , $p = 0.8304$), fertilized oocytes (7.04 ± 3.51 vs 7.16 ± 4.77 , $p = 0.8177$), biochemical pregnancy rate (59.0% vs 63.7%, $p = 0.4678$), clinical pregnancy rate (72.9% vs 67.8%, $p = 0.4475$), and ongoing pregnancy rate (63.8% vs 58.2%, $p = 0.4685$). **Conclusion:** In a cohort of good-prognosis patients with a mean age over 35, combined FSH+hMG/LH stimulation did not improve reproductive outcomes compared to FSH alone. These results suggest no added clinical benefit from LH supplementation in this subgroup.

Disclosure of Interest: The authors declare no conflicts of interest. This study was funded by Gedeon Richter.

DRUG USAGE AND STIMULATION EFFICIENCY IN FSH VS FSH+hMG/LH PROTOCOLS: A BALANCED SUB-ANALYSIS

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Problem statement: In assisted reproductive technology (ART), different gonadotropin combinations may affect stimulation characteristics, efficiency, and cost. A recent multicenter observational study across Spanish ART centers (Moens et al., 2025) revealed widespread use of FSH+hMG/LH protocols even in good-prognosis patients: the study excluded expected poor responders (POSEIDON groups 3 and 4). In a sub-analysis of this study, it has been shown that combined FSH+hMG/LH stimulation did not improve reproductive outcomes compared to FSH alone. In the light of these results, the stimulation efficiency and drug usage in women undergoing ovarian stimulation (OS) with FSH alone or FSH+hMG/LH has been compared. **Methods:** A total of 353 OS cycles were analyzed (FSH: n=106,



FSH+hMG/LH: n=247). Patients were selected using an algorithm that balanced three key prognostic factors: age, anti-Müllerian hormone (AMH), and antral follicle count (AFC). The variables analyzed included total gonadotropin doses, duration of stimulation, and three key stimulation efficiency indicators: mature (MII) oocyte output rate (MOR = MII oocytes/AFC × 100), MII index (MII oocytes/oocytes retrieved × 100), and ovarian sensitivity index (OSI = oocytes retrieved/total gonadotropin dose × 1000). Drug costs per cycle were estimated using average price per unit (€/IU) by drug class. **Results:** Stimulation duration was similar between groups (8.59 ± 2.06 days [FSH] vs 8.43 ± 2.01 days [FSH+hMG/LH], p=0.5045). The FSH+hMG/LH group required less FSH (1844.49 ± 559.34 IU vs 2067.45 ± 682.61 IU, p=0.0014) but received a significantly higher total gonadotropin dose (2852.27 ± 778.50 IU vs 2067.45 ± 682.61 IU, p0.0001). Efficiency metrics were similar: MOR (66.81% vs 65.29%), MII index (80.48% vs 80.05%), and OSI (5.67 vs 4.08). Estimated drug cost per cycle ranged from 555.73-667.16€ (FSH) to 721.83-821.25€ (FSH+hMG/LH), depending on product pricing assumptions. **Conclusion:** In a balanced cohort of good-prognosis patients, OS with FSH+hMG/LH did not shorten stimulation duration or improve efficiency compared to FSH alone but did result in higher gonadotropin consumption and cost. These findings support the cost-efficiency of FSH-only protocols in comparable patients.

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LOW OVARIAN RESERVE ASSOCIATED WITH MATERNAL AGE: A DESCRIPTIVE STUDY

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Problem Statement: Female fertility is one of the earliest physiological functions affected by aging, with a direct impact on ovarian reserve in terms of both oocyte quantity and quality. In women over 37years, this decline significantly compromises the outcomes of assisted reproductive technologies (ART). Clinical decision-making in older patients with suspected diminished ovarian reserve remains challenging, as there is no consensus regarding reliable thresholds for treatment indication. This study aimed to evaluate reproductive outcomes in women 37.9years, assessing the relationship between age, ovarian reserve markers— antral follicle count (AFC) and anti-Müllerian hormone (AMH)—and treatment success, to identify clinically relevant cut-off points that may guide management. **Methods:** We conducted a descriptive, observational study including 829 patients 37.9years treated between January 2016 and March 2023. Ovarian reserve parameters (AFC, AMH), pregnancy, miscarriage, and live birth (LB) rates were analyzed. Receiver operating characteristic (ROC) curve and percentile distribution analyses were used to assess predictive performance. Outcomes were compared between patients 38 and ≥38years and between fresh and frozen cycles. Correlation and linear regression analyses were performed to explore associations between AFC, AMH, and oocyte yield. **Results:** AMH correlated moderately with the number of oocytes retrieved (Pearson's r=0.536; Spearman's rho=0.453), as did AFC (r=0.384; rho=0.430). ROC analysis showed limited predictive ability for pregnancy rates for both AMH (AUC 0.559) and AFC (AUC 0.601). Percentile analysis identified AFC≤4 as a clinically relevant threshold, associated with a significantly reduced pregnancy rate (p=0.008). No significant association was found for AMH, likely due to incomplete data in women ≥38 years, limiting statistical power. Patients ≥38 years demonstrated significantly lower pregnancy rates, higher miscarriage rates, and fewer cryopreserved embryos compared with younger patients. Double-embryo transfer resulted in higher pregnancy rates than single-embryo transfer, in both fresh and frozen cycles. **Conclusion:** Maternal age remains the strongest non-modifiable risk factor for infertility. In this cohort, AFC outperformed AMH in predicting reproductive outcomes. Women ≥38 years with AFC ≤4 showed a markedly reduced probability of success, suggesting that ART may be inadvisable in this subgroup. These findings highlight the need for individualized treatment strategies and further research to validate cut-off points that optimize patient selection and resource allocation.

COMPARATIVE REPRODUCTIVE OUTCOMES OF DAY 7 VERSUS DAY 5-6 EUPLOID BLASTOCYSTS IN SINGLE FROZEN EMBRYO TRANSFER CYCLES

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Problem statement: This study aimed to evaluate the implantation potential and clinical outcomes of euploid human blastocysts that developed on Day 7. **Methods:** A retrospective cohort analysis was conducted at a single in vitro fertilization (IVF) center between April 2021 and June 2024. A total of 585 single euploid frozen embryo transfer (FET) cycles were analyzed. Clinical outcomes of Day 7 euploid blastocysts were compared with those of Day 5 and Day 6 euploid blastocysts. **Results:** No significant differences were observed in patient demographics among groups undergoing FET. The clinical pregnancy rate was significantly higher in the Day 5 group (68.7%, 206/300) compared with the Day 6 group (37.5%, 102/272; P 0.001). The Day 7 group demonstrated a clinical pregnancy rate of 46.2% (6/13). Spontaneous abortion occurred in 7.3% (15/206) of Day 5 and 8.8% (9/102) of Day 6 pregnancies, whereas a markedly higher rate was observed among Day 7 pregnancies (33.3%, 2/6; P = 0.021). The live birth rate was highest for Day 5 embryos (63.7%, 191/300), significantly exceeding both Day 6 (34.2%, 93/272; P 0.001) and Day 7 embryos (30.8%, 4/13; P = 0.017), while no significant difference was found between Day 6 and Day 7 embryos (P = 0.799). **Conclusion:** The increased miscarriage rates observed in Day 7 euploid embryos contribute to their lower live birth rates compared with earlier-developing embryos. Nonetheless, Day 7 euploid blastocysts are capable of achieving live birth, highlighting the need for cautious counseling and close monitoring of pregnancy progression.

INFLUENCE OF ENDOMETRIOSIS ON THE OUTCOMES OF ASSISTED REPRODUCTIVE TECHNOLOGY IN POOR OVARIAN RESPONDERS WITH PREVIOUS IMPLANATION FAILURES

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Problem Statement: Endometriosis (EMS) is a gynecological disorder strongly associated with infertility in women of reproductive age. However, the impact of EMS on assisted reproductive technology (ART) outcomes remains controversial, particularly in women with poor ovarian response. Further investigation is warranted to clarify whether EMS affects embryological and clinical outcomes in poor ovarian responders (PORs) with a history of repeated implantation failure. **Methods:** This retrospective study included women aged 35–44 years who underwent ART with spindle view-assisted intracytoplasmic sperm injection (ICSI) at a single fertility center between January 2023 and December 2024. All participants met the Bologna criteria for POR and had experienced ≥3 previous implantation failures. Thirty-six patients diagnosed with EMS were assigned to the study group, while 108 age-matched POR patients without EMS served as the control group. Embryological and clinical outcomes were compared using chi-square or Fisher's exact tests, as appropriate. **Results:** No significant differences were observed between the EMS and control groups in terms of key embryological parameters: fertilization rate (76.2% vs. 78.9%), cleavage rate (96.3% vs. 96.6%), good-quality embryo rate (55.0% vs. 55.6%), and blastocyst rate (23.9% vs. 21.7%). Similarly, ART-related clinical outcomes did not differ significantly between the two groups, including implantation rate (13.0% vs. 11.7%), clinical pregnancy rate (19.4% vs. 18.5%), and clinical abortion rate (28.6% vs. 40.0%). **Conclusion:** EMS does not appear to adversely affect embryo quality or ART-related pregnancy outcomes in poor ovarian responders with previous implantation failures.

COUNSELING DONOR FAMILY MEMBERS

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Donor families are unique, yet are also becoming substantially more common with the exponential advancements being made in the field of reproductive medicine, and with the wider acceptance of LGBTQ+ and single-parent families utilizing donor gametes in recent decades. The accessibility of commercial DNA testing is also helping to expand these



families, as many people are finding out by surprise that they are part of a sometimes quite large donor family. Individuals connected to donor families are therefore much more likely to be seen across a variety of mental health and medical settings for a range of presenting problems, either related to or separate from this part of their background. Regardless of the presenting issue, for these individuals, the challenges of forming and redefining family as they explore their own or their child's new biological connections can seem overwhelming and are therefore, very likely to surface as a topic of discussion in treatment. Given the greatly increased probability of encountering a client connected to a donor family in their practices across reproductive medicine settings and the specific challenges this presents, clinicians must be well-informed about all perspectives in order to address these issues knowledgeably and sensitively. Clinicians and mental health professionals will be provided with guidance on the unique issues that can present for egg and sperm donors, parents of donor-conceived children, and donor-conceived people. They will be better prepared for many issues that donor family members might present regarding their family of origin and with their new donor family relationships.

OBSTETRIC OUTCOMES AND COMPLICATIONS ASSOCIATED WITH EMBRYO TRANSFER PROTOCOLS: A RETROSPECTIVE REVIEW

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Objective: To evaluate obstetric complications associated with embryo transfer pregnancies at Hospital Príncipe de Asturias, distinguishing outcomes between modified natural cycle and artificial (hormone replacement) protocols. All cases correspond to transfers performed in 2023. **Methods:** A retrospective review of deliveries following frozen embryo transfer (FET) was performed, including 133 births: 23 from modified natural cycles and 110 from medicated cycles. Maternal demographic data, pregnancy complications, delivery mode, and neonatal outcomes were analyzed. **Results:** In the modified natural cycle group (n=22 reviewed), the mean maternal age at embryo cryopreservation was 34.1 years. Reported pregnancy complications included gestational diabetes (9%) and preeclampsia (9%). Delivery modes were 50% vaginal, 18% instrumental, and 31% cesarean. Neonatal mean birth weight was 3,278 g. Obstetric complications included placenta previa (1 case), severe preeclampsia (1 case), shoulder dystocia (2 cases) and breech presentation (2 cases). One patient was diagnosed with breast cancer (BRCA-1 carrier) six months postpartum, and one neonate presented with clubfoot. In the programmed cycle group (n=107 reviewed), the mean maternal age at embryo cryopreservation was 34.2 years. Maternal complications included gestational diabetes (14%) and preeclampsia (10%). Delivery modes included 49% vaginal, 14% instrumental, and 36% cesarean. Neonatal mean birth weight was 3,271 g. Complications leading to cesarean included placenta/vasa previa (10%), preeclampsia (5%), shoulder dystocia (18%), breech (13%), induction failure/non-progression (24%) and reduced fetal well-being (15%). Uterine atony requiring surgical management was observed in 3 cases, including one treated with B-Lynch sutures; one patient required ICU admission. Neonatal complications included cardiopulmonary arrest at birth, Klinefelter syndrome, hypospadias and congenital heart disease. **Conclusions:** Obstetric outcomes after FET at our center revealed a notable incidence of maternal complications such as gestational diabetes and preeclampsia, with slightly higher rates in artificial cycles compared to natural cycles. Cesarean delivery was more frequent in programmed protocols, often associated with obstetric complications such as induction failure, abnormal presentations, or fetal compromise. Neonatal adverse outcomes, although infrequent, included congenital anomalies and perinatal morbidity. However, these findings must be interpreted with caution due to the unequal sample sizes between treatment groups, which may limit the strength of direct comparisons.

EFFECTIVENESS OF A SINGLE-DOSE GnRH ANTAGONIST ON THE DAY OF HCG TRIGGER IN PREVENTING PREMATURE LUTEINIZATION DURING NATURAL CYCLE IVF IN WOMEN WITH DIMINISHED OVARIAN RESERVE

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Problem statement: This study aims to evaluate the effectiveness of administering a single dose of gonadotropin-releasing hormone (GnRH) antagonist on the day of human chorionic gonadotropin (hCG) trigger for final oocyte maturation in preventing premature luteinization in patients with diminished ovarian reserve undergoing early oocyte retrieval during natural cycle in vitro fertilization (IVF). **Methods:** This retrospective study evaluated the outcomes of natural cycle IVF in 44 infertile women with severe diminished ovarian reserve. Patients were divided into two groups based on the criteria used to determine the timing of human chorionic gonadotropin (hCG) administration. In Group 1, hCG was triggered when the leading follicle reached ≥ 18 mm in diameter, while in Group 2, hCG was administered when the serum luteinizing hormone (LH) level was ≥ 20 IU/L. Oocyte retrieval was performed approximately 25 hours after hCG administration in both groups. A GnRH antagonist was used only in Group 1 on the day of hCG triggering. **Results:** There were no statistically significant differences in mean age (40.8 vs. 40.5 years) or serum AMH levels (0.17 vs. 0.29 ng/mL) between the two groups. Premature ovulation occurred in two cases, both in Group 1. The oocyte retrieval rate was slightly higher in Group 2 (70.0%) compared to Group 1 (68.2%), but this difference was not statistically significant ($p = 0.582$). Group 2 also showed higher oocyte maturity rates (71.4% vs. 60.0%, $p = 0.70$) and fertilization rates (100% vs. 90.9%, $p = 0.5$), although these differences were not statistically significant. The embryo formation rate, defined as the number of frozen or transferred embryos per two-pronuclear (2PN) zygotes, was 63.6% (7/11) in Group 1 and 75.0% (9/12) in Group 2. **Conclusion:** The administration of GnRH antagonist on the day of hCG trigger in Natural cycle IVF of patients with diminished ovarian reserve enabled had no effect on premature ovulation and oocyte maturity and fertilization rate.

AGAINST THE ODDS: ACHIEVING MOTHERHOOD THROUGH IVF AFTER FERTILITY-SPARING THERAPY FOR EARLY-STAGE ENDOMETRIAL CARCINOMA

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Problem Statement: Fertility-sparing treatment for endometrial carcinoma is possible in carefully selected patients, although reproductive success can be limited by diminished ovarian reserve and recurrent implantation failures. We present a case of a woman who achieved a successful live birth following conservative oncologic treatment and multiple IVF attempts. **Methods:** A 37-year-old woman with a history of primary sterility was diagnosed with FIGO stage IA, grade 1 endometrioid endometrial carcinoma. Given her strong desire for fertility preservation, she received conservative treatment with megestrol acetate 2 × 160 mg daily for four months. Control hysteroscopy six months after the diagnosis revealed no residual disease, and a levonorgestrel-releasing intrauterine device (IUD) was inserted as maintenance therapy. Reproductive evaluation revealed diminished ovarian reserve, as indicated by an anti-Müllerian hormone (AMH) level of 0.09 ng/mL. Two initial stimulation cycles failed to produce viable embryos. A subsequent cycle yielded good-quality embryos, but three embryo transfers were unsuccessful. In the context of recurrent implantation failure (RIF), diagnostic hysteroscopy identified an atypical adenomyomatous polyp, which was removed. Following additional IVF treatment with complex ovarian stimulations, six embryos were collected and cryopreserved. After four more failed transfers, it wasn't until the fifth frozen embryo transfer (FET) that a pregnancy resulted. The gestation progressed without complications, and the patient ultimately delivered a healthy baby. **Results:** This case highlights the balance between oncologic safety and reproductive goals in women with early-stage endometrial carcinoma. High-dose progestin followed by levonorgestrel IUD insertion provided disease control and endometrial protection while allowing for ART. However, severely diminished ovarian reserve and RIF significantly complicated the reproductive journey. Identifying and removing an atypical polyp was



essential for restoring endometrial receptivity and achieving successful implantation. This highlights the importance of thorough uterine evaluation in cases of repeated ART failure. Elective single embryo transfer (eSET) was done but multiple attempts were needed before success, illustrating the complex interaction between limited ovarian reserve and endometrial conditions. Motherhood after fertility-sparing therapy for endometrial carcinoma is possible, even with reduced ovarian reserve and failed ART cycles. This case illustrates that tailored reproductive strategies and multidisciplinary care can lead to a healthy child.

SEVERE OVARIAN HYPERSTIMULATION SYNDROME FOLLOWING FRESH EMBRYO TRANSFER. A CASE REPORT

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Problem Statement: A 34-year-old woman in a female same-sex relationship, underwent in vitro fertilization (IVF) with donor sperm and fresh embryo transfer. The patient, with no history of infertility, underwent controlled ovarian stimulation and presented days after transfer to emergency care with abdominal distension and epigastric discomfort. She had no metrorrhagia or respiratory symptoms but showed signs of progressive abdominal distension and discomfort. **Methods:** Initial evaluation included physical examination, laboratory testing, and transvaginal and abdominal ultrasounds. Laboratory findings demonstrated hemoconcentration, leukocytosis, hypoalbuminemia, and elevated D-dimer. Imaging revealed bilaterally enlarged ovaries and moderate to severe ascites. Conservative treatment with intravenous fluids, albumin infusion, and strict fluid balance monitoring was initiated. Serial labs and ultrasound assessments were performed daily. Despite conservative measures, the patient's symptoms worsened, with a 5kg weight gain over four days, increasing abdominal perimeter and progressive ascites. **Results:** Severe late-onset ovarian hyperstimulation syndrome (OHSS) was diagnosed. Pulmonary ultrasound excluded pleural effusion or respiratory compromise. A therapeutic paracentesis was performed, draining 4,330 mL of peritoneal fluid. The patient remained hemodynamically stable with preserved renal and respiratory function. Significant clinical improvement followed, and conservative monitoring was continued until resolution of symptoms.

Conclusion: This case illustrates the development of severe OHSS in a fertile patient undergoing fresh embryo transfer following IVF with donor sperm, outside the typical context of infertility. Patients with high ovarian reserve, remain at significant risk of OHSS. It is essential to identify high responders early and consider prophylactic strategies, even in non-infertility contexts. This case reinforces the importance of individualized stimulation protocols and early risk mitigation. Timely recognition and multidisciplinary management were key to avoiding further complications.

CONCORDANCE OF THREE-DIMENSIONAL TRANSVAGINAL ULTRASOUND WITH HISTOLOGICAL DIAGNOSIS OF CHRONIC ENDOMETRITIS VIA JUNCTIONAL ZONE ASSESSMENT

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Problem statement: Chronic endometritis (CE) is a persistent endometrial inflammation characterized by plasma cell infiltration. Histopathological detection of plasma cells remains the gold standard for diagnosis. This study evaluates whether three-dimensional transvaginal ultrasound (3D TVUS) assessment of the endo-myometrial junctional zone (JZ) can assist in identifying CE. **Methods:** This prospective study included 66 patients with recurrent pregnancy loss (RPL) or recurrent implantation failure (RIF) who underwent diagnostic or operative hysteroscopy (H/S) at our center between November 2023 and August 2024. Prior to surgery, all patients underwent 3D TVUS for JZ evaluation in the coronal plane. JZ loss length, regularity, and presence of discontinuity were recorded for the fundus and lateral walls. During H/S, macroscopic CE indicators (hyperemia, edema, strawberry appearance, micropolyps) were documented. Endometrial biopsies were analyzed using hematoxylin-eosin and CD38 immunohistochemistry. CE was diagnosed by identifying ≥ 1 plasma cell in a single high-power field. **Results:** Of the

66 patients (26 RPL, 40 RIF), 39 (59%) were diagnosed with CE. CE incidence was 53.8% in RPL and 62.5% in RIF. JZ loss length and percentage in right and left lateral walls were significantly greater in the CE group ($p=0.032-0.020$). A JZ loss $\geq 50\%$ in any wall was seen in 64.1% of CE cases versus 33.3% of others ($p=0.014$). Combining either ≥ 1 macroscopic H/S finding or $\geq 50\%$ JZ loss on 3D TVUS yielded a sensitivity and specificity of 66.7% and 74.3%, respectively. For 3D TVUS alone, sensitivity was 64.1%, specificity 66.7%, positive predictive value 73.5%, and negative predictive value 56.3%. **Conclusion:** Significant JZ disruption detected via 3D TVUS correlates with histological CE. These findings suggest that 3D TVUS could serve as a non-invasive adjunctive tool for CE diagnosis. Larger prospective studies are warranted to validate its diagnostic utility in broader populations.

PREGNANCY OUTCOMES OF ARTIFICIAL AND NATURAL CYCLES IN FET(FROZEN EMBRYO TRANSFER) CYCLES WITH 5-DAY GRADE 1 EMBRYO TRANSFER

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Study question: Are the pregnancy outcomes of artificial and natural FET cycles same?

The pregnancy outcomes of natural cycles are better. What is known already: Natural cycles has an absolute advantage in decreasing the risk of poor obstetric outcomes. On the other hand, there is still a debate about which protocol has a better implantation rates and/or live birth rates. Also, the day and the grade of the transferred embryo affect pregnancy outcomes. **Study design:** The outcomes of patients between 2012 and 2022 with frozen embryo transfer cycles who applied to the Ankara University ART clinic were retrospectively examined. Only patients who underwent a 5th day grade 1 embryo transfer were included in the study and the pregnancy outcomes of natural and artificial cycles were compared. **Participants/materials:** The records of 319 patients were examined and 147 patients met the inclusion criteria. The artificial cycle was conducted with a fixed or step-up protocol. All patients received luteal phase support. The clinical pregnancy rate, the live birth rate and the obstetrical features were compared between the groups. **Main results:** While 43 patients underwent a natural cycle (NC), 104 patients underwent an artificial cycle (AC). 32 patients (74.4%) in the NC group and 47 patients (45.2%) in the AC group had a clinical pregnancy and it was statistically significant ($p=0.006$). 29 patients (67.4%) in the NC group and 27 patients (26%) had a live birth rate ($p=0.001$). The birth weights and the birth weeks were similar between the groups ($p=0.222$; $p=0.227$). **Limitations:** The clinical pregnancy rate and the live birth rates were very high when compared to the literature. This may be due to the relatively low number of patients in this group. **Wider implications of the findings:** This study shows the better pregnancy outcomes of NC in FET. Since it is a more physiological process, in the coming years, the artificial cycle may be completely abandoned and only the natural cycle may be preferred.

ROLE OF UTERINE ARTERY DOPPLER ASSESSMENT DURING MID-LUTEAL PHASE IN WOMEN WITH UNEXPLAINED INFERTILITY: A COMPARATIVE OBSERVATIONAL STUDY

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Problem Statement: Unexplained infertility remains a diagnostic and therapeutic challenge, affecting a significant subset of women despite normal conventional fertility assessments. Emerging evidence suggests that uterine blood flow and endometrial receptivity, assessed via Doppler ultrasound, may play a critical role in implantation success. However, the clinical utility of uterine artery Doppler parameters in unexplained infertility remains controversial and inadequately explored. **Methods:** A prospective, observational, cross-sectional study was conducted from January 2023 to June 2024 at AIIMS Nagpur, involving 70 married women aged 18-40 years. The study group included 35 women diagnosed with unexplained infertility, and 35 age-matched fertile controls. All participants underwent transvaginal sonography and bilateral uterine artery Doppler evaluation during the mid-luteal phase (days 15-21 of the menstrual cycle). Parameters assessed included Pulsatility Index (PI), Resistance Index (RI), Systolic/Diastolic (S/D) ratio, endometrial thickness, and mid-luteal serum progesterone levels.



Statistical analysis involved t-tests and correlation assessments, with significance set at $p < 0.05$. **Results:** The mean uterine artery PI and RI were significantly higher in the unexplained infertility group compared to fertile controls (PI: 2.2 ± 0.6 vs. 1.7 ± 0.3 , $p = 0.0001$; RI: 0.8 ± 0.1 vs. 0.7 ± 0.08 , $p = 0.0006$), indicating increased uterine vascular resistance. The S/D ratio was also elevated (4.7 ± 1.6 vs. 3.9 ± 0.4 , $p = 0.0006$). No significant differences were observed in endometrial thickness or serum progesterone levels. ROC analysis suggested that a PI cut-off of 1.845 could differentiate infertile from fertile women with 69% sensitivity and 74% specificity. **Conclusion:** Elevated uterine artery Doppler indices (PI, RI, S/D ratio) during the mid-luteal phase are significantly associated with unexplained infertility, suggesting impaired uterine perfusion may contribute to suboptimal endometrial receptivity. Doppler assessment may serve as a valuable, non-invasive adjunct in infertility evaluation, aiding early identification of vascular abnormalities and guiding individualized management strategies. Further large-scale studies are warranted to establish standardized diagnostic cut-offs and therapeutic implications.

PREPROCEDURAL PREDICTION OF IVF OUTCOMES USING MACHINE LEARNING: ESTABLISHED FEMALE DETERMINANTS AND THE EMERGING ROLE OF MALE PARTNER FACTORS

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Problem statement: Accurate prediction of IVF outcomes prior to treatment initiation remains a critical unresolved challenge. Current tools depend on procedural factors such as embryo quality and endometrial assessment. We evaluated whether routinely available preprocedural clinical variables can accurately predict IVF outcomes, enabling earlier counselling and individualized reproductive care.

Methods: This retrospective cohort included 1,243 IVF/ICSI cycles at the Institute of Reproductive Medicine, University of Szeged (21 Jan 2022 – 12 Dec 2023). An extreme gradient boosting (XGBoost) classifier was trained on 14 pre-procedural variables. Five-fold cross-validation assessed discrimination via the area under the receiver operating characteristic curve (AUC). **Results:** Nine predictors—female age, AMH, BMI, follicle-stimulating hormone, luteinising hormone, sperm motility, sperm concentration, male age and infertility duration—explained 93% of total Gain. Adding female age alone raised AUC from 0.81 to 0.87. AMH and BMI consistently improved classification across subgroups, while male factors added incremental value. The XGBoost model achieved an average AUC of 0.876 (95% CI 0.843 – 0.905). **Conclusion:** IVF outcomes can be predicted with high accuracy at the first consultation using routinely collected preprocedural clinical variables. Early risk stratification may guide counselling, set realistic expectations, and inform individualized stimulation protocols or alternative family-building strategies. Prospective multicentre validation and local model recalibration are warranted prior to clinical implementation.

EMBRYOLOGY

COMPARISON OF SURVIVAL AND PREGNANCY RATES OF VITRIFIED CLEAVAGE (DAY 3) VS BLASTOCYST (DAY 5 AND DAY 6) IN FROZEN EMBRYO TRANSFER

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Introduction: Advances in embryo culture media and the widely utilization of vitrification have led to a shift in IVF practice from cleavage stage transfer to blastocyst transfer. The rationale for blastocyst transfer is to better select the embryos with the highest potential for implantation. However, knowledge about the success in frozen embryo transfer (FET) using cleavage stage (Day 3) versus blastocyst stage (Day 5 and Day 6) is still limited. **Objective:** To compare survival and pregnancy rates between transfers of vitrified Day 3, Day 5 and Day 6 embryos. Clinical outcomes were comparatively analyzed. **Materials and Methods:** This retrospective study included 829 patients aged between 26–48 years, mean age 36 years, who underwent FET between January 2022–December 2024. 109 patients had Day 3 FET with 224 frozen thawed Day 3 embryos, 452 patients had Day 5 FET with 636 frozen thawed Day 5 blastocysts, and 268 had Day 5 FET with 381 frozen thawed Day

6 blastocysts. Extended culture of embryos was determined according to the quantity and quality of cleavage-stage embryos. In our Centre, patients with 5 good quality Day 3 embryos (6–8 cells, less than 20% anucleate fragments) will extend culture to blastocyst stage (Day 5/6) for freezing. Less than 5 good quality embryos will be frozen on Day 3 to ensure the availability of embryos. Embryos were cryopreserved using SAGE Vitrification Kit, SAGE Media, USA. **Results:** There was no significant difference in the survival rate of embryos after freezing and thawing among the 3 groups, Day 3: 97.8% vs Day 5: 99.8% vs Day 6: 100%, however, pregnancy rate was significantly higher for Day 5 frozen embryos compared to Day 3 and Day 6 frozen embryos, Day 3: 25.7% (28/109) vs Day 5: 52.7% (238/452) vs Day 6: 36.2% (97/268). **Conclusion:** By culturing embryos to blastocyst stage, embryologists can better assess embryo development and select the most viable embryo for transfer. The study suggested reviewing the cut-off for extended culture from 5 good quality to 4 good quality Day 3 embryos to increase the proportion of vitrified blastocysts to increase the pregnancy rate of frozen embryo transfer.

CULTURE CONDITIONS INFLUENCE BLASTOCYST QUALITY AND REDUCE NON-FERTILIZATION RATES IN IVF CYCLES

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Problem Statement: Culture media composition plays a vital role in embryo development and quality during in vitro fertilization (IVF). This study aimed to assess the impact of a low lactate versus a standard culture media (lactate concentrations of 1.0mM and 10mM respectively) on fertilization rates, blastocyst development, embryo quality, and pregnancy outcomes. **Methods:** A retrospective analysis was conducted comparing IVF/ICSI cycle outcomes between embryos cultured in low lactate versus standard media. Parameters assessed included fertilization rates (OPN, 1PN, 2PN), usable blastocyst rates on Day 5 and Day 6, total usable blastocysts, and blastocyst quality grades (A–D). Clinical pregnancy outcomes (fresh, frozen, and cumulative) were also analyzed. Fisher's Exact Test was used for statistical comparisons with a significance threshold of $\alpha = 0.05$. **Results:** The low lactate group showed a statistically significant decrease in OPN (non-fertilized) embryos ($p=0.037$) and was associated with higher usable blastocyst rates on Day 5 ($p=0.004$) and overall blastocysts ($p=0.019$). Additionally, the number of high-quality (Grade A) blastocysts was significantly higher in the low lactate system, both on Day 5 ($p=0.0001$) and overall ($p=0.0001$). A significant reduction in poor-quality (Grade D) blastocysts was also observed with low lactate media ($p=0.031$). There were no statistically significant differences between the groups in fresh, frozen, or cumulative pregnancy rates. **Conclusion:** A tenfold decrease of lactate concentration in the culture media significantly improved embryo development by enhancing blastocyst usability and quality, while reducing non-fertilization rates. Despite the lack of difference in clinical pregnancy rates, these embryologic improvements could support more effective embryo selection and offer promise for improved cumulative IVF outcomes.

FERTILIZATION TIMING ADJUSTED ACCORDING TO MEIOTIC SPINDLE STATUS: IMPLICATIONS FOR OOCYTE MATURATION AND EMBRYO PLOIDY

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Introduction: The IVF success rate is strongly related to the embryo ploidy which is genetic factor leading to the failure of embryo implantation. Recent studies have shown that oocytes displaying a polar body may still be immature and that the state of meiotic spindle at the fertilization time is of greater value. **Methods:** The maturation period (time from administration of the trigger injection to fertilization) of oocyte with first polar body extrusion was individualized according to meiotic spindle (MS) status and developmental progression. Based on observations in a polarization microscope, all oocytes were classified into three groups: 1. with visible MS (presumed mature in metaphase II); 2. without visible MS; 3. with MS forming a bridge with the first polar body. The maturation period was preferentially extended in cycles with possibly immature oocytes, i.e. those lacking a visible meiotic spindle or exhibiting a spindle forming a bridge with the polar body. Results: By adjusting maturation timing, the proportion of oocytes with visible MS increased from 79% at the first MS observation to 92% at the final assessment before fertilization (p0.5). Embryos were cultured for 5–6 days, followed by preimplantation genetic testing for aneuploidy (PGT-A). Out of 1 879 oocytes, 24% (462) developed into embryos that underwent PGT-A. If oocytes had not visible MS or MS formed a bridge with the first polar body before ICSI the probability of the corresponding embryo euploidy was 17%. In contrast, if oocytes had visible MS before ICSI, the probability of embryo euploidy increased to 42% (p 0.05). **Conclusion(s):** Delaying fertilization for cycles with immature oocytes improved the likelihood of achieving a more advanced oocytes maturation stage and, consequently, increased the chances of developing a euploid embryo. Beside that a better inside into the oocyte maturation process enables more accurate identification of embryos suitable for direct transfer or prioritization for preimplantation genetic testing for aneuploidy.

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FERTILITY PRESERVATION

MODERN OBSTETRIC ON THE PATH TO FERTILITY PRESERVATION IN MAJOR PERIPARTUM COMPLICATIONS

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Problem statement: Peripartum hysterectomy is a life-saving procedure when major obstetric complications cannot be controlled by conservative measures. It remains one of the most controversial interventions in modern obstetric. The main etiologies are placenta previa with or without placenta accreta spectrum, uterine atony, placental abruption, uterine rupture, and, less frequently, sepsis. In these situations, the key challenge is to balance maternal survival with the possibility of preserving fertility. **Methods:** We conducted a retrospective study over a five year period in a level III maternity unit within a multidisciplinary hospital, during which 10095 deliveries were recorded. Data analyzed included the main indications for peripartum hysterectomy, conservative measures attempted for fertility preservation and maternal-fetal outcome parameters. In addition to routine management, advanced options were available, including intraoperative cell salvage, rotational thromboelastometry-guided hemostasis assessment and uterine artery embolization. The main aim was therefore to design a forecasting algorithm, built on estimative models, to predict the probability of requiring hysterectomy with the final objective of improving counseling in the ongoing dilemma of maternal survival and fertility preservation. **Results:** During the 5-year study period, 43 peripartum hysterectomies were performed among 10095 deliveries, giving an incidence of 4.26 per 1000. The main indication was placenta previa with abnormal adherence (58.1%, N=25), followed by uterine atony (16.3%, N=7), placental abruption (11.6%, N=5), uterine rupture (7.0%, N=3), and sepsis (7.0%, N=3). Most patients required massive transfusion, guided replacement in selected cases and cell salvage was used whenever feasible. Uterine artery embolization prevented hysterectomy in some women but failed in others. Complications included bladder and ureter injury and postoperative infection. One case of placenta increta left in situ required delayed hysterectomy. There was one maternal death due to placenta percreta with uncontrollable hemorrhage. **Conclusion:** Based on our findings, we propose the

development of a multimodal management approach, together with a predictive model, to anticipate the need for hysterectomy. These strategies may guide decision-making and enhance counseling in what remains one of the most challenging dilemmas in modern obstetrics: saving maternal life and seeking to preserve fertility.

EVALUATION OF FATTY ACID ADDITION IN VITRIFICATION AND WARMING MEDIA: EFFECTS ON OOCYTE SURVIVAL AND EMBRYONIC DEVELOPMENT IN MICE

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Objectives: This study aimed to evaluate the effect of fatty acid (FA) supplementation into vitrification and/or warming solutions on mouse oocyte survival, fertilization, and subsequent embryonic development.

Methods: Mature oocytes were obtained from BDF1 mice aged 7 to 8 weeks and were vitrified. As the preliminary work, lipid contents in fresh oocytes and vitrified/warmed oocytes was assessed via Nile red staining. During vitrification and warming, fatty acid (1% Chemically Defined Lipid Concentrate) was supplemented into vitrification solutions (FA-vit), warming solutions (FA-war), and both solutions (FA-both). No fatty acid addition was served as control group. After warming, oocytes were fertilized with mice epididymal sperms, and 2-cell embryos were obtained, and then cultured to the blastocyst stage. From final blastocysts, the expressions of mRNA for hydroxyacyl-Coenzyme A dehydrogenase (Hadha) and acyl-CoA synthetase short-chain family member 2 (ACSS2), genes crucial for FA β -oxidation, were quantified by real-time PCR. **Results:** In the preliminary work, vitrified/warmed oocytes demonstrated a significant reduction in lipid content compared to fresh oocytes (median signal intensity; 12,102 vs. 12,542, p0.001). In FA-vit, FA-war, and FA-both groups, oocyte survival, fertilization, and blastocyst formation rates were similar to control group. The expressions of two mRNAs were also similar among four groups. **Conclusion:** Our findings indicate that 1%FA supplementation during vitrification and warming of mice oocytes did not improve their survival, fertilization, and blastocyst formation rate.

Keywords: Fatty acid, Lipid; Blastocyst; Oocytes; Vitrification

MITIGATING AGE-RELATED OVARIAN DYSFUNCTION WITH THE ANTI-INFLAMMATORY AGENT MIT-001

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Problem statement: Age-related female infertility is a natural process primarily associated with ovarian dysfunction, including a diminished ovarian reserve and a decline in oocyte quality. Ovarian aging is influenced by multiple factors, including genetics, lifestyle choices like smoking, and environmental exposures. Biological processes such as oxidative stress, mitochondrial dysfunction, and chronic inflammation drive this decline, alongside chromosomal and telomere changes, and epigenetic modifications. Currently, there are no effective treatments to cure age-related ovarian dysfunction. In this study, we investigated the effect of MIT-001 as anti-inflammation agent on the function of aged ovaries. **Methods:** Young and old mice were utilized in this study. MIT-001 was intraperitoneally administered, analyzed number of follicles and oocytes. Each group was then retrieved for RNA and protein isolation. Total RNA was subjected to mRNA next-generation sequencing. Protein extracts from ovarian lysates were used to evaluate various cytokine levels in the ovaries. MIT-001 enhanced follicles and number of oocytes compared with non-treated old mice. **Results:** MIT-001 enhanced development of antral follicles in ovaries of old mice. Whole transcriptome next-generation sequencing revealed that expression of inflammation-related molecules and inflammatory signaling were decreased in ovaries of MIT-001-treated old mice. MIT-001 downregulated immune response-related transcripts and cytokines in those ovaries of old mice. **Conclusion:** MIT-001 affects many cytokines involved in inflammatory aging via stimulating anti-inflammatory signaling in ovaries. These data help to explain how MIT-001 restores



ovarian functionality, such as oogenesis and follicular development, in old mice.

A RARE CASE OF A LARGE CERVICAL FIBROID IN A PRIMIGRAVID AND MANAGEMENT DILEMMA TO PRESERVE FERTILITY

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Problem Statement: Cervical fibroids are rare, comprising only 2% of all uterine fibroids. Originating from the supravaginal or vaginal portion of the cervix, they may present with abnormal bleeding, pelvic pressure, or urinary and bowel symptoms depending on their location. While hysterectomy is often performed in postmenopausal women, management in reproductive-aged women desiring fertility is more challenging. Fertility-preserving surgeries such as myomectomy are less commonly performed for cervical fibroids due to their deep location and proximity to vital pelvic structures. We present a case of a giant cervical myoma in a 37-year-old nulligravid patient who ultimately underwent hysterectomy despite efforts to preserve fertility. **Methods:** A 37-year-old woman presented with profuse vaginal bleeding and a protruding vaginal mass. Ultrasound revealed a large heterogeneous cervical mass with peripheral vascularity. Initial biopsy was negative for malignancy. The patient was given a single dose of GnRH agonist (leuprolide 3.75 mg) to reduce the size of the mass. Surgical intervention via abdominoperineal approach under spinal anesthesia was planned as a myomectomy. **Results:** Intraoperatively, a large cervical fibroid measuring 30 × 10 × 5 cm was found, displacing the uterus superiorly and creating the characteristic "lantern on top of St. Paul's Dome" appearance. Due to the tumor's size, depth, and anatomical distortion, safe enucleation could not be achieved. A hysterectomy was performed to avoid injury to adjacent organs and to ensure complete removal. Postoperative recovery was uneventful. Histopathology confirmed a benign cervical leiomyoma with hyaline degeneration. **Conclusion:** Cervical myomas, though rare, can reach significant sizes and pose complex surgical challenges, particularly in women of reproductive age. While myomectomy is preferred to preserve fertility, intraoperative findings may necessitate more radical interventions such as hysterectomy. Thorough preoperative imaging, surgical planning, and patient counseling are essential. This case highlights the limitations of conservative management for large cervical fibroids and emphasizes the need for individualized approaches balancing fertility preservation and patient safety.

II. GROSS MORPHOLOGY OF THE CERVICAL MASS



Figure 1. Initial size of the intralatal mass (30 cm x 10 cm x 5 cm) upon consult at the out-patient department. Mass characterized as soft, noduliferous, non-tender, movable.



Figure 2. Mass now measuring 7cm x 4cm after 2 cycles of GnRH injection, with noted decreased size.

Figure 3. Intraoperative finding of an enlarged uterus, normal bilateral fallopian tubes and ovaries.

A RARE CASE OF FERTILITY PRESERVATION AND SUCCESSFUL DELIVERY FOLLOWING IMPLANT-BASED BREAST RECONSTRUCTION IN A YOUNG BREAST CANCER PATIENT

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Problem statement: This case report aims to describe a rare instance of successful delivery following fertility preservation and implant-based breast reconstruction in a young breast cancer patient at a tertiary academic center. **Methods:** Among 2,258 patients who underwent breast reconstruction following breast cancer diagnosis between 2012 and 2025 at our institution, 40 patients underwent fertility preservation prior to cancer treatment. Among them, 21 patients received direct-to-implant (DTI) reconstruction, 11 underwent tissue expander insertion, 5 received latissimus dorsi (LD) flap, and 3 underwent TRAM flap reconstruction. Clinical and surgical outcomes, as well as patient-reported satisfaction using BREAST-Q, were evaluated where available. **Results:** We identified a single patient who achieved successful delivery following fertility preservation and implant-based reconstruction. The patient underwent oocyte cryopreservation before neoadjuvant chemotherapy, followed by bilateral nipple-sparing mastectomy and immediate DTI breast reconstruction using prepectoral silicone implants with ADM wrapping. After completing three years of adjuvant hormonal therapy, she underwent embryo transfer and delivered a healthy singleton via cesarean section. No surgical complications or recurrence were observed. The patient is currently planning a prophylactic bilateral salpingo-oophorectomy (BSO). **Conclusion:** This case highlights the feasibility of integrating fertility preservation with implant-based reconstruction in young breast cancer patients. As survival improves, greater awareness and multidisciplinary support are needed to ensure these patients can retain both their reproductive potential and aesthetic quality of life.

INFERTILITY/ENDOCRINOLOGY

HORMONAL RESPONSE TO PULSATILE GNRH THERAPY IN FUNCTIONAL HYPOTHALAMIC AMENORRHEA: INFLUENCE OF POLYCYSTIC OVARIAN MORPHOLOGY

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Problem Statement: In up to 50% of women with functional hypothalamic amenorrhea (FHA) polycystic ovarian morphology (PCOM) is identified on ultrasound. However, the impact of PCOM on hormonal response to pulsatile GnRH therapy for infertility treatment remains unknown. **Methods:** In this single-center observational study, 41 patients with FHA underwent 3 months of pulsatile GnRH therapy to induce ovulation. Based on transvaginal ultrasound, patients were assigned to the PCOM group (n=24) or the non-PCOM group (n=17). Serum levels of anti-Müllerian hormone (AMH), follicle stimulating hormone (FSH), luteinizing hormone (LH), estradiol, prolactin, sex hormone binding globulin, and other hormones were measured at baseline and after 3 months. Wilcoxon-signed-rank tests were performed to compare pre- and post-treatment hormone levels. **Results:** At baseline, median AMH levels were significantly higher in the PCOM group (6.21ng/ml [IQR 4.03-8.87]) compared to the non-PCOM group (1.7ng/ml [IQR 1.14-2.20]; p 0.001). After 3 months of pulsatile GnRH, the non-PCOM group showed a significant increase in AMH levels (1.94 [IQR 1.39-2.49]; p = 0.001), whereas no significant change was observed in the PCOM group (p = 0.218). LH, FSH, and estradiol levels increased in both groups. Pulsatile GnRH effectively induced ovulation irrespective of ovarian morphology. **Conclusion:** The significant increase in AMH in patients without PCOM likely reflects restored folliculogenesis. In contrast, the absence of AMH elevation in the PCOM group is likely attributable to their already elevated baseline levels. Notably, pulsatile GnRH therapy did not exacerbate further follicular excess in women with PCOM, underscoring its safety and effectiveness in this population.



POLYAMINE HAS THE POTENTIAL TO INFLUENCE OVARIAN PHYSIOLOGY AND FERTILITY IN MICE WITH POLYCYSTIC OVARY SYNDROME (PCOS)

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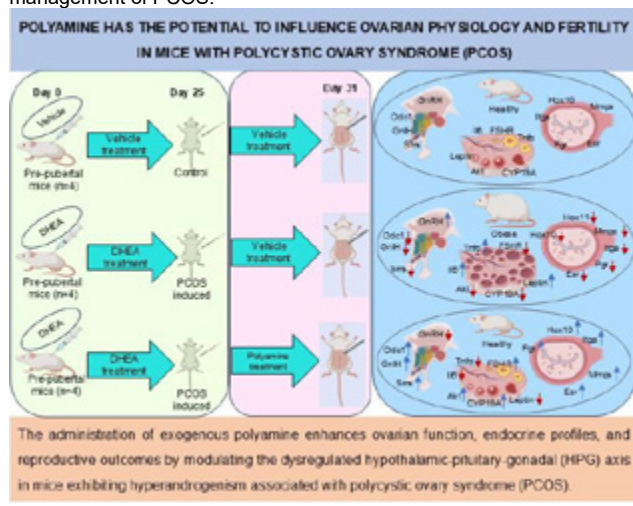
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Problem statement: Gonadotropin-releasing hormone (GnRH) is integral to the regulation of the mammalian reproductive system. Recent investigations have identified polyamines, a class of biogenic amines, as modulators of GnRH activity. These polyamines are endogenously synthesized, and their levels, along with associated factors, are disrupted in metabolic disorders such as diabetes and obesity. However, the relationship between dysregulated expression of polyamines or their associated factors and polycystic ovarian syndrome (PCOS), characterized by an aberrant GnRH secretion pattern, remains to be elucidated. **Methods:** Pre-pubertal female Balb/c mice were administered dehydroepiandrosterone (DHEA) to induce a PCOS-like phenotype (n=4) and subsequently treated with polyamines (n=4) over a five-day period. The study assessed the impact of these interventions on various endpoints, including body weight changes, serum concentrations of glucose and testosterone, as well as the levels of GnRH and gonadotropin-inhibiting hormone (GnIH). Additionally, we evaluated mRNA expression profiles associated with these hormones, alongside histological analyses of ovarian and uterine morphology. Gene and protein expression analyses focused on inflammatory markers and folliculogenesis within the ovarian tissue, in conjunction with evaluating the uterine environment conducive to pregnancy.

Results: The study demonstrated that a single administration of putrescine effectively ameliorated PCOS-like symptoms in murine models. The treatment was associated with significant reductions in GnRH, glucose, and testosterone levels, along with a decrease in body weight (p<0.05). Moreover, putrescine treatment led to a downregulation of key inflammatory markers in the ovaries, including Tnfa, Il-6, and Leptin (p<0.01). Notably, it enhanced folliculogenesis by promoting the translational expression of follicle-stimulating hormone receptor (FSHR) and aromatase (CYP19A) (p<0.05). Additionally, putrescine positively impacted reproductive outcomes by modulating the expression of markers involved in decidualization, integrin receptors, steroid hormone receptors, and matrix metalloproteinases in the uterine tissue (p<0.05).

Conclusion: The findings indicate that exogenous polyamine administration modulates GnRH metabolism in the hypothalamus through the regulation of endogenous polyamine metabolic genes. This modulation appears to enhance PCOS phenotypes by improving ovarian morphology, lowering serum testosterone levels, and facilitating successful pregnancies. The authors propose that exogenous polyamines may serve as a promising therapeutic target for the management of PCOS.



THE IMPORTANCE OF THE GENITAL MICROBIOME ON THE SUCCESS AND OUTCOME OF IMPLANTATION

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Introduction: The human microbiome is considered a newly discovered organ of our body. The lower female genital tract, especially the vagina, is colonized by various bacterial species, with Lactobacillus. The upper female genital tract, especially the uterus, has long been considered sterile. Recent studies have identified a distinct endometrial microbiome. The homogeneous composition and balance of the microbiome in the genitourinary tract, known as eubiosis, is critical for the health of the female reproductive system. **Objectives:** To determine the composition of the microbiome of the vagina, cervix and uterus in patients with miscarriage and in patients with endometrial polyps, as well as failed pregnancy or difficult implantation. **Material and methods:** The first group of patients were with absent miscarriage, and the second group of patients with sterility and endometrial polyp. In both groups of patients, a swab of the uterine cavity, cervix, vagina and a swab for bacterial vaginosis were taken before the intervention. All students have signed a consent form for the study. The examination was carried out at KBC Zemun. **Discussion:** The Lactobacillus-dominated female genital tract microbiome is associated with favorable reproductive outcomes. Microbial imbalance is characterized by a reduced number of lactobacilli, as well as an increased variety and abundance of pathogens and is associated with infertility. The vaginal microbiome changes dynamically in response to physiological influences, such as the menstrual cycle, pregnancy, and hormonal changes during menopause. External factors, such as diet, sexual activity, and hygiene practices, also play a role in implantation failure and pregnancy complications such as miscarriage and premature birth. **Conclusion:** Dysbiosis can damage the vaginal or endometrial mucosal barrier and trigger pro-inflammatory reactions, interfering with reproductive processes such as implantation. Clear microbial biomarkers have not yet been identified and there is no consensus on the precise composition of a normal or healthy microbiome. Further research is needed to refine diagnostic tools and develop personalized therapeutic strategies to improve fertility and pregnancy outcomes.

VARIABILITY OF PROGESTERONE LEVELS IN EMBRYO CRYOTRANSFER DURING HORMONE REPLACEMENT THERAPY CYCLES.

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Serum progesterone levels are a key parameter in the scheduling of frozen embryo transfer, as they correlate with the degree of endometrial preparation and provide information on the patient's absorption of exogenous progesterone. Several studies have shown that low progesterone levels on the day of transfer are associated with reduced pregnancy and live birth rates. According to various studies, the threshold level may range between 8.8, 9.2, or 10 ng/mL. The primary objective of this study was to evaluate the inter-cycle variability of serum progesterone levels in patients undergoing at least three frozen embryo transfers within hormone replacement therapy (HRT) cycles, in order to assess whether progesterone measurement could be omitted from the fourth cryotransfer onward. We conducted a descriptive observational study at our institution, including a sample of 49 patients between January 2023 and April 2025. All cases involved the use of autologous oocytes without preimplantation genetic testing (PGT). A single blastocyst-stage embryo (day 5) was transferred in 77.55% of cases. In all cases, single embryo cryotransfer was performed. Patients were stratified into two groups according to progesterone levels. No significant differences were observed between groups in the evaluated parameters.



		Progesterone 10 ng/ml
Number of patientes	18 (36,73)	31 (63,27)
Variability range	8,84	9,01

In our study, the variability range was relatively broad. This difference was similar in both groups. As a limiting factor, further studies are required. In conclusion, the determination of progesterone levels in each cryotransfer remains necessary to help ensure adequate endometrial preparation.

COMPARATIVE EFFICACY OF LETROZOLE VERSUS CLOMIPHENE CITRATE FOR OVULATION INDUCTION IN SUBFERTILITY

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Problem statement: Anovulation or irregular ovulation is one of the major causes of subfertility in women. Clomiphene citrate and Letrozole are commonly used for ovulation induction [1-2]. This study compared their effectiveness in achieving conception. **Methods:** A randomized controlled study was conducted at the Department of Gynaecology and Obstetrics, Bacha Khan Medical Complex, Swabi, from September 2022 to September 2023. A total of 80 women aged 21–48 years with BMI 23–34 were considered. Participants were divided into two groups: Clomiphene citrate (100 mg daily, days 2–6 of cycle) and Letrozole (5 mg daily, days 2–6). Women with polycystic ovary syndrome (PCOS) were analyzed separately. Pregnancy outcomes per cycle were recorded and compared. **Results:** In women without PCOS (n=60), pregnancy rates were 13.3% with Clomiphene citrate (n=30) and 16.6% with Letrozole (n=30). In women with PCOS (n=20), Letrozole achieved a significantly higher pregnancy rate (30%, n=10) compared to Clomiphene citrate (10%, n=10). Conception rates decreased with increasing age and BMI, with no pregnancies reported in women 45 years or with BMI 35 kg/m². The results are shown in the Figure 1. **Conclusion:** Both Clomiphene citrate and Letrozole are effective first-line drugs for ovulation induction. Letrozole demonstrated slightly higher overall efficacy and was significantly superior in women with PCOS. Conception rates decreased with increasing age and BMI.

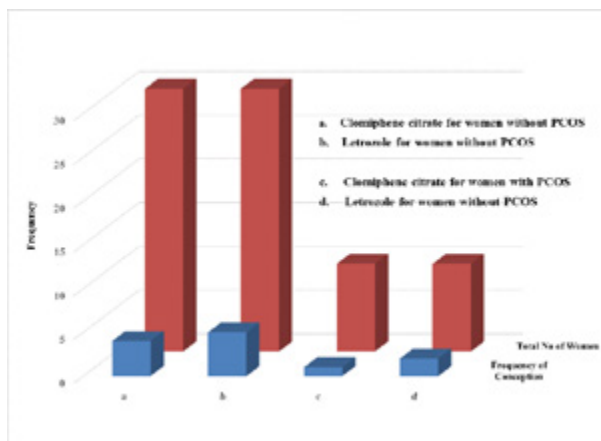


Figure 1. Effectiveness of Clomiphene citrate and Letrozole drugs

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GLOBAL PATTERNS OF PCOS RISK AND DIAGNOSIS: PREDICTIVE INSIGHTS FROM A MULTI-COUNTRY STUDY

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Problem Statement: Polycystic Ovary Syndrome (PCOS) is a prevalent but underdiagnosed endocrine disorder affecting women in the reproductive age group, with a prevalence ranging from 5% to 15% globally. Despite increasing awareness, disparities in diagnosis remain, particularly in low-resource settings and among adolescents, due to limited screening, social stigma, and variable symptom presentation. There is a need for predictive tools that identify high-risk individuals early and highlight global diagnostic disparities. **Methods:** We utilized a simulated dataset representing 120,000 women aged 15–49 across 75 countries, containing 17 variables reflecting real-world PCOS risk patterns. For this preliminary analysis, we focused on adolescents aged 15–19. Age was not a strong differentiator for PCOS within this subgroup. Statistical analyses including Welch's t-test and chi-square tests identified lifestyle-related factors (e.g., BMI, activity level) as significantly associated with PCOS diagnosis. Machine learning models—logistic regression, decision tree, and random forest—were developed to predict PCOS likelihood. All models achieved over 85% accuracy. Ensemble modeling and cross-validation techniques are underway to further optimize predictive robustness. **Results:** Preliminary findings suggest that lifestyle features and derived likelihood scores are highly predictive of PCOS. Random forest and decision tree models demonstrated strong performance, suggesting potential for early, non-invasive screening tools. However, current findings are limited to the adolescent subgroup and model generalizability is under investigation. **Conclusion:** Initial analyses underscore the utility of machine learning in identifying PCOS risk using accessible features. Ongoing research aims to develop a validated, scalable prediction framework to support early detection and targeted screening strategies globally. Further work will expand subgroup analysis, assess health equity implications, and validate findings against clinical benchmarks.

Disclosure of Interest: None declared

MIG-6 PLAYS A CRITICAL ROLE AS A PGR MEDIATOR IN MAINTAINING EPITHELIAL AND STROMAL CELLS FOR UTERINE RECEPTIVITY

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Problem statement: Ovarian steroid hormones—estrogen and progesterone—play a central role in regulating epithelial-stromal interactions in the uterus. These interactions are critical for uterine function, including endometrial receptivity, implantation, and decidualization. These interactions involve complex signaling crosstalk between the uterine epithelium and the underlying stroma, with dynamic cell population-specific roles. Mitogen-inducible gene 6 (MIG-6) is a key mediator of progesterone signaling in the endometrium, and loss of MIG-6 results in implantation failure due to a non-receptive endometrium. However, the molecular and cellular mechanisms by which MIG-6 deficiency disrupts endometrial receptivity have not been studied. **Methods:** We performed single-cell RNA sequencing to characterize the cellular composition and functional alterations in the non-receptive endometrium of uterine-specific Mig-6 knockout (*Pgr^{cre/+}Mig-6^{fl/fl}*; *Mig-6^{del/d}*) mice. **Results:** Compared to control mice, *Mig-6^{del/d}* mice exhibited distinct gene expression patterns in both endometrial epithelial and stromal cells. We identified dysregulation of *Egr1* in the non-receptive endometrium along with attenuated expression of *Foxa2* and *Cyp26A1* in epithelial cells of *Mig-6^{del/d}* mice. Notably, LRP2 expression was diminished in epithelial cells of both *Mig-6^{del/d}* mice and infertile women with endometriosis. **Conclusion:** These findings demonstrate that MIG-6 is a critical progesterone receptor (PGR) mediator that maintains endometrial epithelial and stromal cell function essential to uterine receptivity. Our study advances the understanding of the molecular pathways underlying endometrial receptivity and provides a foundation for therapeutic strategies to improve pregnancy outcomes.



ANALYSIS OF UTERINE NATURAL KILLER CELL CHANGE IN A RAT MODEL OF ENDOMETRIOSIS

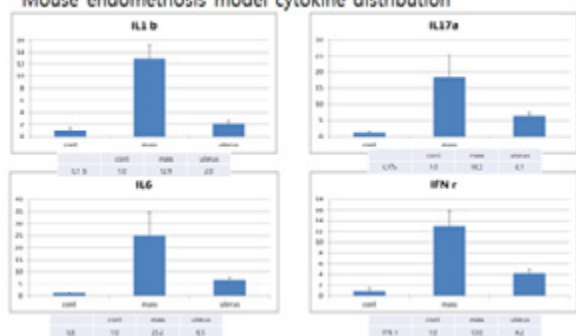
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Problem statement: Uterine natural killer (uNK) cells play a critical role in endometrial immunity and reproductive success, yet their dynamics in endometriosis remain poorly defined. We established a rat model to elucidate uNK cell distribution, cytokine milieu, and killer immunoglobulin-like receptor (KIR) expression in ectopic lesions and the uterine environment. **Methods:** Sprague-Dawley rats were anesthetized and laparotomized; uterine horns were excised, and autologous endometrium was implanted onto gonadal fat. Lesion and uterine tissues were collected at 4, 8, and 12 weeks post-implantation. uNK cell populations were quantified by immunohistochemistry for CD56, CD16, CD34, CD117, and NKp46. Lesion and uterine fluid cytokines (IL-1, IL-6, IL-8, TNF- α , INF- γ , TGF- β) were measured by ELISA. Expression of inhibitory KIR2DL1 and activating KIR2DS1, as well as NKp46 and IL2RB transcripts, was assessed by qRT-PCR (reported as fold change relative to control). **Results:** Ectopic lesion size increased progressively at each time point. Compared with sham controls, uNK cell density and pro-inflammatory cytokines (IL-1, IL-6, IL-8, TNF- α , INF- γ) were significantly reduced in lesions, while TGF- β was elevated. KIR2DL1 expression rose (fold change 1.50) and KIR2DS1 declined, indicating an inhibitory shift. Notably, NKp46 expression increased (fold change 1.25) despite overall downregulation of IL2RB (fold change 0.77), especially in the ipsilateral normal uterus. **Conclusion:** Our novel rat model reveals that endometriosis induces broad suppression of uNK cell activity alongside selective upregulation of NKp46. These immunological alterations may contribute to endometriosis-associated infertility. Therapeutic strategies should aim to restore uNK cell balance, and future drug evaluations must determine whether standard treatments correct these immune dysfunctions.

Disclosure of Interest: None declared.

Mouse endometriosis model cytokine distribution



THE EFFICACY OF ACTIVE COLLECTION OF MENSTRUAL BLOOD-DERIVED STEM CELLS COMPARED TO PASSIVE COLLECTION IN WOMEN WITH REPEATED PREGNANCY LOSS WHO UNDERWENT IN VITRO FERTILIZATION

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Problem statement: Menstrual blood-derived stem cells (MenSCs) represent a promising autologous mesenchymal stem cell source with regenerative potential, yet optimal collection strategies during IVF cycles remain undefined. Current protocols rely on passive menstrual blood collection, but active endometrial cavity sampling concurrent with mock embryo transfer (ET) procedures may yield superior cell recovery and colony-forming efficiency. This study compared MenSC induction success between active intrauterine collection via endometrial sampler during mock ET versus passive collection from vaginal cavity and cervical os at menstrual cycle day 3 (MCD#3) in women with repeated pregnancy loss who underwent IVF. **Methods:** In women who underwent IVF, menstrual blood was collected outside of the uterine cervix using a menstrual cup in one woman (passive collection) and at the tip of the embryo transfer catheter after a mock embryo transfer in four women (active collection) on menstrual day 3, with an assessment of pain severity using the visual analog scale 1 to 10. The retrieved cells

were harvested using centrifugation, and the RBC lysis solution was treated for 5 min at RT. Then, the cells were washed using dPBS and replated for further culture with MEM alpha medium. For the evaluation of stemness, total RNAs were extracted, and 0.25 μ g of RNA was synthesized into cDNA. Expression of stemness-specific markers was evaluated using qPCR. **Results:** No participants reported pain levels exceeding 2. The active collection method yielded a higher number of collected cells compared to the passive collection method. The growth rates of menstrual blood-derived stem cells varied depending on the culture conditions when using the active collection method. The expression levels of stemness markers, including Oct4, Sox2, and Nanog, were confirmed in cells cultured from both collection methods, and no significant differences were observed in these levels. **Conclusion:** The active collection of menstrual blood with mock embryo transfer could afford cell sources of menstrual blood-derived stem cells, even in women with recurrent pregnancy loss

PRIMARY AMENORRHEA SECONDARY TO HYPOGONADOTROPIC HYPOGONADISM SECONDARY TO DIAPHRAGMA SELLA MENINGIOMA

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Problem Statement: This case is reported to highlight a rare cause of primary amenorrhea, where diaphragma sella meningioma resulted in hypogonadotropic hypogonadism. Its uniqueness lies in the dual presentation of reproductive dysfunction and visual impairment, emphasizing the importance of considering central causes in amenorrhea work-up. **Case Report:** A 22-year-old nulligravid Filipino woman presented with absence of menarche. She had breast budding at age 15 without progression of secondary sexual characteristics. Examination revealed Tanner stage II breasts, absent pubic hair, exotropia, decreased visual acuity, and temporal hemianopsia. Hormonal assays showed markedly low estradiol, FSH, and LH, consistent with hypogonadotropic hypogonadism, while karyotyping confirmed a female karyotype, 46,XX. Pelvic imaging revealed an infantile uterus and small ovaries. Brain MRI demonstrated a 2.0 $\times$ 1.7 $\times$ 1.8 cm sellar/suprasellar mass compressing the optic chiasm, with consideration of pituitary macroadenoma. The patient underwent bifrontal craniotomy. Intra-operatively, noted with 3x4cm gritty, partially vascularized mass attached to the diaphragm sella. Excision of mass with Simpson grade II resection was done. Histopathology confirmed mesothelial-type meningioma. Postoperatively, neurologic symptoms improved, but visual deficits persisted. Repeat hormonal evaluation showed persistently low gonadotropins and estradiol. She was initiated on estrogen replacement and scheduled for follow-up MRI after one year, alongside ophthalmologic and psychological monitoring. **Discussion:** This case emphasizes the diagnostic complexity of primary amenorrhea, where evaluation must extend beyond reproductive tract abnormalities to central nervous system pathology. Hypogonadotropic hypogonadism secondary to sellar masses is uncommon, and meningiomas represent only a small fraction of such lesions. Surgical excision remains the mainstay of management, yet long-term endocrine replacement and multidisciplinary follow-up are essential for persistent hypogonadism and risk of recurrence of meningioma. **Conclusion:** Diaphragma sella meningioma is an exceedingly rare etiology of primary amenorrhea. This case emphasizes the importance of a comprehensive diagnostic approach integrating endocrine, reproductive, and neurologic assessment. Early recognition and coordinated multidisciplinary management are crucial to improving hormonal, reproductive, visual, and psychosocial outcomes in affected patients

EFFECT OF OBESITY ON MALE FERTILITY

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Obesity is a chronic metabolic disease that affects multiple body systems. In men, there is growing evidence that obesity negatively affects fertility. Obesity is associated with 20% of male infertility cases. Male obesity can affect semen quality due to a reduction in sperm count, low sperm motility, and an increase in morphological changes. For all



these reasons, obesity is a cause of male infertility, as well as female fertility.

IVF CASE REPORT / STUDY

TREATMENT WITH A PATENTED 3.6:1 MYO-INOSITOL/D-CHIRO-INOSITOL, ANTIOXIDANTS AND PROBIOTICS TO INCREASE PREGNANCY CHANCES IN WOMEN WITH ADVANCED MATERNAL AGE AND LOW OVARIAN RESERVE

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Problem statement: Both low ovarian reserve and poor oocyte quality reduces the chances of successful fertilization, implantation, and pregnancy, making it more challenging for women of advanced maternal age to conceive, whether naturally or through assisted reproductive techniques (ART). Recent studies suggest that a specific 3.6:1 ratio of Myo-inositol (MYO) to D-chiro-inositol (DCI) may improve oocyte quality and pregnancy rates in women with polycystic ovary syndrome.^{1,2} Administering this ratio of inositols may also increase the chances of pregnancy in women with advanced maternal age and low ovarian reserve. **Methods:** We present a series of case reports involving four patients aged 35 to 39 who attended different fertility clinics across Spain in 2023, seeking treatment for infertility lasting between 2 to 5 years. Two of the patients underwent ART procedures after supplementation with a formula containing Caronositol® (3.6:1 MYO to DCI ratio), antioxidants (Punica granatum extract, melatonin, coenzyme Q10), probiotics (L. crispatus, L. acidophilus, L. rhamnosus), and essential vitamins and minerals such as 5-methyltetrahydrofolate, B vitamins, D3, E, zinc, selenium, and iodine. While the remaining two solely initiated supplementation and lifestyle changes. **Results:** All women exhibited low antimüllerian hormone levels, indicating reduced ovarian reserve. After 2–3 months of supplementation, two women conceived spontaneously, one of whom had associated endometriosis. Another woman, also with endometriosis, who had previously experienced two failed IVF-ICSI cycles, achieved pregnancy on her third IVF attempt after 3 months of supplementation. The fourth woman, following two unsuccessful artificial insemination attempts, became pregnant on her third attempt after supplementation. While the possibility of chance cannot be entirely dismissed, it is noteworthy that all patients achieved success only after receiving the supplementation. **Conclusions:** The supplementation regimen with a specific 3.6:1 ratio of MYO to DCI, combined with antioxidants and probiotics, led to successful pregnancies in women with low ovarian reserve and advanced age, regardless of whether they underwent ART.

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SUPPLEMENTATION WITH 3.6:1 MYO-INOSITOL/D-CHIRO-INOSITOL, ANTIOXIDANTS AND PROBIOTICS TO IMPROVE OOCYTE QUALITY AND INCREASE PREGNANCY CHANCES IN WOMEN WITH HISTORY OF ART FAILURES WITHOUT PCOS

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Context: Assisted reproductive techniques (ART) may be challenging for women facing repeated failures. Improving oocyte quality is crucial to increasing the chances of pregnancy. The administration of inositols in a specific ratio of 3.6:1 of Myo-inositol (MYO) to D-chiro-inositol (DCI) has been shown to increase the oocyte quality and pregnancy rates in women with polycystic ovary syndrome (PCOS). The supplementation of a 3.6:1 ratio of Myo-inositol to D-chiro-inositol may also enhance ovarian response, improve oocyte quality, and increase the chances of pregnancy in women with previous ART failures without PCOS. **Methods:** We present a series of case reports involving four patients without PCOS who attended different fertility clinics across Spain in

2023. These women sought treatment for infertility lasting between 6 months and 5 years. **Intervention:** All had previously undergone unsuccessful ART cycles and were subsequently recommended to pursue another ART cycle, preceded by supplementation with a formula containing Caronositol® (3.6:1 MYO to DCI ratio), antioxidants (Punica granatum extract, melatonin, coenzyme Q10), probiotics (L. crispatus, L. acidophilus, L. rhamnosus), and key vitamins and minerals, including 5-methyltetrahydrofolate, B vitamins, D3, E, zinc, selenium, and iodine. **Results:** Among the four women, three (aged 33, 36, and 40) were diagnosed with repeated implantation failures, while one (aged 29) had experienced unsynchronized follicle maturation in previous ART procedures. All cases involved poor oocyte quality. After 3–6 months of supplementation, three of the women underwent successful IVF, achieving pregnancy. The fourth patient was able to produce a higher number of good-quality embryos for social preservation. Across all cases, there were marked improvements in ovarian stimulation response, oocyte quality, fertilization rates, and progression to the blastocyst stage. While the role of chance cannot be entirely ruled out, it is notable that all patients had previous ART failures and only achieved success following supplementation. **Conclusions:** This case series suggests that supplementation with a 3.6:1 ratio of Myo-inositol to D-chiro-inositol, along with antioxidants, probiotics, and essential vitamins, may improve oocyte quality, fertilization, and implantation rates in women with previous ART failures without PCOS, even in cases of advanced maternal age.

A CASE OF REPETITIVE SPERM RETRIEVAL FAILURE OVERCOME BY SERIAL EJACULATE COLLECTION IN CRYPTOZOOSPERMIA

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Problem statement: Cryptozoospermia, a severe form of male infertility, is defined as the absence of sperm in fresh semen with sperm detectable only after centrifugation. It may lead to failed sperm retrieval via testicular sperm extraction (TESE), leaving few options for couples seeking biological parenthood. The potential of serial ejaculate collection as an alternative approach in such cases remains underexplored. **Methods:** A 31-year-old male with cryptozoospermia and a 27-year-old female with normal ovarian reserve presented with 7 years of infertility. The female partner's anti-Müllerian hormone (AMH) level was 5.00 ng/mL, and antral follicle count was 25. Hysterosalpingography revealed an arcuate uterus with patent fallopian tubes. A total of 26 oocytes (23 MI) were retrieved and cryopreserved due to azoospermia on the day of ovum pick-up. Four days later, one motile sperm was found in ejaculate; however, TESE failed to retrieve any sperm. Serial ejaculations were then attempted every 1–2 weeks. Sperm morphology and motility were assessed under microscopy. Intracytoplasmic sperm injection (ICSI) was performed when viable sperm was available. **Results:** The initial ejaculations yielded no sperm. At the 7th attempt, motile sperm with severe morphological defects were found; three were selected for ICSI but fertilization failed. The 8th attempt led to fertilization, but the embryo arrested at 1-cell stage. The 9th attempt yielded two embryos, one of which progressed to the 8-cell cleavage and was cryopreserved. During endometrial preparation using hormone replacement therapy, one additional 4-cell embryo was obtained. Two embryos were transferred, resulting in clinical pregnancy. **Conclusion:** This case highlights the potential of serial ejaculate collection as a non-invasive and feasible alternative for sperm retrieval in cases of cryptozoospermia where TESE fails. Clinicians may consider repeated semen collection as a viable pathway to biological conception in carefully selected patients.

Disclosure of Interest: The authors declare no conflicts of interest.

SUCCESSFUL TWIN PREGNANCY THROUGH IVF-ET IN YOUNG WOMEN DIAGNOSED PREMATURE OVARIAN INSUFFICIENCY

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Introduction: The purpose of this case report is to emphasize the rapid diagnosis of Premature ovarian insufficiency (POI) and the importance of ovarian stimulation as soon as possible. **Case Report:** A 29-year-old nulliparous woman visited our IVF clinic with infertility concerns. Initial laboratory tests indicated low AMH at 0.01 ng/mL, elevated FSH at 26.1 mIU/mL. Transvaginal ultrasound (TVS) performed on the 2nd day of



menstruation revealed an AFC of 0. The patient's menstruation started getting irregular without expectation since about a year ago. A 31-year-old husband's semen analysis indicated teratozoospermia. We asked the patient to have oral contraceptives for one month. The patient revisited our center on the 3rd day of menstruation. TVS revealed an AFC of 2. We start first IVF cycle with mild stimulation protocol. Two oocytes were collected, resulting in one high-quality cleavage that was transferred on day three. 12 days later, the blood testing indicated an increased level of human chorionic gonadotropin (HCG) (258.7IU/L) and a clinical pregnancy was diagnosed. Two weeks later, TVS confirmed the intra-uterine pregnancy with a gestational sac, a yolk sac, and a fetal pole with visible heartbeat. However, the patient underwent missed abortion at 8 weeks of pregnancy. The second cycle of IVF was conducted using the same protocol as the first cycle; however, due to the production of a lower-quality embryo, pregnancy was not successful. In the third cycle, ovulation was induced using mild stimulation protocol. Two mature metaphase II (MII) oocytes were collected and they were transferred on day three. 12 days later, the blood testing indicated an increased level of HCG (181.2IU/L) and a clinical pregnancy was diagnosed. Two weeks later, TVS confirmed the intra-uterine pregnancy with two gestational sacs and two fetal poles with visible heartbeat. After regular check, two healthy babies were born by the cesarean section without any complication. **Discussion:** Oocyte quality is correlated with female age. Therefore the clinician should always take into account that patients need to try with their own gametes, with or without success, before moving forward to oocyte donation, especially if the patient is under the age of 35 years.

HETEROTOPIC PREGNANCY FOLLOWING OVULATION INDUCTION WITH CLOMIPHENE CITRATE: A CASE REPORT

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Problem statement: Heterotopic pregnancy, the coexistence of intrauterine and ectopic gestations, is a rare but potentially life-threatening condition. Its incidence is extremely low in natural conception (about 1 in 30,000) but markedly increases with assisted reproductive technologies (ART), reported up to 1–3%. Ovulation induction agents such as clomiphene citrate also raise the risk (about 1 in 900), although the frequency remains substantially lower than with ART. Early recognition is essential to optimize maternal outcomes and preserve intrauterine pregnancy. **Methods:** We present a case of a 32-year-old woman who conceived following ovulation induction with clomiphene citrate. Clinical presentation, diagnostic evaluation, and surgical management were reviewed. **Results:** The patient presented with acute abdominal pain in early pregnancy. On initial evaluation, her vital signs were stable. Laboratory tests showed hemoglobin of 11.4 g/dL. Transvaginal ultrasonography revealed a viable intrauterine gestation, a left adnexal mass consistent with ectopic pregnancy, and moderate hemoperitoneum. Laparoscopic exploration confirmed a left tubal pregnancy, and laparoscopic left salpingectomy was performed. The intrauterine pregnancy was successfully preserved and has progressed without complications. **Conclusion:** This case underscores the importance of considering heterotopic pregnancy in patients undergoing ovulation induction, even without ART. Prompt diagnosis and timely surgical management allowed preservation of the intrauterine pregnancy. Clinicians should maintain vigilance for this rare but serious condition.

IVF OTHER

ASSESSMENT OF PAIN DURING OVARIAN PUNCTURE IN IN VITRO FERTILIZATION CYCLES

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Problem statement: Ovarian puncture is the standard technique for oocyte retrieval. Although minimally invasive, pain perception is highly variable and influenced by patient-and procedure-related factors, including ovarian accessibility, follicle number, and tissue irritation. Effective and safe analgesia is crucial to ensure optimal surgical conditions and prompt recovery. However, no consensus exists regarding the most effective anesthetic strategy. This study aimed to evaluate pain perception in patients undergoing ovarian puncture, and to examine its relationship with technical difficulty and clinical outcomes. Secondary objectives included assessing patient satisfaction, adequacy of information provided, and the correlation between patient-and physician-reported pain. **Methods:** A prospective, observational study was conducted between September 2023 and September 2024 at the Reproductive Medicine Unit of a tertiary public hospital. Patients undergoing ovarian puncture under conscious sedation (0.05mg propofol + 1mg midazolam) combined with paracervical local anesthesia (2% mepivacaine) completed a structured post-procedure survey. Data collected included demographics, perceived pain (visual analogue scale), satisfaction, and physician assessment of technical difficulty. **Results:** We included 185 patients (mean age 35.7 years). The most frequent infertility factors were ovarian (33%) and male (21.19%). For 58.37%, this was their first puncture. Pre-procedure information was considered adequate by 93% of participants (mean rating 9/10). Before the procedure, 60.5% reported a pain score of VAS 6; pain decreased to VAS 4 during and after the procedure. Importantly, 94% would not have interrupted the procedure due to pain. Overall satisfaction was high (mean score 9/10), and 89.7% would undergo the procedure again under the same conditions. However, 76.2% were unaware of potential risks associated with general anesthesia. Physicians rated the procedure as technically easy in 91.3% of cases, and expected oocyte yield was achieved in 95%. Physician-estimated patient pain was VAS 3. Patients with endometriosis or prior abdominal surgery reported higher pain levels, greater technical difficulty, and reduced oocyte recovery. **Conclusions:** Ovarian puncture performed under conscious sedation with paracervical block is associated with high patient satisfaction, adequate analgesia, and favorable clinical outcomes. Individualized anesthetic approaches are recommended, particularly for patients with anxiety, psychiatric comorbidities, previous negative experiences, or anticipated technical complexity. These patients may benefit from deep sedation to optimize comfort and results.

DISPARITIES IN ACCESS TO ASSISTED REPRODUCTIVE TECHNOLOGIES IN EUROPE: A REVIEW OF BARRIERS AND INEQUITIES

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Problem Statement: Despite medical advancements in assisted reproductive technologies (ART), including IVF, access across Europe remains inequitable. These disparities stem from complex interactions between socioeconomic status, geographic distribution, health system infrastructure, and eligibility policies. Even in countries with universal healthcare, vulnerable groups such as migrants, LGBTQ+ individuals, single women, and those with lower socioeconomic status face disproportionate exclusion due to cost, clinic availability, and restrictive legal or social norms. The issue extends beyond policy frameworks; differences in health literacy, psychological resilience, and provider biases also contribute to poor ART outcomes. As ART becomes more essential in family-building, understanding and addressing these layered barriers is a pressing public health concern. **Methods:** A structured literature review was conducted using Google Scholar. Search terms included: "disparities", "assisted reproductive technology," IVF, "ART access," "fertility treatment," "infertility care," "barriers," and "Europe." Inclusion criteria: peer-reviewed studies (2020–2025) focused on ART access or outcome disparities by geography, policy, or social determinants in Europe. Excluded: editorials, non-empirical articles, dissertations, books, letters. **Results:** Emerging themes indicate consistent, multifactorial barriers. Economic barriers (e.g., limited subsidies, high out-of-pocket costs) are prevalent in privatized or partially funded systems. Geographic disparities are notable, rural populations face reduced access due to clinic scarcity. Sociodemographic barriers disproportionately affect marginalized groups due to restrictive eligibility criteria or social stigma. Knowledge-related gaps, such as poor fertility literacy and misinformation, delay care-seeking. Structural barriers, including long wait times and



fragmented care pathways, further limit access. These barriers often intersect, compounding disadvantage. **Conclusion:** Preliminary findings underscore that ART access in Europe is shaped by more than national policies: social, economic, and geographic inequities persist. This ongoing review highlights the need for multi-level interventions that prioritize equity, community outreach, and inclusive system redesign. Future research should explore how patient-centered models can reduce exclusion and enhance ART accessibility for all.

Disclosure of Interest: None declared.

LIFESTYLE AND SUPPLEMENT USE IN ASSISTED REPRODUCTION: CONTROVERSIAL PATTERNS FROM THE FAIR-HU STUDY

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Problem statement: Lifestyle behaviours and supplement use are increasingly recognised as potential modifiers of assisted reproductive technology (ART) outcomes, yet their role remains debated. Physical activity often declines during fertility treatment, while dietary interventions and supplement use expand, particularly among women. Understanding these shifts is crucial for optimising ART success.

Methods: The FAIR-HU multicentre study involved 603 participants (243 men, 360 women) from four Hungarian fertility centres. The Complex Fertility Awareness Questionnaire captured demographics, health literacy, fertility awareness, physical activity (general exercise habits before and since treatment; GPAQ for the past week), sleep, diet, supplement use, and quality of life. Group comparisons were performed using Wilcoxon and Mann-Whitney tests (p<0.05). (clinicaltrials.gov NCT06795568) **Results:** Self-reported physical activity declined to less than one-third of baseline after starting treatment, with a sharper drop among men (to one-fifth) than women (to one-third) (p<0.001). Post-treatment activity was significantly lower in men compared to women (p=0.030). GPAQ data indicated average weekly activity of 16 h (work), 3.2 h (transport), 3.8 h (recreation), and 7.3 h (sitting), but median values (e.g. women: 0.5 h work, 1 h transport, 1.2 h recreation, 7.5 h sitting) better represented typical patterns. Nutrition awareness was higher in women (28% "very conscious" vs. 14% men; p<0.001). Prior to ART, 40% of women vs. 13% of men reported dieting, mainly for weight reduction or carbohydrate metabolism disorders. Supplement use was markedly more frequent among women (81% vs. 46% men; p<0.001), with sex-specific patterns (e.g. folate, vitamin D, coenzyme Q10, melatonin among women; protein powders, creatine among men). Only 37% of participants had received professional dietary advice, while 85% of men and 50% of women reported none. **Conclusion:** ART is associated with a significant reduction in physical activity, more pronounced in men, while women show higher levels of diet modification and supplement use. These controversial patterns underline the need for targeted lifestyle education and professional counselling during ART. Future analyses will include objective activity monitoring and stratification by sex and IVF outcomes.

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EVALUATING INFERTILITY EDUCATION AND CLINICAL PREPAREDNESS IN UK MEDICAL SCHOOLS: A CROSS-SECTIONAL SURVEY OF STUDENTS AND DOCTORS

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Problem statement: Infertility affects approximately 1 in 6 people worldwide (1), yet it remains underrepresented within undergraduate medical curricula. Adequate knowledge and clinical preparedness are essential for future clinicians to effectively counsel and support patients facing fertility issues. This study aimed to evaluate how infertility is taught across UK medical schools, the extent of clinical exposure, and students' preparedness to address infertility concerns. **Methods:** A cross-sectional survey was distributed to medical students and doctors

from UK medical schools. The survey assessed the presence of formal teaching on infertility and assisted reproductive technologies (ART), clinical placement exposure, and confidence to engage in infertility-related patient discussions. Responses were analysed using descriptive statistics. **Results:** A total of 114 responses were collected from medical students and doctors across 16 UK medical schools. Only 59.6% reported receiving formal teaching on infertility, and 49.1% had not received any teaching on ART, such as IVF. Clinical exposure was also limited, with 58.8% reporting no placements in infertility or reproductive medicine. Among those who had, the most common placement length was just one day (14%). Most respondents expressed a clear need for improved education: 82.5% wanted more infertility teaching, and 78.1% supported additional clinical placements. Notably, 78.1% felt unprepared to discuss infertility concerns with patients. **Conclusion:** This study highlights significant variability and gaps in infertility education across UK medical schools. A substantial proportion of students and doctors feel underprepared to manage patient concerns related to fertility. We recommend that medical schools review and revise curricula to include more comprehensive teaching on infertility and ART, alongside structured clinical placement opportunities. Strengthening and standardising infertility education will better equip future clinicians to support patients and is critical to meeting the demands of reproductive healthcare in the context of the growing prevalence of infertility worldwide.

IVF TECHNOLOGICAL INNOVATIONS

WHEN AI CALLS THE TRIGGER: DATA-DRIVEN TIMING YIELDS MORE MII IN IVF

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Problem statement: Timing of the ovulation trigger is pivotal for maximizing metaphase-II (MII) oocyte yield in IVF, yet decisions vary across clinicians and centers. We evaluated whether an AI-driven trigger-day recommendation improves MII yield versus routine clinician timing. **Methods:** Retrospective, multi-center study of 1,085 IVF cycles from 6 clinics (2019–2021). Inclusion required bilateral ovarian ultrasound cine-loops ≤3 days before trigger. Candidate features included automated follicle measurements from cine-loops, age, AMH, estradiol, and endometrial thickness. A supervised machine-learning model predicted expected MII count for trigger on the exam day (D0) or +1/+2/+3 days; the day with the highest expected MII was recommended. Predictive performance (R², MAE, RMSE) was assessed with 10-fold cross-validation. Clinical effectiveness compared cycles aligned with the AI recommendation ("on-time") versus misaligned, with propensity score matching to balance covariates. **Results:** Overall prediction accuracy was R² = 0.56, MAE = 2.54, RMSE = 3.50; for D0, MAE = 2.39 (RMSE = 3.33), and for +1/+2/+3 days MAE = 2.57/2.71/2.56 (RMSE = 3.60/3.67/3.44). Cycles executed on the AI-recommended day yielded, on average, +1.98 MII oocytes (95% CI: 1.22–2.77) versus misaligned cycles. After propensity matching, the advantage remained +1.11 MII (95% CI: 0.22–1.99). Stratified by follicle count, the "on-time" advantage was +0.30 MII (10 follicles), +0.72 MII (10–20), and +1.32 MII (≥20). Results were consistent across centers and ultrasound platforms. **Conclusion:** A machine-learning model that recommends the trigger day was associated with a clinically meaningful increase in MII yield, particularly in higher-follicle cohorts, without constraining device or center heterogeneity. These findings motivate prospective, multi-center trials and real-world implementation studies to confirm efficacy, safety, and workflow impact.

Disclosure of Interest: Some authors are employees and/or shareholders of MIM Fertility (developer of the follicle-measurement system used). Study development received support from the Polish National Centre for Research and Development (POIR.01.01.01-00-1634/20-00) and ERC Consolidator Grant TUGBOAT No. 772346.

UTERINE PATHOPHYSIOLOGY

THE ROLE OF ORAL SUPPLEMENTATION WITH VITAMIN D, VITAMIN B6, AND GREEN TEA EXTRACT IN THE TREATMENT OF UTERINE FIBROIDS

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Problem statement: Uterine fibroids can impair women's quality of life by causing irregular bleeding, anaemia, infertility, pain, dysuria, constipation, and dyspareunia. The idea of oral supplementation arose after low vitamin D serum concentrations were discovered in women with uterine fibroids. The study aimed to investigate the possible association between vitamin D, vitamin B6, and green tea extract supplementation and uterine and myoma volume changes. **Methods:** This prospective interventional study included forty-six women of reproductive age with a previous diagnosis of uterine fibroids. The participants filled out the informed consent form and a sociodemographic questionnaire. During two sonographic examinations, at the first visit and after four months of taking supplementation tablets, we measured the resistance indices in the left and right uterine arteries. We calculated the uterus volume and the two most extensive fibroids by the formula for the ellipsoid: $L \times H \times W \times 0.52$ (in centimetres). Student's t-test for paired samples by IBM SPSS software version 29.0 calculated the significance of the difference. **Results:** Myoma volume significantly differed before and after the supplementation ($p=0.02$ for the most extensive and $p=0.047$ for the second most extensive, respectively). Overall, 68 examined myomas were significantly reduced ($p=0.01$) in their volumes. The difference in uterine volumes and resistance indices of uterine arteries reached no significance. **Conclusion:** Participants with large myomas reported no benefits from supplementation, and we scheduled them for surgery. Small submucous myomas slightly reduced their volume, thus improving menstrual bleeding. All women who reported improvement of symptoms continued taking the supplementation. The Mitter pharmaceutical company granted the supplementation therapy and, in this way, financially supported the conduct and presentation of this research.

WHICH TYPE OF IMMUNE ABNORMALITY-T CELL OR NK CELL-IS MORE RESPONSIVE TO IVIG TREATMENT?

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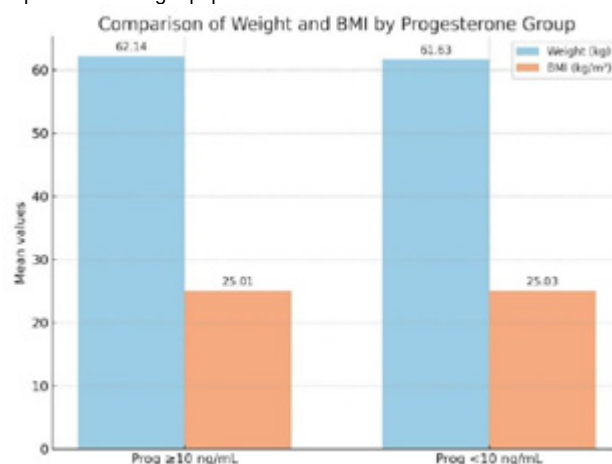
Problem statement: Recurrent pregnancy loss (RPL) has a heterogeneous etiology, yet nearly half of cases remain unexplained despite comprehensive evaluation. Immune dysregulation is considered a potential underlying mechanism in many idiopathic cases. Intravenous immunoglobulin (IVIG) therapy has been utilized to modulate aberrant cellular immune responses and improve pregnancy outcomes. However, it remains unclear which specific immune abnormalities are most responsive to IVIG, and whether individualized treatment approaches—such as tailored IVIG dosing—are warranted. This study aimed to evaluate IVIG treatment outcomes in RPL patients stratified by commonly assessed immune markers: natural killer (NK) cell level, NK cell cytotoxicity, and the TNF- α /IL-10 (Th1/Th2) ratio. **Methods:** RPL was defined as women with two or more spontaneous abortions and in total, 987 RPL women visited Department of Obstetrics and Gynecology, Konyang University Hospital (KYUH) from January 2007 to December 2020. Only those with a full evaluation and known treatment outcome were included. A total 251 idiopathic RPL and 215 RPL women with known etiology were enrolled. We investigated the pregnancy outcome by sorting the patients into seven subgroups depending on abnormal cellular immunity including NK cell level, NK cell cytotoxicity and TNF- α /IL-10 ratio. **Results:** Among all RPL women with at least one abnormal cellular immunity were treated with IVIG and the overall live birth rate (LBR) was 82.7%. The group which did not have IVIG treatment showed an overall LBR of 80.7%. Among the seven groups of RPL women with abnormal cellular immunity, the group with both high NK cell cytotoxicity and Th1/Th2 ratio showed the highest LBR, 100%, and the group with both high NK cell level and Th1/Th2 ratio showed the lowest LBR, 75%. The difference among the subgroups was not statistically significant. ($p=0.931$) **Conclusion:** While IVIG treatment was associated with favorable pregnancy outcomes in RPL patients with abnormal cellular immunity, no statistically significant differences in LBRs were observed among the subgroups. These results suggest that tailoring IVIG regimens based on individual immune profiles may not be essential. However, further research is warranted to determine personalized treatment strategies.

INFLUENCE OF BODY WEIGHT ON PROGESTERONE LEVELS IN EMBRYO CRYOTRANSFER DURING HORMONE REPLACEMENT THERAPY CYCLES

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Problem statement: Adequate serum progesterone levels on the day of frozen embryo transfer (FET) are critical to optimize endometrial receptivity and implantation, particularly in hormone replacement therapy (HRT) cycles where luteal support depends exclusively on exogenous progesterone. Several studies suggest that body weight and body mass index (BMI) may interfere with progesterone absorption and serum concentrations, potentially reducing reproductive outcomes. However, evidence remains inconclusive, and the role of BMI and weight on progesterone levels in substituted FET cycles has not been fully elucidated. **Methods:** We performed a descriptive observational study including 49 patients who underwent at least three single blastocyst cryotransfers in HRT cycles at our institution between January 2023 and April 2025. Endometrial preparation was achieved with estradiol patches (150 mg/72h 11 days) and vaginal progesterone (400 mg/12h). Serum progesterone was measured on the morning of embryo transfer, with 10 ng/mL established as the reference threshold. Patients were classified according to whether progesterone was consistently ≥ 10 ng/mL in all transfers or 10 ng/mL in at least one transfer. Demographic parameters including age, body weight, and BMI were compared between groups. **Results:** Among the 49 patients analyzed, 31 (63.3%) maintained progesterone ≥ 10 ng/mL in all transfers, while 18 (36.7%) presented at least one measurement below threshold. The mean age was comparable between groups (36.2 years). Mean BMI was 25.01 kg/m² in the ≥ 10 ng/mL group and 25.03 kg/m² in the 10 ng/mL group, with mean weights of 62.1 kg and 61.6 kg, respectively. No statistically significant association was found between BMI or body weight and serum progesterone variability. Despite the absence of differences in this cohort, previous studies have highlighted that obesity may limit vaginal progesterone absorption, suggesting potential clinical implications in larger populations.



Conclusion: In this study, body weight and BMI did not significantly influence serum progesterone levels in HRT-FET cycles. Nevertheless, given the variability observed and the evidence linking obesity to reduced progesterone concentrations, individual monitoring of serum progesterone remains advisable to optimize luteal support. Larger studies are warranted to better define the relationship between weight, BMI, and progesterone absorption.



GROUP B STREPTOCOCCUS COLONIZATION RATE AND ITS EFFECTS ON NEONATAL OUTCOME AMONG MOTHERS UNDER MATERNITY PROGRAM IN A TERTIARY HOSPITAL IN CEBU CITY FROM JANUARY 2022-JANUARY 2024

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Pregnancy, while a transformative experience, presents certain health risks, including increased susceptibility to infections such as Group B Streptococcus (GBS). GBS, a Gram-positive bacterium, asymptotically colonizes the maternal rectovaginal area but can be transmitted to newborns during delivery, leading to severe neonatal complications. Despite international recommendations for screening, routine GBS testing remains inconsistent in many regions, including Cebu City. This study aims to determine the maternal GBS colonization rate, assess its impact on neonatal health, and evaluate the necessity of routine screening among expectant mothers. Specifically, it investigates neonatal outcomes such as NICU admissions, Apgar scores, and infection rates in GBS-positive cases. A retrospective cohort study was conducted among mothers enrolled in a maternity package deal program at a tertiary hospital in Cebu City from January 2022 to January 2024. Maternal demographics, GBS screening results, and neonatal health indicators were analyzed. Statistical methods were employed to determine associations between GBS colonization and neonatal outcomes. Among 919 participants, the maternal colonization rate was 1.7%, which, despite being low, was associated with significant neonatal risks, including a tenfold increase in neonatal infections and higher NICU admissions. Neonates born to GBS-positive mothers demonstrated higher rates of respiratory distress syndrome, pneumonia, and NICU admissions compared to their GBS-negative counterparts. A key finding was the strong correlation between GBS status and neonatal infection risk, with most early-onset disease cases occurring within 48 to 72 hours, emphasizing the necessity for early newborn monitoring. GBS colonization poses a significant but preventable risk to newborn health. Routine screening between 35-37 weeks of gestation, coupled with intrapartum antibiotic prophylaxis, could substantially reduce neonatal morbidity. This study highlights the urgent need for standardized GBS screening protocols across hospitals in Cebu City to ensure improved maternal and neonatal health outcomes.

Keywords: GBS Screening, Group B Streptococcus, Maternal Colonization, Neonatal Infections

PREVALENCE, DEMOGRAPHIC FACTORS, AND PREGNANCY OUTCOMES ASSOCIATED WITH CONSUMPTION PATTERNS OF DHA-CONTAINING FOODS AND SUPPLEMENTS IN THAI PREGNANT WOMEN

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Problem statement: Adequate maternal nutrition during pregnancy is critical for fetal growth and development. Docosahexaenoic acid (DHA), a long-chain omega-3 fatty acid, plays a key role in neurodevelopment, visual function, and placental physiology. Despite its importance, many pregnant women worldwide do not achieve recommended DHA intake. In Thailand, data regarding dietary DHA intake, supplement use, and their association with pregnancy outcomes remain limited. **Methods:** This hospital-based observational study recruited 364 singleton pregnant women ≤32 weeks' gestation attending antenatal care at Thammasat University Hospital. Participants completed validated questionnaires assessing demographics, food consumption, and DHA-specific dietary patterns, including a modified DHA Food Frequency Questionnaire (FFQ). A subset of women who reported regular DHA supplement use underwent blood sampling to determine omega-3 index levels. Pregnancy outcomes—including gestational age at delivery, mode of delivery, maternal complications, neonatal birthweight, Apgar scores, and neonatal complications—were collected. Statistical analysis

included descriptive summaries and group comparisons using chi-square, t-tests, or Mann-Whitney U tests, with $p < 0.05$ considered significant. **Results:** Of the 364 participants, 32% reported DHA supplement use, while 68% relied solely on dietary sources. Among the dietary group, 41% were in the low DHA dietary group, 45% in the moderate DHA dietary group, and only 14% in the high DHA dietary group. Supplement users demonstrated a significantly higher mean omega-3 index (6.4% vs. 3.7%, $p = 0.02$). The prevalence of preterm birth was not significantly different among supplement users (6.8%) compared with dietary-only women (7.9%, $p = 0.07$). Neonates of supplement users had higher mean birthweight (3,180 g vs. 2,960 g, $p = 0.04$). Maternal hypertensive disorder rates were similar between groups. **Conclusion:** Approximately one-third of Thai pregnant women reported DHA supplement use, while the majority relied on dietary sources, with most failing to reach recommended DHA intake. Supplement use was associated with improved omega-3 status and higher neonatal birthweight, although preterm birth rates did not differ significantly. These findings support DHA supplementation as an effective nutritional strategy to optimize maternal and neonatal health in Thailand.

FMM CASE REPORT / STUDY

USE OF CELOX IN UTERUS-PRESERVING SURGERY FOR PLACENTA ACCRETA SPECTRUM: A CASE REPORT HIGHLIGHTING BLURRED VISION AND DIABETES INSIPIDUS

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Problem Statement: This case demonstrates a conservative, uterus-preserving surgical approach using Celox. Chitosan is a hydrophilic biopolymer derived from the deacetylation of chitin, which is abundantly found in the shells of crustaceans such as crabs and shrimp. Celox, a chitosan-based hemostatic gauze, is widely used for traumatic bleeding, but its role in postpartum hemorrhage (PPH) is less clear in the current literature. **Case Presentation:** A 25-year-old gravida two woman was scheduled for cesarean delivery and uterus-preserving surgery due to placenta accreta spectrum (PAS). She presented with vaginal bleeding at 35 weeks of gestation. We decided to deliver the baby by cesarean section. The adherent portion of the placenta was excised together with the lower uterine segment. After closure of the incision, we placed Celox in accordance with the literature. Nine hours after Celox placement, the patient developed a fever of 39.5°C, which transiently decreased with paracetamol but recurred. She experienced nausea and vomiting. Celox was subsequently removed about 15 hours later. The patient's nausea and vomiting disappeared immediately after Celox withdrawal. The patient developed tinnitus and blurred vision. Tinnitus disappeared within approximately 1 day. In the following days, the patient reported persistent blurred vision lasting for about one month. From postoperative day 15 onward, she developed polyuria and polydipsia and was diagnosed with diabetes insipidus. These unexpected complications were managed symptomatically, and the patient's condition gradually improved. **Discussion:** In this case, although we initially doubted that Celox would be sufficient to control the bleeding following lower segment resection, we decided to try it while keeping a Bakri balloon readily available as a more reliable option. To our surprise, Celox achieved rapid and remarkable hemostasis within minutes. Such complications have not been previously reported in association with the use of Celox in the obstetric setting. The occurrence of prolonged blurred vision and the late onset of diabetes insipidus raise concerns regarding possible systemic absorption or immune-mediated reactions. **Conclusion:** However, Chitosan-based dressings, such as Celox, are not included in these recommendations for PPH materials. These materials, including Celox, which provide both topical hemostasis and compression tamponade within the uterus, can replace balloon tamponade.

RECURRENT POST-CAESAREAN WOUND INFECTION IN A LOW RISK PATIENT: A CASE REPORT

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Background: Severe post-caesarean wound infections are uncommon in well-resourced settings. It can cause significant morbidity, especially when recurrent and accompanied by major intraoperative complications such as uterine rupture. **Case:** A 32-year-old multiparous woman, with



a history of prior caesarean wound infection requiring VAC (Vacuum-Assisted Closure) therapy, underwent an emergency lower segment caesarean section for pathological CTG (Cardiotocography) after an unsuccessful trial of VBAC (Vaginal Birth After Caesarean). Intraoperatively, a 7 cm uterine rupture and anterior cervical tear were repaired. She re-presented on POD (Post operative day) 3 with fever and wound dehiscence, in a similar fashion to her first caesarean section which was done under a different surgeon and hospital. Imaging showed subcutaneous changes without collections. Despite negative intra-abdominal cultures, clinical findings were highly suggestive of severe infection. Multidisciplinary management included multiple staged surgical debridement, VAC therapy, and targeted antibiotics. Recovery was complete following secondary wound closure on POD 19. **Discussion:** This case is notable for recurrent severe wound infection in an otherwise low risk patient, raising the possibility of individual predisposition to impaired wound healing and poor scar integrity, potentially contributing to uterine rupture. The case underscores the value of early multidisciplinary intervention, negative pressure wound therapy, and tailored perioperative strategies for patients with prior postoperative wound complications. **Conclusion:** Vigilant postoperative monitoring and personalized surgical site infection prevention strategies may be warranted in patients with a history of complicated wound healing, even in the absence of standard risk factors.

FETAL REDISTRIBUTION WITHOUT APPARENT CAUSE AS THE FIRST SIGN OF NOONAN SYNDROME

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Problem statement: Fetal redistribution is classically linked to placental insufficiency and growth restriction. When present in normally growing fetuses without maternal or placental disease, it may signal an intrinsic fetal disorder. We report redistribution as the first prenatal sign of Noonan syndrome (NS), later confirmed by genetic diagnosis and typical complications. **Methods:** A healthy 32-year-old primigravida with well-controlled gestational diabetes (diet only; third-trimester HbA1c 5%) was followed in our unit. Serial ultrasounds showed a fetus growing in the higher percentiles: estimated fetal weight at the 61st percentile (32+2 weeks) and 75th percentile (36+6 weeks), with abdominal circumference reaching the 95th percentile. At 37+1 weeks, Doppler demonstrated middle cerebral artery (MCA) vasodilation (PI 3rd percentile) with a cerebroplacental ratio (CPR) at the 3rd percentile, consistent with redistribution, while umbilical artery (UA) flow was normal. With no identifiable maternal or placental cause, induction was planned at 38+4 weeks. A cesarean section was performed after failed induction of labor. **Results:** A male neonate was delivered weighing 3380g (Apgar 9/10). At birth he was plethoric, with right testis palpable in the inguinal canal and a café-au-lait macule on the thigh. At day 15, following an emergency admission, laboratory tests showed erythrocytosis, neutrophilic leukocytosis, thrombocytopenia, and indirect hyperbilirubinemia. Echocardiography revealed multivalvular disease and biventricular hypertrophy. Oncologic work-up confirmed juvenile myelomonocytic leukemia (JMML). Genetic testing identified a germline heterozygous CBL variant on DNA from hair follicles, establishing NS. During follow-up, he suffered an ischemic stroke associated with moyamoya vasculopathy. Both JMML and moyamoya are recognized complications of NS. **Conclusion:** Redistribution in the absence of growth restriction or placental pathology should alert obstetricians to an intrinsic fetal disorder. In this case, an unexplained low CPR with normal UA preceded the diagnosis of NS, which subsequently manifested with its typical hematologic (JMML) and cerebrovascular (moyamoya) complications. Such findings highlight the value of third-trimester Doppler in pregnancy surveillance.

NAUSEA AND VOMITING OF PREGNANCY: PREVALENCE, CLINICAL CHARACTERISTICS, AND MANAGEMENT FINDINGS OF AN ITALIAN MULTI-CENTER STUDY

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Problem statement: Nausea and vomiting of pregnancy (NVP) has a relevant negative impact on maternal quality of life and nutritional status and may progress to hyperemesis gravidarum (HG). In Italy, data

regarding national incidence, evaluation of severity and treatment of NVP are limited: previous data were collected in selected obstetrics and gynecological university units. This study, which includes a larger population with a longitudinal assessment of patients during all the course of pregnancy, could provide more information about usual approach. **Methods:** We performed a multicentric, prospective cohort study of pregnant women recruited in eighteen Italian obstetrics centres, from November 2022 to December 2024. Eligibility criteria included age ≥ 18 years and attending the first prenatal visit within the 13 weeks of gestation. The severity of NVP was assessed by Pregnancy-Unique Quantification of Emesis and Nausea (PUQE) score at first visit, during the second and third trimester, and late pregnancy. Demographics, obstetrical, and socio-economic data were registered. **Results:** 890 women were enrolled, with a mean maternal age of 32.8 ± 5.0 years; 84.3% were Caucasian. Prevalence of NVP at initial consultation was 70.0%: according to PUQE, NVP was 54.4% mild, 42.3% moderate and 3.2% severe. A history of NVP in previous pregnancies was a significant predictor of recurrence, (63.2% of cases, p-value 0.000001). At the initial obstetric consultation, new pharmacological therapy was prescribed in over half of NVP patients. Among these patients, 89.7% received doxylamine succinate (10 mg) – pyridoxine hydrochloride (10 mg) combination, which dosing was tailored according to PUQE score. Specifically, in NVP moderate cases, which are the most frequent, 1 capsule/day was prescribed in 5.6%, 2 capsules/day in 42.5%, 3 capsules/day in 20.6%, 4 capsules/day in 30.0%, highlighting the posology flexibility of this pharmacological association. **Conclusion:** NVP, mostly mild-moderate forms, affects a large proportion of pregnant women. Despite its impact on maternal quality of life, early pharmacological management remains suboptimal. The doxylamine/pyridoxine 10mg/10mg capsules were the most frequently used treatment with an adaptable posology. Early PUQE-based screening and prompt initiation of therapy are fundamental to improve maternal well-being and prevent complications.

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BILATERAL RECTUS SHEATH HEMATOMA IN A PREGNANT PATIENT

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Problem Statement: Rectus sheath hematoma (RSH) is an uncommon postpartum complication, typically unilateral and associated with coagulopathy or surgical trauma. Bilateral involvement is exceedingly rare and may mimic other causes of acute abdomen. **Methods:** We report the case of a 39-year-old gravida 2 para 2 woman who underwent emergent repeat cesarean section for breech presentation and non-reassuring fetal heart tones. Her postoperative course was complicated by postpartum hemorrhage, disseminated intravascular coagulation (DIC), COVID-19 infection, and abdominal tenderness. Imaging was used to identify the underlying pathology. **Results:** CT abdomen and pelvis revealed hemoperitoneum and bilateral stable RSH, with the right hematoma larger than the left. Conservative management included hemodynamic monitoring, supportive care, and correction of coagulopathy. Surgical intervention was not required, and the hematomas remained stable. After resolution of DIC, the patient recovered well and was discharged with outpatient follow-up. **Conclusion:** Postpartum bilateral RSH is an extremely rare presentation of RSH and is potentially life threatening. Early recognition, appropriate imaging, and management is critical. There are many different imaging modalities available now with CT seen as the gold standard and Triphasic CT as a way to determine the type of bleeding. Awareness of this case presentation can guide clinicians in recognition of bilateral RSH, possible underlying risk factors, and effective management to prevent adverse outcomes.

POSTNATALLY DIAGNOSED CONGENITAL PULMONARY AIRWAY MALFORMATION AFTER PRENATAL REGRESSION: A CASE REPORT

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Problem statement: Congenital pulmonary airway malformation (CPAM) is a rare developmental anomaly of the lower respiratory tract, characterized by abnormal airway proliferation and cystic lesions within



the lung. It is most commonly diagnosed during the second trimester via prenatal ultrasound. While some lesions remain stable or enlarge, others may regress or seemingly disappear in utero. However, apparent prenatal resolution does not necessarily indicate true involution, and residual lesions may still be present at birth, carrying potential risks such as infection, respiratory distress, or malignant transformation. We present a case of a fetus diagnosed CPAM that was no longer visible in late gestation but demonstrated postnatal persistence on imaging. **Case Presentation:** A 35-old-woman primigravida at 22 weeks of gestation was referred for evaluation of fetal lung lesion. Ultrasound revealed a 1cm sized single anechoic cystic lesion in the left lung of the fetus. The lesion was small, without signs of hydrops, and remained stable in size on follow-up imaging until 28 weeks. By 31 weeks of gestation, the lesion appeared to have resolved completely. At 38 weeks and 2 days, a 2,970g female was delivered via cesarean section. Postnatal evaluation, however, revealed a persistent pulmonary lesion on chest CT, consistent with residual CPAM. The neonate remained asymptomatic under routine clinical follow up. **Conclusion:** This case highlights that prenatal resolution of CPAM lesions does not necessarily indicate true regression. Residual lesions may persist postnatally despite apparent disappearance on prenatal imaging. Therefore, thorough postnatal evaluation—including imaging studies—is essential in all cases of prenatally diagnosed CPAM, regardless of apparent in utero regression. *The authors declare no potential conflicts of interest.*

HIGH GRADE VILLITIS OF UNCERTAIN AETIOLOGY IN A PATIENT WITH MINIMAL RISK FACTORS

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Introduction: A primigravida with an otherwise uncomplicated antenatal course, presented with minimal fetal movements. CTG on arrival was pathological and she underwent immediate Caesarean section. Placental histology showed high-grade villitis of uncertain aetiology (VUE). **Case Study:** A 37-year-old primigravida presented at 38 weeks with minimal fetal movements for 2 days. CTG showed absent variability, unprovoked decelerations and wandering baseline, and she immediately underwent a Category 1 Caesarean section for pathological CTG. Intra-operatively, there was thick meconium-stained liquor and baby was born flat with APGAR scores of 2 (1 min) and 6 (5 mins). Birth weight was 2.7kg. The baby suffered from perinatal depression complicated by multiorgan involvement and persistent pulmonary hypertension of the newborn and required inpatient stay for 20 days, but was discharged well. Her antenatal course had been otherwise smooth. Her booking body mass index was 42.6. She was started on aspirin at 12 weeks for primiparity and low PAPP-A, but otherwise there were no other issues detected antenatally. Placental histopathology showed high-grade diffuse chronic lympho-histiocytic villitis (villitis of unknown aetiology), with extensive associated obliterative vasculopathy (avascular villi), with no chorioamnionitis. **Discussion:** VUE results from lymphocytic infiltration of placental villi with no infectious cause, with maternal cytotoxic T cells attacking placental villi. It is also known as chronic lymphocytic villitis or chronic villitis. It is usually found in term or late preterm pregnancies and may be present in 5-15% of term pregnancies. It is associated with intrauterine growth restriction (IUGR), pre-eclampsia, cerebral palsy, neonatal encephalopathy and intrauterine fetal death. Risk factors include obesity, autoimmune disease, IVF donor egg pregnancy and antenatal substance abuse. Recurrence risk is high – it can be 50% or more in high-grade VUE. For this patient, other than obesity, she had no other maternal or fetal risk factors – she was normotensive throughout pregnancy and baby's weight was appropriate for gestational age. **Conclusion:** It is important to be aware of the entity of VUE, the risk of significant antenatal and intrapartum consequences and high risk of recurrence, as it can be a lot more common than expected, even in those with no risk factors.

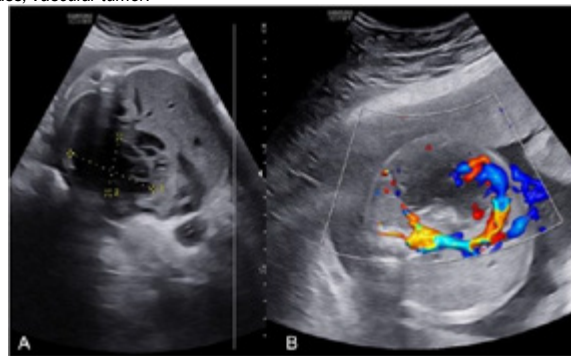
CONGENITAL HEPATIC HEMANGIOMA DETECTED ON PRENATAL ULTRASOUND: PERINATAL COURSE AND OUTCOME OF A RARE VASCULAR TUMOR

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Background: Congenital hepatic hemangiomas are rare benign vascular tumors, comprising about 5% of childhood neoplasms. While they are the most common liver tumors in neonates, antenatal

diagnosis is remain difficult due to variable imaging features and overlap with other fetal abdominal masses. Large lesions may cause serious complications such as heart failure, coagulopathy, or Kasabach-Merritt syndrome. At present, there are no standardized international management guidelines that exist. **Case Presentation:** We report a case of a 38-year-old gravida 4 para 3 referred to the high-risk pregnancy unit for a fetal intraabdominal mass. At 25 weeks' gestation, a congenital anomaly scan revealed a 5.23 × 4.22 × 3.82 cm mixed cystic and solid mass contiguous with the left hepatic lobe and showing peripheral vascularity on Doppler. Fetal hepatic hemangioma versus arteriovenous malformation was considered. Serial ultrasounds showed no growth of the hepatic mass or signs of hydrops fetalis. At 35 weeks and 6 days, the patient underwent cesarean delivery due to breech presentation, oligohydramnios, and the suspected vascular mass. A male neonate (2,277 grams) was born with Apgar scores of 7 and 8. Postnatal examination revealed over ten cutaneous hemangiomas. Laboratory work-up showed thrombocytopenia, anemia, and coagulopathy. Echocardiography showed patent ductus arteriosus, patent foramen ovale, and cardiac enlargement. Kasabach-Merritt syndrome was suspected. Despite propranolol, platelet and plasma transfusions, the neonate expired on day 15 due to neonatal sepsis. **Conclusion:** This case illustrates the diagnostic and management challenges of congenital hepatic hemangiomas. Prenatal diagnosis and serial monitoring are crucial for planning delivery and anticipating neonatal complications. Future international guidelines should emphasize standardized imaging criteria, fetal surveillance protocols, and coordinated multidisciplinary care to improve neonatal outcomes. **Keywords:** Congenital hepatic hemangioma; prenatal ultrasound; Kasabach-Merritt syndrome; neonatal coagulopathy; propranolol; fetal abdominal mass; vascular tumor.



SIMULTANEOUS BILATERAL TUBAL PREGNANCY: A CASE REPORT

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Problem Statement: Bilateral ectopic pregnancy (BEP) is an exceptionally rare and potentially life-threatening condition, representing less than 1% of all ectopic pregnancies. It is often misdiagnosed as unilateral due to its non-specific symptoms and rarity, particularly in spontaneous cases without risk factors like assisted reproduction or tubal damage. Delayed or missed diagnosis increases the risk of complications. **Methods:** We present the case of a 38-year-old Gravida 3 Para 1 woman with no identifiable risk factors who presented with acute lower abdominal pain and minimal vaginal bleeding. She was found to be hypotensive and tachycardic. A positive pregnancy test and clinical signs of internal bleeding prompted an emergency exploratory laparotomy. **Results:** Surgical findings revealed approximately 2000 cc of hemoperitoneum. Both fallopian tubes were ruptured—right and left—with active bleeding. Bilateral salpingectomy was performed. Histopathology confirmed the presence of chorionic villi in both tubes, fulfilling Norris' criteria for BEP. The patient recovered well postoperatively and was counseled on the need for IVF due to loss of both tubes. **Conclusion:** Spontaneous BEP, although rare, must be considered in patients with suspected ectopic pregnancy and signs of hemodynamic compromise. Intraoperative evaluation of both adnexa is critical to avoid missed diagnoses. Early recognition and thorough counseling are key to ensuring optimal outcomes and appropriate reproductive planning.

Disclosure of Interest: The authors declare no conflicts of interest.



CARDIAC ARREST IN A PREGNANT WOMAN WITH ECLAMPSIA: A CLINICAL CHALLENGE

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Problem Statement: Eclampsia remains a rare but life-threatening obstetric emergency, with high associated morbidity and mortality rates. This case study describes a term pregnant woman who developed cardiac arrest minutes after an eclamptic tonic-clonic seizure, during the anesthesia induction. **Methods:** Data was collected using computerized clinical records in Soarian program at Beatriz Ângelo Hospital. **Results:** A 40-year-old pregnant woman at 38 weeks gestation, with a history of first trimester gestational diabetes managed with metformin, is admitted to the emergency room due to hypertensive crisis, with blood pressure 200/160mmHg, where she also presented with repetitive erratic movements of the head. She promptly started magnesium sulphate and labetalol but minutes later evolved to eclamptic state with tonic-clonic seizures, which was managed with diazepam. An emergency c-section was decided, and during the surgical disinfection she developed cardiorespiratory arrest. After 5 minutes of advanced life support, fetal extraction was performed. The Apgar Index of the newborn was 2/9/10, 3120gr. After birth, and still during the surgical procedure, there was return of the woman's spontaneous circulation. At the Intensive Care Unit, she completed 48 hours of Magnesium Sulphate and made therapeutic switch to oral Nifedipine and Carvedilol, with proper blood pressure control. Tall peaked T waves were seen on electrocardiogram, associated with an increase of Troponin from 11.3 to 201ng/L. Transthoracic echocardiogram revealed preserved systolic ejection fraction. Brain Computed Tomography (CT) scan revealed small recent ischemic lesions in the frontal and parietal regions. She remained stable and asymptomatic during the hospital stay, and four days later she was discharged home with her baby with oral anti-hypertension medication. In subsequent follow-up appointments she remained asymptomatic, with proper blood pressure control under oral medication and normal complementary diagnostic exams, including brain CT scan and analytical evaluation. **Conclusion:** Eclampsia has the potential to evolve to severe life-threatening complications, emphasizing the need for prompt recognition and immediate multidisciplinary teamwork. This case study emphasizes the importance of rapid intervention to achieve favorable maternal outcomes.

MEDICAL MANAGEMENT OF CORNUAL ECTOPIC PREGNANCY IN A PERIMENOPAUSAL WOMAN: A CASE REPORT

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Problem Statement: A 48-year-old woman presented to the emergency department with acute, heavy vaginal bleeding. She had no relevant past medical history aside from two previous cesarean deliveries and a prior dilation and aspiration abortion. He had 6 weeks of amenorrhea. She reported irregular menstrual cycles with intermittent episodes of amenorrhea. **Methods:** Initial evaluation included transvaginal ultrasonography, which revealed an uterus with a homogeneous myometrium and a regular endometrial measuring 4.5 mm. A well-circumscribed, paracornual "donut-shaped" mass measuring 34 x 35 mm was identified in the right adnexal region, raising suspicion for an ectopic pregnancy. The left ovary appeared atrophic, and no free fluid was observed in the pelvis. Laboratory studies showed a serum β -hCG level of 6,224 mIU/mL, and normal hemoglobin and coagulation parameters. Diagnostic laparoscopy revealed a 4 cm hypervascular right cornual mass consistent with a cornual ectopic pregnancy; the right fallopian tube appeared uninvolved. Surgical resection was deferred due to the patient's stable hemodynamic status and the elevated risk of intraoperative hemorrhage. Intrasacral potassium chloride injection was also ruled out due to the absence of embryonic cardiac activity. **Results:** The patient was admitted for medical management and treated with a multi-dose methotrexate regimen (1 mg/kg administered intramuscularly every 48 hours, for a total of four doses). Intrasacral potassium chloride injection remained contraindicated due to the lack of detectable embryocardia. Serial β -hCG levels demonstrated a progressive decline, reaching 4,255 mIU/mL by the third day post-initiation of methotrexate therapy. Subsequent follow-up showed continued β -hCG decline, ultimately reaching undetectable levels over the following weeks. **Conclusion:** This case illustrates the diagnostic

and therapeutic management of cornual ectopic pregnancy in a perimenopausal woman. Early identification through imaging and laparoscopy, combined with conservative medical treatment using methotrexate, allowed for successful non-surgical resolution. The patient's stable clinical condition and the absence of embryonic cardiac activity supported a medical approach, as confirmed by the consistent decline in β -hCG levels.

SPONTANEOUS FETAL MEGACYSTIS RESOLUTION

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Problem statement: Fetal megacystis is defined as a sagittal diameter of the bladder more than 7 mm at first trimester scan (1TUS) (11-14w). It occurs in approximately 1/1500 pregnancies with male to female ratio of 8-9:1. Most times, the reason is a mechanical obstruction, such as posterior urethral valves in males or urethral stenosis in females. Nevertheless, 15-20% of the cases are related to genetic disorders so invasive chromosomal/karyotype studies are often required. **Methods:** We present the case of a 24-year-old, primigravida, with no relevant medical records. Scheduled ultrasounds were performed and due to findings, intensive ultrasound follow-ups were needed. A chorionic villus sampling was carried out for genetic evaluation, including QF-PCR, conventional karyotyping, and chromosomal microarray analysis (array-CGH). **Results:** At the 1TUS at week 12+2, an 8.4 mm urinary bladder was found with stable measures during the scan with slightly hyperechogenic kidneys. CRL was 56.3mm; Nuchal Translucency 1.04 mm, Uterine arteries IP was normal. No other anomalies were found. Preterm preeclampsia risk was low. Trisomy screening was 1/10,000 (low risk) for chromosome 21, and 1/100,000 (low risk) for chromosomes 13 and 16. Chorionic Villus Sampling was performed at week 13+1. Anterior placental insertion. Maternal Rh positive. No complications during or after the procedure. QF-PCR showed no trisomy. Array-CGH showed a normal (1-22)x2,(XY)x1 karyotype. A precocious foetal morphological scan was performed at week 15+3w showing no evidence of foetal megacystis (sagittal length less than 7 mm) and male external genitalia correctly developed. Second trimester scan performed at week 20+3 showed complete resolution of megacystis, normal development of genitalia, minimum pyelectasis (3 mm in right kidney and 4 mm in left kidney) and no other sign of malformations. **Conclusion:** According to literature, fetal megacystis of more than 15mm are often related to obstructive disorders such as posterior urethral valves or urethral stenosis. Meanwhile, with measures of less than 15 mm, as in our case, genetic disorders are primary found to be the reason. In cases with normal karyotype findings, as our case, it is known that approximately 90% of cases come to a fully spontaneous resolution.

LEFT ISOMERISM WITH ASSOCIATED CARDIAC AND GASTROINTESTINAL ANOMALIES: PRENATAL DIAGNOSIS AND GENETIC EVALUATION

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Problem Statement: Cardiosplenic syndromes, including left isomerism, represent complex congenital malformations with potential implications for cardiac and extracardiac development. Accurate prenatal diagnosis is essential for appropriate counseling, management, and postnatal planning. **Methods:** We present the case of a 29-year-old pregnant woman (G2P1A0L1), referred at 21 weeks of gestation due to detection of cardiac anomalies on a second-trimester ultrasound. The pregnancy resulted from a non-consanguineous union with a 41-year-old partner. A detailed fetal echocardiogram and multiple targeted ultrasounds were performed between 21 and 31 weeks. An amniocentesis was carried out for genetic evaluation, including QF-PCR, conventional karyotyping, and chromosomal microarray analysis (array-CGH). **Results:** Initial ultrasound findings included a



horizontalized cardiac axis, cardiomegaly, abnormal mitral and tricuspid valve mobility, enlargement of the right heart chambers, and fetal bradycardia. Follow-up evaluations showed levocardia, persistent left superior vena cava (PLSVC), interrupted inferior vena cava (IVC), aberrant right subclavian artery (ARSA), and a medialized stomach. The findings were consistent with left isomerism (cardiosplenic syndrome). Additional findings included a reduced thymic box, dilated azygos vein, and suspected atrial and ventricular septal defects (ASD/VSD). Spontaneous fetal megacystis was also found during follow-ups. A transient hand malposition was also noted. Genetic studies showed a normal 46,XX karyotype, with no pathogenic findings on array-CGH. **Conclusion:** This case illustrates the complexity of prenatal diagnosis in left isomerism, a condition with variable expression and potential surgical management. Despite significant structural abnormalities, genetic testing did not reveal chromosomal abnormalities. Early and detailed fetal evaluation allows for multidisciplinary planning and informed parental counseling regarding surgical outcomes and potential comorbidities.

PRENATAL EVALUATION OF MILD SHORT LONG BONES: A CASE REPORT

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Problem Statement: Prenatal detection of short long bones can raise concerns for skeletal dysplasias or genetic syndromes. However, familiar and ethnic variations must be carefully considered to avoid unnecessary interventions. **Methods:** Case report. **Results:** We report the case of a 33-year-old Filipino woman with no relevant medical, currently in a spontaneous singleton pregnancy at 18+3 weeks. First-trimester ultrasound and combined screening were unremarkable. At 17 weeks, fetal ultrasound revealed long bones measuring -2 standard deviations (SD). The partner, also Filipino (height 160 cm), reported no medical history. There was not family history of short stature or genetic disorders. Extensive genetic evaluation was initiated, including QF-PCR (negative for common aneuploidies), chromosomal microarray (normal), and targeted FGFR3 analysis (no pathogenic variants detected). We added a Whole Exome Sequencing test. Two heterozygous SNV variants of uncertain clinical significance were identified in the FBN1 gene. This finding neither confirms nor excludes the suspected clinical diagnosis due to limited evidence of causality, possible undetectable alterations by the technique used, or variants in other untested genes. **Discussion:** Isolated short long bones at -2 SD may represent a normal familial variant, particularly in populations with lower average stature. However, differential diagnosis must include skeletal dysplasias, especially when findings appear early in pregnancy. Genetic testing plays a crucial role in guiding prognosis and management. **Conclusion:** This case highlights the importance of integrating fetal biometry, genetic testing and personal history in the prenatal assessment of suspected skeletal anomalies. So far, genetic studies have not identified a clear cause for the observed ultrasound findings. Nevertheless, the biometric measurements remain suggestive of underlying skeletal dysplasia. We provided detailed counseling on the possible phenotypic outcomes, including isolated skeletal dysplasias affecting stature or thoracic development, as well as potential syndromic associations. We discussed the legal framework for pregnancy termination. They ended up deciding to interrupt the pregnancy.

CHRONIC PREGESTATIONAL HYPERTENSION LEADING TO EARLY-ONSET INTRAUTERINE GROWTH RESTRICTION: A CASE REPORT

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Problem Statement: Intrauterine growth restriction (IUGR) is a significant pregnancy complication characterized by a fetus failing to reach its genetically determined growth potential, diagnosed by an estimated fetal weight below the 10th percentile. Among maternal risk

factors, chronic hypertension plays a critical role by impairing uteroplacental blood flow, leading to early-onset IUGR. Early diagnosis and careful management are essential to improve maternal and fetal outcomes. **Methods:** We report the case of a 34-year-old woman with diagnosis of chronic hypertension leading to an early intrauterine growth restriction in week 24. **Results:** The patient presented with elevated blood pressure at her first midwife visit in week 12 and was diagnosed with chronic pregestational hypertension. Initial treatment included methyldopa and nifedipine. In the first-trimester ultrasound, uterine artery Doppler indicated a high risk for preeclampsia, prompting the initiation of Tromalyt therapy. At 24-week the ultrasound revealed type II intrauterine growth restriction (IUGR) with absent end-diastolic flow in the umbilical artery, umbilical artery pulsatility index exceeding the 99th percentile, middle cerebral artery flow below the 5th percentile, and a normal ductus venosus Doppler. Given the refractory hypertension and fetal compromise, the patient was admitted to a tertiary care hospital for optimization of antihypertensive therapy. Following stabilization and discharge, she maintained proper blood pressure; however, at the 27-week ultrasound, stage III IUGR was diagnosed, confirmed by DV PI 95th percentile. She was referred to the delivery room emergency, where an NST showed reduced variability. They performed pulmonary maturation with corticosteroids. At 29-week, fetal ultrasound revealed reversed ductus venosus, reclassifying stage IV IUGR, so neuroprophylaxis with magnesium sulfate was initiated. The NST wasn't variable. A cesarean section was indicated after completing 4 hours of neuroprophylaxis. A 760g male newborn was born, progressing favorably. **Conclusions:** Chronic hypertension significantly increases the risk of early-onset fetal growth restriction. This case highlights the importance of early diagnosis, vigilant monitoring, and tailored antihypertensive treatment. Multidisciplinary care is essential to optimize outcomes in high-risk pregnancies with severe FGR and multiple obstetric complications.

EARLY OLIGOHYDRAMNIOS AS A PREDICTOR OF ADVERSE PREGNANCY OUTCOME: A CASE REPORT

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Problem statement: Oligohydramnios is commonly associated with adverse perinatal outcomes, particularly when detected early in gestation. However, its isolated presence in the first or early second trimesters is rare and may reflect early-onset placental insufficiency. We report a case of early and persistent oligohydramnios, associated with preterm delivery due to severe preeclampsia (PE) and fetal growth restriction (FGR), emphasizing the need for close surveillance and multidisciplinary management. **Methods:** This is a case report of a healthy 25-year-old primigravida whose pregnancy was followed at Hospital de Loures due to oligohydramnios first identified at 15 weeks of gestation, which persisted on all subsequent scans, limiting the morphological assessment of the fetus. Evaluation for congenital infection showed weakly positive serum cytomegalovirus (CMV) immunoglobulin (Ig)M, with high-avidity IgG. An amniocentesis was performed, with no detection of CMV in the amniotic fluid and no evidence of chromosomal abnormalities. She was also diagnosed with gestational diabetes mellitus (GDM) at 25 weeks, controlled with diet. Fetal growth percentile (P) declined progressively (P12 at 19 weeks, P7 at 23 weeks, P1 at 28 weeks). At 30 weeks, she was admitted in the Emergency Department for severe preeclampsia, presenting with persistent hypertension, early-onset FGR with Doppler flow alterations (in uterine, umbilical and cerebral arteries) and anhydramnios. Management included magnesium sulfate, labetalol, and corticosteroids for fetal lung maturation. **Results:** Due to breech presentation, non-reassuring cardiotocography, and worsening of the maternal-fetal status, a cesarean section was performed at 30 weeks and 3 days. A live male neonate weighing 1255g was delivered without immediate complications, but was then admitted to the Neonatal Special Care Unit and required endotracheal intubation for respiratory support. Postnatal evaluation revealed no evidence of structural anomalies or genetic syndromes. Postpartum recovery was uneventful; blood pressure normalized without medication, and glycemic control was maintained. **Conclusion:** This case highlights the prognostic significance of early and persistent oligohydramnios as a marker of placental dysfunction. Comprehensive evaluation, including infectious work-up, ultrasound and Doppler follow-up may aid in early risk stratification and timely delivery planning.



POSTERIOR REVERSIBLE ENCEPHALOPATHY SYNDROME IN LATE PREGNANCY: A CASE REPORT — REVERSIBLE ONLY IF RECOGNIZED

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Introduction: Hypertensive disorders complicate 5–10% of pregnancies and remain a major cause of maternal and perinatal morbidity and mortality. Posterior reversible encephalopathy syndrome (PRES), a hypertensive encephalopathy, is a clinico-radiological diagnosis, that has been historically underdiagnosed. It is characterized by vasogenic edema predominantly in parieto-occipital regions, with variable neurological manifestations. In obstetric populations, it mostly presents with seizures (45%; usually the initial symptom), visual disturbances (34%), and altered consciousness (19%). **Case Report:** A 24-year-old multiparous woman at 35+3 weeks gestation presented with a generalized tonic-clonic seizure, preceded by persistent headache, vomiting, and confusion. Blood pressure was only mildly elevated (132/95 mmHg). Laboratory tests showed mild proteinuria (protein/creatinine ratio 265 mg/g) with otherwise normal hematologic, renal and hepatic parameters. Differential diagnosis considered primary seizure disorders, cerebral venous thrombosis, intracranial hemorrhage, arterial infarction, and metabolic or infectious encephalopathies. Initial evaluation included EEG, which demonstrated diffuse slowing without epileptiform activity, and CT, which excluded intracranial hemorrhage or infarction. Given maternal instability and non-reassuring fetal status, an urgent cesarean section was performed. Postpartum brain MRI revealed bilateral parieto-occipital hyperintensities on T2-weighted and FLAIR sequences, consistent with vasogenic edema, while MR venography excluded cerebral venous sinus thrombosis. These findings supported the diagnosis of PRES. The patient was treated with magnesium sulfate, levetiracetam, nifedipine, and prophylactic enoxaparin. Neurological recovery was complete within five days. Follow-up MRI at two weeks confirmed full resolution of vasogenic edema. At three and six months, she remained seizure-free, normotensive without medication, and fully functional. **Discussion:** This case highlights the diagnostic challenge of PRES in pregnancy, particularly in the absence of severe hypertension. Although often associated with eclampsia, PRES manifestations are heterogeneous, and its pathophysiology remains incompletely understood. Loss of cerebral autoregulation with endothelial dysfunction and hyperperfusion is one of the most accepted mechanisms. Early recognition and multidisciplinary management are critical to prevent irreversible injury and long-term sequelae. **Conclusion:** PRES should be considered in obstetric patients presenting with seizures and atypical features, even without marked hypertension. Awareness of this entity is essential to optimize maternal and fetal outcomes.

FETOMATERNAL MEDICINE - FMM OTHER

SERUM LIPID AND PENTRAXIN 3 ALTERATIONS IN FETAL GROWTH RESTRICTION AND PREECLAMPSIA: A POTENTIAL LINK TO CARDIOVASCULAR DISEASE

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Background: During pregnancy, serum lipid levels naturally rise and normalize postpartum, impacting cardiovascular disease (CVD) risk, especially in mothers with preeclampsia. Both fetal growth restriction (FGR) and preeclampsia, conditions linked to placental insufficiency, affect lipid metabolism and inflammation in both mothers and fetuses. Pentraxin 3 (PTX3), a key marker of vascular inflammation, may serve as a CVD biomarker. This study examines maternal and fetal lipid profiles and PTX3 levels in FGR and preeclampsia cases to assess their potential role in CVD risk. **Methods:** This prospective cross-sectional study included 180 pregnant women who underwent cesarean section at St. Vincent's Hospital, Catholic University of Korea (April 2013–December 2016). Participants were categorized into three groups: normal pregnancies (n=120), FGR without preeclampsia (n=39), and FGR with preeclampsia (n=29). PTX3 and lipid profiles were analyzed in maternal blood samples collected prepartum, postpartum, and in umbilical cord blood. **Results:** Prepartum PTX3 levels were significantly higher in both FGR groups compared to the normal group. Postpartum, PTX3 remained elevated in the FGR without preeclampsia group but showed no significant difference in the FGR with preeclampsia group. In cord blood, PTX3 and triglycerides were elevated, while HDL-c was reduced in both FGR groups. LDL-c levels and atherogenic indices were

significantly higher in the FGR with preeclampsia group than in the other groups. **Conclusion:** FGR may contribute to an increased long-term CVD risk in both mothers and infants. Further longitudinal studies are needed to confirm these findings and develop early intervention strategies for this high-risk population.

IMPACT OF NIPPLE LENGTH AND DIAMETER ON BREASTFEEDING SUCCESS AND MATERNAL BREASTFEEDING SELF-EFFICACY: A LONGITUDINAL OBSERVATIONAL STUDY

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Problem statement: Having flat or inverted nipples is an important problem that prevent exclusive breastfeeding. The aim of the study was to determine the effect of prenatal and postnatal nipple length and diameter on breastfeeding success and perception of breastfeeding self-efficacy and the critical threshold for nipple length and diameter that facilitates breastfeeding success. **Methods:** This study was conducted with a descriptive, longitudinal and observational design. The sample consisted of 40 women who had vaginal births and had no breastfeeding experience. Data were collected using an Introductory Information Form, Nipple Length and Diameter Information Form, Breastfeeding Self-Efficacy Scale-Short Form, and the LATCH Breastfeeding Diagnostic Measurement Tool. **Results:** A significant difference was found in nipple diameter measurements taken prenatally, 1-hour postpartum, and 24-hours postpartum (p0.05). A positive, significant, moderate correlation was found between nipple length and the mean 1-hour and 24-hour postpartum BSES and LATCH breastfeeding success scores. As mothers' nipple length increases, their breastfeeding self-efficacy increases. A positive, significant, moderate correlation was found between nipple diameter and the mean breastfeeding success scores at the 1st and 24th hours (p0.05). According to ROC analysis, the threshold values for nipple length and breast diameter were determined as 9.25 mm and 13.7 mm, respectively, with 91.4% and 69% sensitivity. **Conclusion:** Mothers' nipple length affect their perception of postpartum breastfeeding self-efficacy and breastfeeding success. Mothers with a nipple length of less than 9.25 mm should be allocated more time and support within the scope of breastfeeding counseling.

SUBJECTIVE HEALTH PERCEPTION MODERATES THE ANTIDEPRESSANT EFFECTS OF HOME-BASED TRANSCRANIAL DIRECT CURRENT STIMULATION IN PERINATAL WOMEN: A REAL-WORLD OBSERVATIONAL STUDY

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Problem statement: Perinatal depression often remains undertreated due to concerns about antidepressant exposure during fertility treatment, pregnancy, or breastfeeding. Non pharmacological, home-based interventions such as transcranial direct current stimulation (tDCS) present a promising alternative; however, real-world evidence in perinatal populations remains limited. **Methods:** This prospective observational study included 38 women who received infertility, pregnancy, or postpartum treatment at four hospitals in South Korea. Participants self-administered anodal tDCS targeting the left dorsolateral prefrontal cortex for 20–28 sessions over four weeks. Depressive symptoms were assessed using the Center for Epidemiologic Studies Depression Scale (CES-D) at baseline and weeks 2, 4, and 8. Subjective health perception was measured at baseline using a 5-point Likert scale. **Results:** Time had a significant effect on depressive symptoms (Wald $\chi^2 = 90.75$, p 0.001), with the largest reduction observed during the first two weeks. The CES-D scores remained significantly lower than baseline at week 8, four weeks after treatment ended. Subjective health perception was significantly associated with baseline depression severity (Wald $\chi^2 = 26.41$, p 0.001), and its interaction with time was also significant (Wald $\chi^2 = 320.18$, p 0.001). Participants with poorer perceived health (scores 4–5) experienced greater depressive symptom reductions than those with more favorable perceptions (scores 1–2). **Conclusion:** Home-based tDCS was feasible and associated with clinically meaningful improvement in depressive symptoms among perinatal women. Those who initially perceived their health more negatively showed greater response, suggesting subjective health



perception may serve as a useful moderator and potential marker to inform personalized treatment strategies.

KNOWLEDGE ATTITUDES AND ACCEPTANCE TOWARDS EXERCISE AMONG PREGNANT WOMEN ATTENDING THAMMASAT UNIVERSITY HOSPITAL

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Problem statement: Exercise during pregnancy reduces risks of gestational diabetes, preeclampsia, and mental health complications. Despite proven benefits, many pregnant women avoid exercise due to misconceptions, cultural beliefs, or lack of guidance. In Thailand, evidence on antenatal exercise knowledge and acceptance remains limited. **Methods:** A descriptive cross-sectional study was conducted among 104 singleton pregnant women aged ≥ 18 years attending antenatal care at Thammasat University Hospital. Participants completed validated questionnaires assessing baseline knowledge, attitudes, acceptance, and barriers toward exercise. Standardized education based on WHO guidelines was delivered via short video. Post-intervention, participants repeated the same questionnaire. Data were analyzed using descriptive statistics, Chi-square/Fisher's exact test, Mann-Whitney U test, and multivariable regression. **Results:** At baseline, only 38.5% of participants demonstrated adequate knowledge of safe antenatal exercise, 55.8% expressed positive attitudes, and 41.3% reported willingness to exercise. The most common barriers were safety concerns (62.5%), fatigue (54.8%), and lack of time (43.3%). After the intervention, awareness of antenatal exercise increased (87.5% $\rightarrow$ 97.1%), aerobic exercise knowledge improved (64.4% $\rightarrow$ 75.0%), and understanding of pelvic floor (Kegel) exercises rose markedly (34.6% $\rightarrow$ 91.3%). Family support increased from 31.7% to 69.2%. Positive attitudes improved from 55.8% to 82.7% ($p < 0.001$), and acceptance rose from 41.3% to 73.1% ($p < 0.001$). Walking ≥ 3 times/week increased from 33.7% to 45.2%. Multivariable regression showed higher education (aOR 2.9, 95% CI 1.3–6.6) and prior counseling (aOR 3.4, 95% CI 1.5–7.8) were independent predictors of improved acceptance. **Conclusion:** Thai pregnant women initially demonstrated limited knowledge and acceptance of antenatal exercise. Structured education significantly improved knowledge, attitudes, and willingness to engage in safe antenatal exercise. Findings highlight the importance of routine counseling and culturally tailored educational interventions to optimize maternal and fetal health outcomes.

THE MATERNAL BODY IMAGE AND EATING BEHAVIORS SCALE: TURKISH VALIDITY AND RELIABILITY STUDY

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Problem statement: Pregnancy is a critical period during which women experience physical, emotional, and psychological changes. These changes often influence maternal body image and eating behaviors, which may affect maternal well-being and fetal outcomes. However, there is a lack of culturally appropriate and psychometrically sound instruments to assess body image and eating behaviors among pregnant women in Turkey. The absence of such tools limits researchers' and healthcare professionals' ability to identify and address body image concerns and maladaptive eating patterns during pregnancy. Therefore, this study aims to evaluate the validity and reliability of the Maternal Body Image and Eating Behaviors Scale (MBIEB-S) among Turkish pregnant women. **Methods:** A methodological design was employed involving 420 pregnant women. Data were collected using the Descriptive Information Form, MBIEB-S, and the Body Understanding Measure for Pregnancy Scale (BUMPS). The study assessed the scale's language, content validity (Scale and Item Content Validity Index- S-CVI and I-CVI), construct validity through Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA), as well as convergent and divergent validity. Reliability analyses included internal consistency (Cronbach's alpha), test-retest method, parallel form reliability, and split-half reliability. Additionally, Hotelling's T^2 test was used to evaluate response bias, and Tukey's test was

applied to determine the feasibility of obtaining a total score from the scale. **Results:** The I-CVI values ranged from 0.87 to 1.00, and the S-CVI was 0.95. EFA revealed a four-factor structure comprising 24 items, accounting for 66.5% of the total variance, with all factor loadings exceeding 0.50. CFA indicated acceptable fit indices. Cronbach's alpha coefficients for the factors were 0.925 (F1), 0.871 (F2), 0.843 (F3), and 0.879 (F4), with an overall scale alpha of 0.815. Test-retest reliability yielded an Intraclass Correlation Coefficient (ICC) of 0.855 ($p < 0.001$). Significant correlations were found between MBIEB-S factors and BUMPS, with moderate to strong relationships ($p < 0.001$). **Conclusions:** The MBIEB-S is a valid and reliable instrument for assessing body image and eating behaviors during pregnancy among Turkish women. **Keywords:** body image; eating behaviors; pregnancy; validity; reliability

DOES THE SEPP1 POLYMORPHISM HAVE A PROTECTIVE EFFECT AGAINST GESTATIONAL DIABETES MELLITUS?

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Introduction: Gestational Diabetes Mellitus (GDM) is defined as any degree of glucose intolerance caused by physiologic changes that occur via placental factors during pregnancy. Risk factors for GDM include ethnicity, advanced maternal age, pre-pregnancy excessive weight or obesity, family history of type 2 diabetes (T2D), polycystic ovarian syndrome (PCOS), multiple gestation, genetic factors, smoking, pre-pregnancy unhealthy diet, and sedentary lifestyle. It has been reported that β cell dysfunction and insulin resistance (IR) play a role in etiopathogenesis of GDM. There are numerous studies regarding genetic susceptibility of GDM. SEPP1, rs13154178 (G/A); AHSG, rs4918 (C/G); HNF1A, rs1169288 (G/T); FTO, rs9939609 (T/A) polymorphisms are associated with GDM in the Turkish population in previous studies. Also, the MTNR1B variants (rs10830963 and rs1387153) were associated with GDM. However, these variants have not been studied before in our population. The aim of this study was to investigate any relationship between these 6 SNPs and GDM. **Methods:** 78 pregnant women with GDM and 113 pregnant women with normal glucose tolerance were included in the study. Pregnant women with pregestational diabetes, thyroid disease, PCOS, hypertension, hyperlipidemia, and T2D were excluded. 75 gr oral glucose tolerance test (OGTT) at 24 to 28 week was performed for all participants. Samples were collected using buccal swabs, and genomic DNA was isolated from epithelial cells. Polymorphisms were detected using rhAmp SNP assay (IDT, USA) in real-time PCR (LightCycler 480, Roche Switzerland). Genotype and allele frequencies were compared between patient and control groups using Fisher's exact test. **Results:** There was no significant difference between groups for rs4918, rs1169288, rs9939609, rs10830963 and rs1387153. A significantly higher frequency of genotypes carrying the A allele (GA and AA genotype) of SEPP1 rs13154178 (G/A) was observed in the control group ($p = 0.0081$, OR: 0.44; 95% CI: 0.24-0.79). **Conclusion:** MTNR1B variants (rs10830963 and rs1387153) were not found to be associated with GDM risk in our study. However, this is the first study to examine the relationship between these SNPs and GDM in the Turkish population. Our results suggest that the presence of the A allele of SEPP1 rs13154178 (G/A) was significantly associated with a lower risk of GDM.



EHEALTH AND HYPERTENSIVE DISORDERS OF PREGNANCY: A SYSTEMATIC REVIEW

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Problem statement: Hypertensive disorders of pregnancy (HDP) affect up to 10% of pregnancies, and can have adverse short and long-term implications for women and their babies. eHealth interventions include any health service or treatment delivered using the Internet and related technology that aims to facilitate, capture or exchange knowledge. There have been no previous reviews examining all eHealth interventions and HDP. It is important to conduct this review as strategies to improve monitoring and management of HDP can reduce morbidity and potentially mortality associated with HDP. **Methods:** We conducted a systematic review to examine all eHealth interventions targeted at patients at risk of or with HDP and the feasibility and acceptability of these interventions as well as secondary outcomes including clinical outcomes and resource utilisation. The search was conducted on all papers published from database inception to 24 August 2024. **Results:** 100 publications were identified with 61,539 participants. Interventions were primarily targeted at self-monitoring of blood pressure (BP) and two-way communication between patients and care providers. In observational studies there was no significant difference in the observed clinical outcomes. eHealth interventions appeared to be feasible and all studies showed participants were satisfied and found eHealth interventions easy to use. There was equivocal evidence regarding cost benefits of eHealth interventions, but it did demonstrate largely reduced healthcare service utilisation. In meta-analysis of RCT data - eHealth interventions reduced readmission rates Odds Ratio (OR 0.4) (95% Confidence Interval (CI) 0.23, 0.71), improved likelihood of BP ascertainment OR 7.02 (95% CI 4.41, 11.15), improved attendance at postpartum hypertension clinic OR 1.44 (95% CI 0.98, 2.12). **Conclusion:** The current evidence for the use of eHealth interventions targeted at patients at risk of or with HDP is of low quality and insufficient to make a recommendation regarding their routine use in clinical care. Our findings indicate that there is poor quality and low-level evidence that eHealth interventions are feasible, safe and acceptable to patients and there is very limited evidence that it has the potential to reduce healthcare utilisation, improve follow up and BP ascertainment with a generally positive patient experience with minimal patient concerns.

FETOMATERNAL MEDICINE – GENETICS

IS THERE A DIFFERENT MOLECULAR IMPRINT BETWEEN PREECLAMPSIA AND PREECLAMPSIA WITH SEVERE FEATURES? AN INTEGRATIVE BIOINFORMATICS ANALYSIS

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Problem statement: Severe preeclampsia (SPE) is a life-threatening condition identified by systolic blood pressure ≥ 160 mm Hg or diastolic pressure ≤ 100 mm Hg, along with symptoms of central nervous system dysfunction, liver abnormalities, thrombocytopenia, renal dysfunction, and/or pulmonary edema. The predominant biological explanation proposes that SPE occurs as a placental insufficiency syndrome. The molecular mechanisms distinguishing preeclampsia (PE) from its severe form remain unclear. Our study aimed to identify key genes, miRNAs, and pharmacological connections through the integration of transcriptomic and network-based analyses based on publicly available datasets between PE and SPE. **Methods:** We analyzed two publicly available transcriptomic datasets, GSE114691 (with samples of PE and non-hypertensive controls) and GSE186257 (SPE and non-hypertensive controls). Differentially expressed genes were identified using thresholds of $|\log_2 FC| \geq 1$ and $p \leq 0.05$. Overlapping genes between two datasets were identified using Venn diagrams. Protein-protein interaction networks were constructed with STRING, and hub genes

were determined according to degree centrality. Interactions with hub genes and microRNAs were analyzed through NetworkAnalyst, while pharmacological associations were retrieved from DGIdb. Functional and disease enrichment analyses (GO, DisGeNET) were performed to further investigate the hub genes biological and clinical contexts.

Results: We discovered 86 overlapped DEGs across the datasets. Ten genes (LTF, LEP, CGB3, LPL, CP, PAPP2, LHB, CGB5, CGB8, PROCR) were identified as central hub nodes. The genes exhibited enrichment in pathways associated with placental development, angiogenesis, immunological control, and endocrine signaling, with disease enrichment supporting significant correlations with preeclampsia, eclampsia, and trophoblastic diseases. Network study identified the miR-27 and miR-29 families as key regulators of LEP, LTF, and PAPP2, indicating a coordinated post-transcriptional regulation in the course of PE. Drug-gene mapping identified clinically significant associations, such as progesterone-CP (prevention of preterm birth), contraceptive steroids targeting CGB/LHB subunits, and PROCR-associated anticoagulant pathways. **Conclusion:** Our analysis identified a group of placental hub genes and regulatory miRNAs that could potentially differentiate PE and SPE. The intersection of endocrine and coagulation pathways with future studies could identify potential biomarkers and therapeutic targets and provide a comprehensive framework to translate omics discoveries into clinical strategies for the prediction and management of SPE.

NEURAL TUBE DEFECTS IN THE CZECH REPUBLIC, INCIDENCE, PRENATAL DIAGNOSTICS AND SEX RATIO

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Problem statement: Neural tube defects (NTD) are an important group of congenital anomalies of the central nervous system. The analysis of incidences of NTDs is important for evaluating the effects of primary prevention (like folic acid usage) and ultrasound screenings. We present a retrospective long-term study of population incidences. **Methods:** We have used the official data from the National Registry of Congenital Anomalies of the Czech Republic. For our study, we have used the data for the 1961-2020 time period. The analysed diagnoses were: anencephaly, encephalocele and spina bifida. **Results:** During the study period, there were 2521 cases of anencephaly, 3391 cases of spina bifida, and 704 cases of encephalocele. For anencephaly, 1456 cases were diagnosed at birth and 1065 cases were diagnosed prenatally (and pregnancies were electively terminated). For spina bifida, 2451 cases were diagnosed in born children and 940 cases were prenatally diagnosed. For the encephalocele, there were 390 cases in born children and 314 in prenatal diagnostics. Prenatal diagnostics significantly lowered the number of cases in births in all three diagnoses. During the last three decades we can also observe the switch in the sex ratios. The originally observed (significantly) higher frequency of females disappeared during the 90ths of the last century and later the differences in the sex ratio are not significant anymore. **Conclusion:** NTDs are reported in our registry from its very beginning in the 60ties of the last century. Therefore, we were able to do long-term analysis of the incidences and their trends. The major factor which affected the incidences of NTDs diagnosed in born children was surely the implementation of ultrasound prenatal examination. Sadly, we cannot provide detailed information about folic acid usage (and its effect) as these data are not available on the population level in our medical registries.

FETOMATERNAL MEDICINE - HIGH RISK PREGNANCY

POSTPARTUM UTERINE ACTIVITY IN PATIENTS WITH AND WITHOUT POSTPARTUM HEMORRHAGE IN THE FIRST 30 MINUTES AFTER CHILDBIRTH

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Problem statement: Despite the postpartum administration of uterotonics and other interventions, the incidence of postpartum hemorrhage (PPH) continues to rise. Less is known about the (patho)physiology of postpartum uterine activity directly after childbirth due to limitations in the methods used for intrapartum uterine activity monitoring. Electrohysterography (EHG) is an emerging intrapartum monitoring method, which is also suitable for continuous postpartum monitoring. The goal of this study is to investigate the association between various uterine activity parameters and total blood loss in the first 30 minutes after childbirth. **Methods:** Term patients who delivered in a tertiary obstetric care center in the Netherlands and received continuous postpartum monitoring with EHG were included. An computer-based algorithm analyzed the postpartum EHG-derived tocogram retrospectively. Total area under the curve (AUC), AUC from baseline, baseline and maximum amplitude were analyzed. Multivariate regression analyses were performed with the uterine parameters and several labor characteristics as independent covariates and total blood loss in the first 30 minutes after childbirth. **Results:** Among the 119 patients included, 24 had PPH. Total AUC ($r=0.18$, 0.44) and AUC from baseline ($r=0.18$, $p=0.044$) showed a weak positive association with total blood loss in the first 30 minutes after childbirth. However, this association was no longer found when excluding outliers. A statistically significant increase in patients with PPH was observed in total AUC ($p=0.007$), AUC from baseline ($p=0.003$) and maximum amplitude ($p=0.024$) compared to patients without PPH. No significant differences in uterine parameters between patients with PPH due to uterine atony and patients without PPH were observed. **Conclusion:** A better understanding of postpartum uterine activity patterns may contribute to improving postpartum obstetric care.

Disclosure of interest: Prof. dr. SG. Oei is the initiator of the development of the Nemo Fetal Monitoring System®, the electrophysiological monitoring system used in this study.

ACCURACY OF 48-72 HOURS POSTPARTUM 75G ORAL GLUCOSE TOLERANCE TEST FOR PREDICTING POSTPARTUM GLUCOSE INTOLERANCE IN GESTATIONAL DIABETES MELLITUS

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Objectives: This study aimed to evaluate the accuracy of an early 48-72 hours postpartum 75g oral glucose tolerance test (75 gOGTT) for predicting 6-12 weeks postpartum glucose intolerance in gestational diabetes mellitus (GDM). **Materials and Methods:** This study utilized a diagnostic test. The study population comprised 100 women who were diagnosed with gestational diabetes and delivered babies at Hatyai Hospital between January and July 2024. The study outcomes were sensitivity, specificity, accuracy, and positive as well as negative predictive values of the early postpartum 75 OGTT results to predict impaired or diabetes mellitus (DM). **Results:** The early 48-72 hours postpartum 75g OGTT had a sensitivity of 79.3% and a specificity of 53.6% for predicting postpartum glucose intolerance (impaired or DM). However, testing showed a high specificity of 89.1% with an NPV of 98.6% and a sensitivity of 50% for predicting DM. **Conclusion:** The early 48-72 hours postpartum 75g OGTT had superior sensitivity but modest specificity for predicting glucose intolerance at 6-12 weeks in GDM. It is useful for identifying high-risk patients who require further postpartum follow-up. Additionally, the early 2-hour post OGTT was considered optimal at separating the DM.

IMMUNE THROMBOCYTOPENIA IN PREGNANCY: CONTROVERSIES IN DELIVERY MODE AND NEONATAL RISK ASSESSMENT

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Problem statement: Immune thrombocytopenia (ITP) affects 1–2 per 1,000 pregnancies, elevating the risk of maternal hemorrhage and newborn thrombocytopenia. Management continues to be disputed, especially regarding delivery methods and the predictive value of maternal platelet count on newborn outcomes. **Methods:** We conducted a retrospective evaluation of 20 pregnant women with ITP treated at a tertiary care hospital in Romania from January 2024 to June 2025. Inclusion required isolated thrombocytopenia ($100 \times 10^9/L$) after excluding secondary causes. Clinical features, treatments, and results were analyzed. Patients were stratified by platelet count ($50,000/mm^3$ vs. $\geq 50,000/mm^3$), and comparative analyses were performed. **Results:** Mean maternal age was 27.9 years. Most diagnoses occurred in the third trimester (mean GA 33.2 weeks). The mean lowest platelet count was $52,050/mm^3$; four women experienced mucocutaneous bleeding. Corticosteroids were administered in 65%, oral prednisone in 55%, and IVIg in 15%. One woman had undergone splenectomy prior to conception. Cesarean delivery predominated (86.7%). Severe thrombocytopenia correlated with more maternal bleeding (44.4% vs. 0%; $p=0.026$) and higher corticosteroid use ($p=0.004$). Neonatal outcomes were reassuring: mean platelet count was $209,952/mm^3$, with two neonates (13.3%) requiring IVIg, both born to mothers with $50,000/mm^3$. No intracranial hemorrhage or platelet transfusion was observed. **Conclusion:** This cohort illustrates two key controversies in ITP pregnancy. First, although guidelines recommend that ITP alone should not determine delivery mode, cesarean section was performed in nearly 87% of cases, underscoring a gap between evidence and practice. Second, while international guidance considers maternal platelet count a poor predictor of neonatal thrombocytopenia, in our series all neonates requiring IVIg were born to mothers with counts $50,000/mm^3$. The study does not prove correlation but suggests that very severe maternal thrombocytopenia may still signal neonatal risk and justifies close monitoring. Overall, individualized therapy and multidisciplinary care achieved favorable outcomes for both mothers and infants.

THE ROLE OF SFLT-1/PLGF RATIO IN THE PREDICTION AND MANAGEMENT OF PRE-ECLAMPSIA

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Problem statement: Pre-eclampsia (PE) remains one of the leading cause of maternal and fetal morbidity and mortality. The accurate and early risk assessment is essential to prevent complications such as: eclampsia, HELLP syndrome, an abruption of the placenta or fetal growth restriction (FGR). This study evaluates the clinical utility of sFLT-1/PLGF ratio in the prediction and management of hypertensive disorders of pregnancy. **Methods:** The group of 127 pregnant women were included to the study. The peripheral blood samples have been taken from the pregnant patients to assess sFLT-1/PLGF ratio. The Elecsys sFLT-1 and Elecsys PLGF commercially available diagnostic kits were used to measure the concentrations of sFLT-1 and PLGF respectively. A threshold value of sFLT-1/PLGF = 85 has been indicated as a marker of high risk of severe complications of pregnancy and the need for urgent medical interventions. **Results:** The retrospective analysis of sFLT-1/PLGF ratio has been performed. The sFLT-1/PLGF ratio demonstrated a sensitivity of 63.4% and specificity of 96.5% with positive and negative predictive values of 89.7% and 84.7% respectively. **Conclusion:** The use of sFLT-1/PLGF is a valuable tool in clinical practice for identifying high-risk pregnancies, optimizing the timing of delivery and improving maternal and fetal outcomes. While highly useful, sFLT-1/PLGF ratio should complement rather than replace other clinical methods of assessment and diagnosis of hypertensive disorders of pregnancy.

SCOPING REVIEW OF FETAL HOME MONITORING IN HIGH-RISK PREGNANCIES: NO EVIDENCE OF INCREASED RISK COMPARED TO HOSPITAL CARE

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Problem statement: Pregnancies classified as high-risk are typically monitored in a hospital setting due to elevated risks for maternal and



perinatal complications. However, selected subgroups may be suitable for fetal home monitoring. **Methods:** This scoping review aimed to evaluate maternal and perinatal outcomes in high-risk pregnancies (fetal growth restriction, preeclampsia, preterm pre-labor rupture of membranes) managed with fetal home monitoring compared to conventional in-hospital surveillance. A comprehensive search of Embase, Medline, Cochrane, and grey literature databases was conducted up to April 30, 2025, yielding 1763 records. Due to significant methodological variability and limited stratification by diagnosis, a systematic scoping review with quality assessment was performed. **Results:** Eight studies met inclusion criteria—three randomized controlled trials and five cohort studies. Only one study provided outcome data stratified by diagnosis. No significant differences were observed in primary outcomes (maternal and perinatal mortality) or most secondary outcomes, including emergency cesarean delivery, chorioamnionitis, thromboembolic events, eclampsia, gestational age at birth, neonatal asphyxia, and NICU admission. **Conclusion:** Existing evidence suggests that fetal home monitoring in high-risk pregnancies does not lead to increased maternal or neonatal risks, compared to hospital-based monitoring. Nonetheless, the heterogeneity of available studies underscores the need for well-designed multicenter trials to confirm safety across specific high-risk groups.

WHEN THE VIRUS HIDES: SILENT MATERNAL PARVOVIRUS B19 INFECTION WITH COMPENSATORY FETAL HEPATOMEGALY

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Problem statement: Parvovirus B19 infection during pregnancy remains a significant concern due to its capacity for transplacental transmission and resultant fetal morbidity and mortality. Approximately 30–50% of maternal infections result in vertical transmission, with severe fetal outcomes occurring in 3–10% of affected pregnancies. The main risks to the fetus following maternal parvovirus B19 infection during pregnancy include fetal anemia, hydrops fetalis, miscarriage and intrauterine fetal death. Parvovirus targets fetal erythroid progenitor cells, leading to suppression of erythropoiesis and resulting in fetal anemia which can progress to hydrops fetalis, being the last one a strong predictor of perinatal mortality. **Methods:** Review of the clinical case and available literature. **Results:** A 31-year-old woman presented at 29+5 weeks with hydramnios (AFI 25 cm) on the second-trimester ultrasound. The etiological workup excluded gestational diabetes, Rh isoimmunization and fetal malformations. Serology was positive for parvovirus IgG and IgM. Other infectious screenings were negative. The patient reported no symptoms consistent with viral infection. At 32 weeks, the third-trimester ultrasound revealed fetal hepatomegaly without acute signs of anemia associated with evidence of growth deceleration. At 36 weeks, spontaneous labor occurred, with the delivery of a male neonate, 2465g, Apgar scores of 9-9-10. **Conclusion:** Parvovirus B19 infection in pregnancy may be asymptomatic in the mother but can lead to significant fetal compromise. In this clinical case, the hydramnios was the only manifestation of the infection and was associated with fetal hepatomegaly. As the maternal infection was asymptomatic, the diagnosis was not performed in the acute phase. Presumably, a transient state of fetal anemia occurred, causing compensatory hepatomegaly in an attempt to enhance extramedullary fetal hematopoiesis, allowing spontaneous delivery with favorable neonatal outcome. Survival exceeds 85–90% when hydrops is absent and infection occurs after mid-gestation. This case underscores the importance of serological testing and serial ultrasound surveillance in pregnancies complicated by suspected or confirmed parvovirus B19 infection, with hydramnios being one of the clinical findings.

EVALUATION OF ARTERIAL STIFFNESS IN PREECLAMPSIA: A COMPARATIVE STUDY WITH NORMAL PREGNANCY

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Problem statement: To investigate the differences in arterial stiffness (AS) and to identify the useful parameters for the evaluation of AS between PE and normal pregnancy (NP). **Methods:** From May 2019 to

February 2022, 35 pregnant women with PE (38.0±4.1 years) and 25 NP (37.2±4.6 years) were enrolled. AS variables measured by pulse wave velocity (PWV), pulse wave analysis (PWA), and carotid ultrasound were compared between PE and NP groups. The correlations among AS variables were also evaluated. **Results:** Baseline BP was significantly elevated, body mass index was significantly higher, and gestational diabetes mellitus was significantly frequent in PE than in NP. Brachial ankle PWV (BAPWV) was faster (1582.99±191.40 vs. 1252.78±167.09, p<0.001) in PE than in NP. Central systolic BP (SBP), diastolic BP (DBP), pulse pressure (PP), and augmentation pressure (AP) were significantly higher in PE than in NP, but augmentation index was not different. Carotid artery circumferential strain (CS) and distensibility were not different between the groups. BAPWV significantly correlated with all PWA variables, but not with carotid CS and distensibility. Carotid CS was not correlated with PWA variables. Carotid distensibility significantly correlated with central PP, but not with other PWA variables. **Conclusion:** AS measured by PWV and AP was significantly increased in PE than NP, but AI and carotid CS and distensibility were not different. PWV was well correlated with PWA variables. Therefore, it is suggested that the measurements of PWV and PWA would be useful in the evaluation of AS in pregnant women with PE.

ASSOCIATION OF SERUM POTASSIUM AND MAGNESIUM LEVELS IN PREECLAMPSIA IN PATIENTS ADMITTED IN A LEVEL III HOSPITAL: A CASE-CONTROL STUDY

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Problem statement: Preeclampsia is a significant pregnancy complication that affects multiple organ systems, causing serious maternal and fetal risks. Dysregulation of the renin-angiotensin-aldosterone system (RAAS) plays a crucial role in its pathogenesis, disrupting electrolyte balance and worsening blood pressure and organ function. While extensive research has focused on RAAS in preeclampsia, the specific impact of electrolyte imbalances as indicators of disease severity remains underexplored. **Methods:** A case-control design was used, involving 156 conveniently sampled patients divided equally into normotensive and preeclamptic groups. Blood pressure and serum electrolyte levels were measured and severity in the preeclampsia group was assessed upon admission. T-test independent was performed to compare serum potassium and magnesium levels and logistic regression to evaluate their predictive value for severity. **Results:** Results showed that the mean serum potassium level was significantly lower in the preeclamptic group (3.25 mmol/L) compared to the normotensive group (3.73 mmol/L; p-value 0.000), indicating a strong association between serum potassium and preeclampsia. Higher serum potassium levels were also associated with a lower likelihood of severe preeclampsia (OR = 0.104, p = 0.007). In contrast, serum magnesium levels did not significantly differ between groups and were not a reliable predictor of disease severity (OR = 0.384, p = 0.817). **Conclusion:** The study concluded that hypokalemia was associated with preeclampsia and can indicate its severity, while serum magnesium level was not associated with the disease.

UTERINE RUPTURE: A CASE REPORT

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Problem Statement: A 32-year-old pregnant woman, with a history of pregestational type 2 diabetes mellitus (diagnosed during the first trimester, HbA1c 8.8%) and obesity (BMI 31.2), was referred from Endocrinology for high-risk pregnancy monitoring. She had one previous cesarean section in Pakistan in 2020 (cause unknown). Despite medical treatment with MDI insulin and metformin, glycemic control remained suboptimal. She declined continuous glucose monitoring. At 38+0 weeks, routine follow-up revealed stable maternal and fetal parameters. However, she was later referred urgently from non stress test due to absence of fetal heart rate. **Methods:** Ultrasound confirmed fetal demise at 39 weeks. The patient reported maternal fever in the preceding 48 hours. Following counseling, labor was induced with oxytocin, and artificial rupture of membranes revealed meconial amniotic fluid. Due to poor labor progression and maternal fever (up to 39°C), an emergency



cesarean was performed. **Results:** Intraoperatively, a longitudinal uterine rupture was discovered in the lower two-thirds of the anterior uterine wall, extending 1 cm into the lower cervix. The fetus was found intraabdominally. Uterine repair was completed with appropriate hemostasis. Postoperatively, the patient developed febrile hypotension. Initial antibiotic treatment with piperacillin-tazobactam was replaced by imipenem upon placental culture identifying *Pseudomonas putida* resistant to empiric antibiotic. Additional investigations (TAC abdomen, bloodwork) showed localized postoperative inflammatory changes without clear abscess formation. The patient was discharged following a course of antibiotic therapy with appropriate de-escalation. **Conclusion:** This case highlights the complexity of managing high-risk pregnancies in patients with pregestational diabetes and obesity. Intrauterine fetal death at term was likely due to intra-amniotic infection, complicated by uterine rupture and subsequent maternal sepsis. Prompt surgical intervention and targeted antibiotic therapy were critical for maternal stabilization. It underscores the importance of close metabolic control, infection monitoring, and vigilance for uterine rupture signs in women with prior cesarean delivery and labor induction.

CLASSIC HODGKIN LYMPHOMA PRESENTING WITH CONSTITUTIONAL SYMPTOMS DURING PREGNANCY: A CASE REPORT

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Problem Statement: Diagnosing serious illness during pregnancy is particularly challenging, as constitutional symptoms often overlap with normal gestational changes or common infections. This overlap can delay the identification of underlying pathological conditions. **Methods:** We present a case of a 30-year-old gravida at 22 weeks gestation with a history of hypothyroidism managed with levothyroxine. At 30 weeks, she developed pneumococcal pneumonia, followed by progressive constitutional symptoms at 35 weeks, including a 6 kg unintentional weight loss, anorexia, generalized pruritus, and nocturnal diaphoresis. Laboratory tests revealed persistent leukocytosis, initially interpreted as reactive in the context of infection and pregnancy. Upon clinical examination, left-sided cervical lymphadenopathy was identified and biopsied. Serological investigations were negative for acute Epstein-Barr virus (EBV) or cytomegalovirus (CMV) infection. Serum protein electrophoresis demonstrated a polyclonal inflammatory pattern. Polymerase chain reaction testing for *Mycobacterium tuberculosis* from the lymph node sample was negative. **Results:** At 36 weeks and 5 days, an urgent cesarean delivery was performed due to spontaneous labor and a short interpregnancy interval following a prior cesarean section. Histopathological examination of the lymph node confirmed a diagnosis of EBV-negative classic Hodgkin lymphoma. Postpartum staging, including imaging and bone marrow biopsy, classified the disease as stage IVA with an International Prognostic Score (IPS) of 3 out of 7. The patient initiated systemic chemotherapy postpartum with good clinical tolerance and initial therapeutic response. **Conclusion:** This case underscores the complexity of diagnosing malignancy during pregnancy, where systemic symptoms may be mistakenly attributed to physiological or infectious processes. Persistent or unexplained clinical findings warrant comprehensive evaluation. Prompt recognition and a multidisciplinary approach are essential to ensure timely diagnosis and treatment, optimizing maternal outcomes while minimizing fetal risk.

MATERNAL UTERINE ARTERY AGENESIA AS INTRAUTERINE GROWTH RESTRICTION RISK FACTOR

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Problem statement: Intrauterine growth restriction (IUGR) is a complex entity that has been and is widely studied. Several foetal morphological anomalies found in obstetric ultrasound assessments may hint for a future IUGR. Nevertheless, maternal anatomical anomalies are not usually related to IUGR development. **Methods:** We present the case of a woman with a congenital unilateral left renal agenesis as her only relevant medical record. Both of her pregnancies resulted with fetuses

diagnosed with IUGR. **Results:** Her first pregnancy at 30 years-old developed as follows. At the first trimester foetal ultrasound, maternal left uterine artery agenesis was diagnosed. With this finding, Preterm Preeclampsia Risk was unable to be calculated, so prophylactic 150 mg acetylsalicylic acid (AAS) was prescribed until week 36 of pregnancy. No foetal anomalies found at the morphological second trimester ultrasound. From week 31+3 to week 34+1 the patient was admitted for Threatened Preterm Labor requiring tocolysis and foetal lung maturation. Cervical microbiological PCR-test was positive for Chlamydia, so 1g Azithromycin was prescribed. During hospitalisation, late-onset UGR type 1 was diagnosed (foetal weight depending, no Doppler alterations) at week 32. Preeclampsia was ruled out. Induction to labour was performed at 37+3w with Cook's balloon. A 2024 g female was born, APGAR 9/10/10; arterial pH 7.27; venous pH 7.34. During her second pregnancy, at 32 years-old, a 33x32 mm retrochorial haematoma was diagnosed in a metrorrhagia episode with no longer implications. Prophylactic 150 mg AAS was prescribed before week 16 until week 36. Again, late-onset IUGR type 1 due to foetal weight with no Doppler alterations was diagnosed. Preeclampsia was ruled out. Induction to labour was performed at week 37+2 with dinoprostone cervical ripening. A 2235 g male was born, APGAR 8/9/10, arterial pH 7.22; venous pH 7.11. **Conclusion:** Although several foetal anomalies, such as unilateral renal agenesis, have been reported and linked to IUGR, no maternal anatomical anomalies are commonly related to IUGR. Maternal uterine artery agenesis may represent a IUGR risk factor. Future assessment should be performed in order to firmly confirm this hypothesis.

RISK FACTORS FOR HIGH-RISK PREGNANCY RELATED TO ANTENATAL DEPRESSION: A PROSPECTIVE COHORT STUDY

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Problem Statement: Maternal depression during pregnancy significantly impacts maternal and fetal outcomes, with elevated prevalence in high-risk pregnancies. Despite this vulnerability, validated screening tools for early identification of antepartum depression risk remain scarce. Existing research has focused on individual risk factors through retrospective designs, with insufficient investigation into high-risk pregnancy-specific conditions. This study aimed to develop and validate a clinical prediction model for antepartum depression using readily available clinical variables. **Methods:** This prospective cohort study enrolled high-risk pregnant women at Seoul National University Bundang Hospital between April 2020 and May 2021. Participants included women with threatened preterm labor, preterm premature rupture of membranes (PPROM), placenta previa, fetal growth restriction, and gestational hypertensive disorders. Women with prior psychiatric diagnoses or psychotropic medication use were excluded. Clinical data including maternal demographics, obstetric history, pregnancy complications, and adverse outcomes such as preterm birth, fetal anomalies, and cervical cerclage were collected. Depression symptoms were assessed using Edinburgh Postnatal Depression Scale (EPDS), with scores ≥ 10 indicating antepartum depressive symptoms. Multivariable logistic regression was performed to develop a risk scoring system. **Results:** Of 161 participants analyzed, 52 (32.3%) demonstrated elevated antepartum EPDS scores ≥ 10 . Women with high depression risk showed significantly higher rates of maternal-fetal intensive care unit (MFICU) admission (65.4% vs. 39.4%, $p=0.002$) and fetal anomalies (7.7% vs. 0.9%, $p=0.038$) compared to those with lower risk. Multivariable logistic regression identified MFICU admission (adjusted odds ratio [aOR] 3.05, 95% confidence interval [CI] 1.37-6.81, $p=0.006$) and presence of fetal anomalies (aOR 9.71, 95% CI 1.43-66.02, $p=0.020$) as independent predictors of antepartum depression risk. The final prediction model demonstrated good discriminative ability (AUROC = 0.739, 95% CI 0.66-0.82). **Conclusion:** MFICU admission and fetal anomalies emerged as the strongest independent predictors of antepartum depression risk among high-risk pregnant women. This clinically applicable prediction model enables early identification of vulnerable women during pregnancy, potentially facilitating timely mental health interventions. Given the established continuity between antepartum and postpartum depression, early screening and



intervention may improve both maternal mental health outcomes and pregnancy-related quality of care.

DIVERGENT PROFILES IN EARLY AND LATE POSTPARTUM PREECLAMPSIA

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Problem Statement: We aimed to determine whether early postpartum pre-eclampsia (PP-PE; ≤ 48 h after delivery) and late PP-PE (48 h–6 wk) share a common pathophysiology or represent distinct entities.

Methods: This was a single-center retrospective cohort study. Women with severe-feature PP-PE were classified as early ($n = 121$) or late ($n = 26$). Control groups included healthy postpartum women ($n = 658$) and women with severe antepartum pre-eclampsia (AP-PE; $n = 494$). Multivariable logistic regression was used, adjusting for maternal age, parity, and other significant covariates. The main outcomes assessed were maternal comorbidities, mode of delivery, and obstetric complications. **Results:** Compared with healthy controls, women with PP-PE more frequently had chronic hypertension (26.5% vs. 13.2%, $p < 0.01$), gestational hypertension (13.6% vs. 1.7%, $p < 0.01$), and gestational diabetes (22.4% vs. 12.3%, $p < 0.01$). Early PP-PE was associated with higher rates of Cesarean delivery (74.4% vs. 46.2%, $p = 0.02$) and preterm birth (33.1% vs. 16.0%, $p = 0.09$) compared to late PP-PE. In adjusted models, early PP-PE independently increased the odds of Cesarean delivery (adjusted odds ratio [aOR] 9.3, 95% CI 4.8–17.8) and preterm birth (aOR 3.5, 95% CI 1.9–6.3), while late PP-PE was strongly associated with chronic hypertension (aOR 4.6, 95% CI 1.9–10.8). Compared with AP-PE, chronic hypertension was less common in early PP-PE (23.1% vs. 43.5%, $p < 0.01$) but similar in late PP-PE; small-for-gestational-age infants were less frequent in late PP-PE (3.8% vs. 15.0%, $p = 0.01$). **Conclusion:** Early PP-PE appears to be closely linked to placental-related complications, whereas late PP-PE aligns with maternal vascular disease. Differentiating these phenotypes may guide clinical practice, with early PP-PE warranting intensive short-term obstetric care and late PP-PE requiring long-term cardiovascular follow-up.

CEASAREAN DELIVERY AS A TRIGGER FOR POSTPARTUM PREECLAMPSIA – WHO IS AT RISK?

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Problem Statement: Our study aimed to characterize postpartum preeclampsia (PP-PE) in women who have undergone a cesarean section, to further distinguish between early (≤ 48 h after delivery) and late PP-PE (48 h–6 wk) in this group, and to identify factors associated with its development. **Methods:** This was a retrospective cohort study. The study group included patients diagnosed with PP-PE after a cesarean section ($n = 102$). Of whom, 90 patients (88%) had early PP-PE, and 12 (12%) had late PP-PE. This group was compared to patients diagnosed with preeclampsia prior to cesarean delivery ($n = 296$) and to those who underwent cesarean delivery without developing postpartum preeclampsia ($n = 171$). Multivariable logistic regression was used, adjusting for maternal age, parity, and other significant covariates. The main outcomes assessed maternal comorbidities, neonatal outcomes, and obstetric complications. **Results:** Patients in the study group had a significantly higher rate of multiple gestation (22.6% vs. 11.1%, $p = 0.03$) and gestational hypertension (10.8% vs. 2.3%, $p < 0.01$) in comparison to healthy individuals. This finding remained significant on multivariate logistic regression (aOR 8.77, 95% CI 2.128–36.162). Compared to the antepartum PE group, the study group had lower rates of preterm deliveries (33.3% vs. 64.9%, $p < 0.01$). Comparison of early vs. late PP-PE did not reveal any differences in baseline characteristics, pregnancy complications, or neonatal outcomes. **Conclusion:** our study revealed distinct characteristics among women who developed post cesarean section PE, compared to those who developed antepartum PE and to women who did not develop preeclampsia at all. Our findings suggest that there may be a place for more rigorous monitoring of women after cesarean delivery, especially in women with additional risk factors such as gestational hypertension or twin pregnancies.

DEVELOPMENT OF A RISK SCORE MODEL TO PREDICT MATERNAL NEAR-MISS AND MORTALITY IN ACQUIRED CARDIAC DISEASE

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Problem statement: Maternal mortality and near-miss events are major concerns in women with acquired cardiac disease. Existing risk assessment tools focus mainly on cardiac parameters and often overlook key maternal and obstetric factors. Developing a risk score model is essential to accurately identify high-risk women and guide interventions to improve maternal outcomes. Accordingly, the objective of this study was to develop a risk score model to predict maternal near-miss and mortality in women with acquired cardiac disease. **Methods:** We retrospectively analyzed 197 pregnancies complicated by acquired cardiac disease and delivered at Songklanagarind Hospital between January 2011 and December 2024. Maternal near-miss events or deaths occurred in 80 cases (40.6%). Multivariate logistic regression was used to develop the best-fitting model for predicting maternal near-miss and mortality, incorporating maternal demographic, obstetric, and cardiac factors. Model discrimination was assessed using the area under the receiver operating characteristic curve (AUC), and weighted risk scores were assigned to each significant predictor based on regression coefficients. **Results:** Six significant predictors were identified, yielding a total weighted score ranging from 0 to 26: maternal age ≥ 30 years (score = 2), nonvalvular heart disease (score = 5), medical comorbidities (score = 5), left ventricular ejection fraction $\leq 55\%$ (score = 4), left ventricular outflow tract obstruction (score = 6), and WHO class III–IV (score = 4). The six-factor predictive model demonstrated excellent discrimination, with an AUC of 0.946 (95% CI, 0.917–0.974). At a cut-off score of 6, the model achieved a sensitivity of 100%, specificity of 54.7%, positive predictive value of 60.2%, negative predictive value of 100%, and an overall accuracy of 73.1%. **Conclusion:** A risk score model with excellent discriminative ability for predicting maternal near-miss and mortality in women with acquired cardiac disease was developed. Further external validation is warranted to confirm its generalizability and clinical applicability.

FETOMATERNAL MEDICINE - LABOR AND DELIVERY

PERINEAL TEAR IIIA WITH INTRAPARTUM REPAIR AND SUBSEQUENT CONSERVATIVE TREATMENT FOR FECAL INCONTINENCE

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Introduction: Perineal tears that involve anal sphincter are the most frequent cause of fecal incontinence in women. They entail important short and long term consequences, including anal incontinence, dyspareunia and sexual dysfunction, pelvic chronic pain and those affecting quality of life. There are risk factors related with having a perineal tear during labor process such as maternal age, instrumented labour, nulliparity, elevated weight of the newborn, episiotomy, maternal ethnicity. **Clinical case:** A 43-year-old patient presented to the emergency department at 40.3 weeks for labor induction due to a previous cesarean section and maternal age. TEAL: 1/0/2/1. After a right mediolateral episiotomy, Naegele forceps were used to shorten the expulsive phase. The fetus was obtained as a male, weighing 3772 g, with an APGAR score of 7/10/10, insufficient pHa sample, and pHv of 7.26. During the birth canal examination, an obstetric anal sphincter tear (OASIS) IIIA was observed, which was repaired intrapartum with overlap sutures with 3.0 fine polydioxanone suture (PDS 3/0), laxatives are prescribed and antibiotic prophylaxis according to the department protocol. At 6 months postpartum, they attended a follow-up visit at the pelvic floor clinic. During the visit, the patient presented with fecal incontinence (FI) with gas and stress urinary incontinence (SUI) with severe exertion. There was no dyspareunia. An endoanal ultrasound study was requested. - External anal sphincter: defect in the middle anal canal from 9 to 2:00 and probable defect associated with the middle anal canal. (Figure 1). The clinical presentation and ultrasound were evaluated together, and the patient was referred for manometry and biofeedback. At 4 months



she went to a check-up and was asymptomatic of both incontinences. **Discussion:** An instrumental delivery is an undeniable risk factor for developing an OASIS tear. However, although it was detected and repaired immediately, the patient presented symptoms that were resolved with subsequent follow-up and conservative treatment. Furthermore, the follow up of the patient allows us to check the anatomy and clinical state resulting after the OASIS. It will help us to decide the better way to plan future pregnancies.

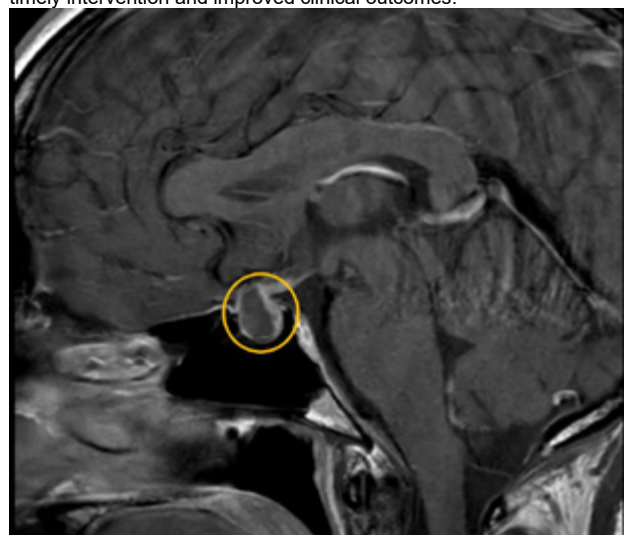
PITUITARY APOPLEXY (SHEEHAN'S SYNDROME) SECONDARY TO POSTPARTUM HEMORRHAGE AFTER ITERATIVE CEASARIAN DELIVERY

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Problem statement: Differential diagnosis of postpartum headache as key symptom. **Methods:** We present the case of a 39-year-old woman, 38+1 weeks pregnant admitted to the hospital for active labour stage. Relevant records: two previous caesarean-sections, a miscarriage.

Results: An urgent caesarean-section was performed obtaining a 2840g female newborn, APGAR 9/10/10, venous pH=7.30. Two hours after surgery, heavy uterine bleeding develops requiring uterine massage and medical treatment (1g tranexamic acid iv, 200 micrograms intramuscular methylergometrine, five doses 250 micrograms intramuscular carboprost). Unable to be controlled, a Bakri-balloon was inserted with haemorrhage cease, with 2 litres estimated blood loss and a total instillation of 3 litres of crystalloids and one red blood cell concentrate (RBCC) transfusion for a 6.5 g/dL haemoglobin found. During the night, a 9/10 verbal rating scale (VRS) appears. Two more RBCC were transfused and anaesthesiology assessed the patient and ruled out post dural puncture headache (PDPH). A CT scan showed no lesions, so an MRI (Figure 1) was performed showing an increase in pituitary gland with hypocaptation and small hemorrhage zones within, suggesting a pituitary apoplexy. Blood test showed panhypopituitarism. No optic nerve affection was detected neither in imaging testing nor in physical examinations. Patient was discharged after 6 days with 75 micrograms levothyroxine and 20 mg hydrocortisone per day. Ophthalmology and endocrinology follow-ups (lab tests and MRI) show stability so hydrocortisone have been lowered to 10 mg/day.

Conclusion: Sheehan's syndrome should be carefully considered in the differential diagnosis of postpartum headache, particularly in women with a history of significant postpartum hemorrhage. Other entities such as PDPH should be ruled out because of their major incidence. Although its initial manifestations may be subtle or nonspecific, such as headache, early recognition is critical. Early diagnosis and hormonal replacement can prevent serious endocrine complications and reduce maternal morbidity. Given its association with pituitary ischemic necrosis following obstetric hemorrhage, maintaining a high index of suspicion is vital for timely intervention and improved clinical outcomes.



ANTIBIOTIC PROPHYLAXIS IN ELECTIVE CESAREAN SECTION: CEFAZOLIN VS CEFTRIAXONE

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Aims: Single dose preoperative administration of antibiotics is sufficient to prevent intra and postoperative infections in the parturients with no high risk for the development of infection. **Material and methods:** A prospective investigation comprised 36 healthy pregnant women at term planned for elective cesarean section vs. 8 non-pregnant women planned for gynecological surgery. 1st group of patients preoperatively administered ceftriaxone in a dose of 2g, i.v., and 2nd group of patients administered cefazolin in a dose of 2g, i.v., 10 min. before the planned surgery. The concentrations of antibiotics were estimated immediately and 6 hours following the operation (by the method of liquid chromatography). In pregnant women the concentrations of antibiotics were estimated also in amniotic fluid and in the umbilical blood of the newborn infant. **Results and discussion:** The mean concentrations of antibiotics in the patients following the elective cesarean section were as follows: cefazolin-44,80 mcg/l vs ceftriaxone-22,75 mcg/l. Six hours later, the concentration of antibiotic decreased: cefazolin-24,87 mcg/l vs ceftriaxone-13,23 mcg/l which was still over the MIC for sensitive bacteria. The mean concentrations of antibiotics following gynaecological surgery in non-pregnant patients were as follows: cefazolin-30,06 mcg/l vs ceftriaxone-12,03 mcg/l. Six hours later, the concentration of antibiotic decreased: cefazolin-17,39 mcg/l vs ceftriaxone-5,7 mcg/l. The concentration of cefazolin was still over the MIC for sensitive bacteria. The mean concentrations of the administered antibiotics in umbilical cord were high (cefazolin-35,14 mcg/l vs ceftriaxone-29,02 mcg/l) and in amniotic fluid were low (cefazolin-6,8 mcg/l vs ceftriaxone-1,58 mcg/l). **Conclusions:** It is most optimal to administer a single-dose of the first generation cephalosporins - cefazolin- immediately following the clamping of the umbilical cord as well as in preoperative antibiotic prophylaxis in gynecological operations.

Keywords: Antibiotic prophylaxis; Cesarean section; Cefazolin; Ceftriaxone

PREDICTING THE OUTCOME OF LABOR INDUCTION: DO WE HAVE A MODEL?

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Problem statement: The main aim of this study was to develop a machine-learning-based model for predicting the success of labor induction. To that end, the clinical and ultrasound parameters that affect the successfulness of labor induction were assessed, and a new ultrasound scoring system (USS) was developed and then assessed.

Methods: This prospective observational study from a single center included 192 term women who underwent induction of labor. First, a wide range of clinical and ultrasound pre-induction parameters were recorded. The induction was initiated by endocervical administration of Prepidil® gel (for Burnett score ≤ 5) or with intravenous Oxytocin (for Burnett score ≥ 6). After evaluation of ultrasound parameters we created an ultrasound scoring system. Next, the USS was compared with the Burnett score and clinical parameters. Finally, a comprehensive model using machine learning algorithms for predicting the success of the induction of labor was developed. **Results:** In terms of clinical parameters, this study found that IOL correlates with parity, BMI (both at p<0.05) and the Burnett score (p<0.001). All ultrasound parameters were statistically significant (p<0.05) apart from the posterior cervical angle. Therefore, the new USS encompasses the following five ultrasound parameters: cervical length, the size of the posterior cervical angle, the funneling (if present), the position of the fetal occiput and the distance from the head of the fetus to the outer cervical os. However, compared to the Burnett score, the new USS showed slightly lower sensitivity (0.55 compared to 0.64) but much higher specificity (0.75 compared to 0.44) at a cut-off of 1.66. Therefore, the proposed model, which can predict 83% of the events correctly, encompasses the Burnett score, USS and clinical parameters. **Conclusion:** The findings imply that the model developed in this study, which takes into account clinical



parameters (parity, BMI), the ultrasound parameters and the Burnett score and uses machine learning algorithms, yields better results than models using other parameters. Nevertheless, further research is needed to overcome the limitations of the present study and confirm the reliability of the model.

AUDIT ON ANTENATAL STEROID ADMINISTRATION IN CAESAREAN DELIVERIES AT OR BEFORE 37 WEEKS OF GESTATION

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Problem statement: Antenatal corticosteroids improve neonatal outcomes and are recommended for caesarean sections ≤ 37 weeks of gestation [1]. This audit aimed to assess compliance for antenatal steroid administration in the obstetrics and gynaecology unit at Bacha Khan Medical Complex (BKMC)/Gajju Khan Medical College (GKMC), Pakistan with The Royal College of Obstetricians and Gynaecologists (RCOG) guidelines. **Methods:** The audit was carried out at Bacha Khan Medical Complex (BKMC), Pakistan, in February 2023, followed by a re-audit in September 2023. A total of 100 random samples during the specific time were selected in both February 2023 and September 2023. The study included women undergoing elective C-section ≤ 37 weeks of gestation. The main objective was to measure the proportion of mothers received steroids before caesarean delivery ≤ 37 weeks. **Results:** The steroid administration coverage was 67% in the initial audit, which increased to 83% in the re-audit after implementing recommendations to improve compliance with guidelines. The results are presented in Figure 1. Further details will be presented in the poster. **Conclusion:** Steroid administration rates improved from 67% to 83% in the re-audit following presentation of the initial audit results and targeted interventions to improve adherence to protocols. Significant progress was achieved, but the coverage still remains below the RCOG-recommended 100%. Therefore, continuous adherence to protocols and staff awareness programs are recommended. Furthermore, regular audits are recommended to monitor the progress.

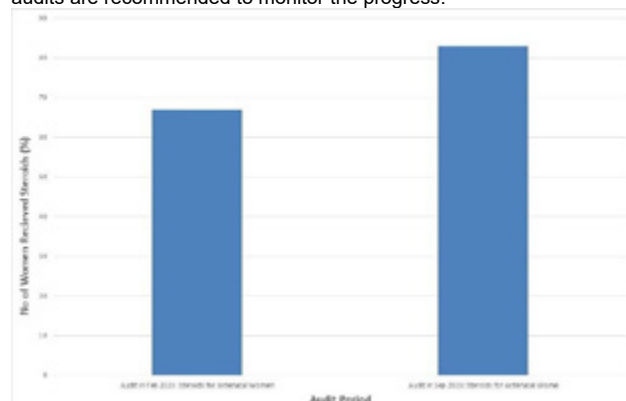


Figure 1. Results of Audit on Antenatal Steroid Administration

References: Stock SJ, Thomson AJ, Papworth S; the Royal College of Obstetricians, Gynaecologists. Antenatal corticosteroids to reduce neonatal morbidity and mortality. BJOG 2022 <https://doi.org/10.1111/1471-0528.17027>

REFRACTORY POSTPARTUM HEMORRHAGE FOLLOWING VAGINAL DELIVERY. A CASE REPORT

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Problem Statement: A 39-year-old primigravida at 40+5 weeks of gestation, with a prior history of myomectomy via Pfannenstiel incision four years earlier, was admitted for labor induction due to suspected fetal macrosomia (estimated fetal weight in 94th percentile). **Methods:** Labor was induced using a Cook cervical balloon, resulting in a spontaneous vaginal delivery of a healthy female neonate weighing 4084 g. Following delivery, the patient developed significant postpartum hemorrhage, with

an estimated blood loss of approximately 1700 mL. Uterotonic agents were administered without achieving adequate bleeding control. A Bakri balloon was inserted; however, uterine atony persisted. Uterine artery embolization was subsequently performed by the interventional radiology team, with initial technical success. **Results:** Despite embolization, uterine atony and moderate vaginal bleeding continued. An urgent abdominal hysterectomy was performed. Intraoperatively, an area suggestive of abnormal placental adherence (possible placenta accreta) was identified on the posterior endometrial surface. The patient remained hemodynamically stable throughout the intervention but required transfusion of nine units of packed red blood cells during the overall management. Postoperative recovery was uneventful, and the patient was discharged home four days after surgery. **Conclusion:** This case underscores the challenges in managing postpartum hemorrhage in patients with prior uterine surgery and suspected macrosomia. Conservative measures, including uterotonics and intrauterine balloon tamponade, were insufficient, necessitating both interventional radiology and surgical management. The possible presence of undiagnosed placenta accreta may have contributed to the refractory hemorrhage. Early multidisciplinary involvement was critical in achieving a favorable outcome.

ELECTIVE CESAREAN SECTION AT EARLY-TERM VS 39 WEEKS OR BEYOND: IMPACT ON NEONATAL RESPIRATORY OUTCOMES AND MATERNAL MORBIDITIES IN A TERTIARY HOSPITAL: A RETROSPECTIVE COHORT STUDY

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Problem statement: Determining optimal timing for elective cesarean section (ECS) is crucial for maternal and neonatal outcomes. ECS before 39 weeks increases neonatal respiratory risks, while delays may raise maternal morbidity due to emergency surgery. This study compares outcomes of early-term versus ≥ 39 week ECS, focusing on maternal morbidity and neonatal respiratory complications. **Methods:** We conducted a retrospective analysis of ECS cases performed at a tertiary hospital from January 2022 to December 2024. Participants were categorized into two groups: early-term (39 weeks; n=1,326) and full-term (≥ 39 weeks; n=473). Maternal demographics, surgical outcomes, and selected neonatal respiratory outcomes were compared using Chi-square and Ranksum tests. A p-value 0.05 was considered statistically significant. **Results:** Out of 13,745 total deliveries during the study period, 5,188 (37.7%) were cesarean deliveries. Among these, 1,900 (36.6%) were elective procedures, with 1,799 included in this analysis. The most common ECS indications were previous cesarean section (73.9%), breech presentation (10.9%), and large fetus (5.6%). Patients delivering at ≥ 39 weeks were slightly younger (median age 30 vs. 31 years, p = 0.045) and had fewer parity (p= 0.001). Previous cesarean was more common in the 39 weeks group (19.3% vs. 15.4%, p 0.001), while breech presentation and large fetus were more frequent at ≥ 39 weeks (p = 0.028 and p 0.001, respectively). No significant differences were observed in operative time, estimated blood loss, or transfusion needs between the groups. Among 1,837 newborns, early-term deliveries accounted for 74.1%. Twin pregnancies were significantly more frequent in the 39 weeks group (5.3% vs. 0.8%, p 0.001). Neonatal birth weight was significantly higher at ≥ 39 weeks (median 3,243g vs. 3,105g, p 0.001), while no significant differences were found in sex distribution, Apgar scores, or neonatal respiratory complications, including respiratory distress in newborns. **Conclusion:** Although early-term ECS was associated with lower neonatal birth weight, it did not increase maternal or neonatal complications. These findings support the safety of early-term ECS in appropriately selected cases.

Keywords: Elective cesarean section, gestational age, maternal morbidity, neonatal respiratory complication

APPLICATION OF EPIDURAL ANALGESIA IN OBSTETRIC HOSPITALS OF UKRAINE AND ITS ALTERNATIVE

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Problem statement: Epidural analgesia (EA) provides the most effective pain relief in labour, but it has a significant impact on the labour process. So it is important to find out the true frequency of adverse outcomes in the case of EA during vaginal delivery. The aim of the study:



to establish the frequency of EA in obstetric healthcare hospitals in Ukraine, to determine the relationship between the development of adverse perinatal outcomes in women with vaginal delivery and the use of EA, and to introduce alternative methods of analgesia for vaginal delivery. **Methods:** The rate of adverse outcomes was analyzed in the group of women with vaginal delivery who did not have EA (n=27 503) and in the group of women with vaginal delivery and EA (n=22 214). The information base of the study was the data from the medical records of the electronic healthcare system of women who had vaginal delivery in 2023. The bibliosemantic, analytical, epidemiological, statistical, and conceptual methods were used. **Results:** The use of epidural analgesia (EA) significantly increases the chances of a woman to have long labour (OR 4.71; p<0.001), uterine inertia (OR 3.52; p<0.001), stimulation of labour (OR 2.36; p<0.001), instrumental vaginal births (OR 2.76; p<0.001), perineal rupture of the II degree (OR 1.24; p<0.001), rupture of the cervix (OR 1.15; p=0.011), rupture of the vagina (OR 1.17; p<0.001), episiotomy (OR 1.71; p<0.001), retained placenta (OR 1.32; p<0.001) and fetal distress (OR 1.8; p<0.001). **Conclusion:** The obtained results indicate the need for a balanced approach to the use of EA, based on the benefits and risks for the woman and the fetus. Use of non-pharmacological pain management (NPPM) offers a promising alternative, potentially improving the experience of labour, reducing side effects and improving outcomes for both mothers and babies. These methods use natural pain management mechanisms and promote relaxation, comfort, reduced anxiety and increased satisfaction with labour. They also offer the additional benefit of minimal side effects and risks, making them an attractive option for most women.

USE OF STARSIL® HEMOSTAT FOR BLEEDING CONTROL AND ADHESION PREVENTION IN REPEAT CESAREAN SECTION

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Objective: Although the safety of caesarean sections (C/S) has improved, complications such as pelvic adhesions, peripartum hemorrhage (PPH) or other bleeding occur more frequently with repeat C/S and remain challenging. Starsil® Hemostat, a plant-derived polysaccharide is certified for both - hemostasis and adhesion prevention. The aim of our study was to assess the safety and efficacy of Starsil® Hemostat in patients undergoing repeated C/S. **Methods:** This prospective single-arm study is being conducted at our department of the Orthodox Jewish community. ASPAGS: Assessment of STARSIL for Prevention of Adhesions in Gynecological Surgery (Ethical Committee MHMC – 032-2021: Study No. MOH_2021-12-13_010475) From January 2022 to present, 36 pregnant women (age: 33.8±6.1 years) planning to have repeat C/S were enrolled and followed-up. During the operation adhesions were evaluated and after closure of the lower segment, Starsil® Hemostat was applied between tissues for bleeding control and adhesion prevention. After six weeks, an ultrasound was performed to assess adhesions. When patients came for repeat C/S, intraoperative adhesions were evaluated under direct vision. **Results:** None of the 36 parturient developed PPH or other bleeding. At 6 weeks follow-up, ultrasound examination revealed only one patient with severe adhesions (2.7%). To date, 16 women had repeat C/S. No severe adhesions were observed intraoperatively. Two women are currently pregnant, 12 planning another C/S and 2 who have had already multiple deliveries are uncertain regarding further births. 3 women were not planning another birth. One woman was lost to follow up. There were no adverse events related to Starsil® Hemostat. **Conclusion:** The interim results demonstrate the safety and efficacy of Starsil® Hemostat in hemostasis and adhesion prevention in C/S.

WHY DO WOMEN REQUEST A CESAREAN SECTION? CASE-CONTROL STUDY IN THE REFERRAL MATERNITY CENTRE IN URUGUAY, SOUTH AMERICA

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Problem statement: Globally, there is a steady upward trend in the cesarean section rate, and maternally requested cesarean section (MCS) is one of the multiple causes. Motivations for patient requests have been described, such as emotional experiences, social norms, and the relationship with the healthcare team. Studying the factors behind this request is important to understand this phenomenon and find strategies to address it. The aim of this study was to analyze the reasons

for opting for MCS in patients assisted at the Maternity of the Pereira Rossell Hospital Center, a referral maternity centre in Uruguay. **Methods:** Observational case (MCS) -control (vaginal delivery) study. A pre-designed survey was conducted to evaluate potential associated factors. It was conducted in two stages, in 2021 and then in 2024, due to changes in care during the pandemic that could influence maternal decision. **Results:** In the first stage, 171 patients were included. Among patients who underwent cesarean section due to maternal needs, 52.5% stated they chose cesarean section due to concerns about high fetal-natal safety, 32.8% due to some influence from the attending physician, 31.7% due to its predictability, and 42.6% due to personal concerns about the consequences of vaginal delivery. Tocophobia was measured using the WDEQ, categorized into tertiles, and showed a statistically significant association. A history of prior trauma showed an association of 4.17. In the second phase, 306 patients were included. Tocophobia was again a factor. Among these, more than 60% did not have available labor analgesia and also desired surgical sterilization. **Conclusions:** The factors that influenced the decision to request a cesarean section were a history of trauma, the influence of the attending physician, and the presence of tocophobia in the first phase. In the second phase after the pandemic, where some changes in healthcare systems occurred, it is clear that cesarean section at maternal request reflects unmet needs in the system and highlights the urgency of ensuring timely contraception and obstetric analgesia.

FETOMATERNAL MEDICINE - MEDICAL COMPLICATIONS IN PREGNANCY PRETERM DELIVERY PREVENTION AND TREATMENT

SUBDURAL EMPYEMA AND LEPTOMENINGEAL MENINGITIS COMPLICATING A VERY PRETERM PREGNANCY: OBSTETRIC CONSIDERATIONS IN A MULTIDISCIPLINARY CRITICAL ILLNESS

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Problem statement: Severe central nervous system (CNS) infections during pregnancy are rare but life-threatening, posing risks to both maternal and fetal outcomes. Subdural empyema, an uncommon form of intracranial infection, typically arises from contiguous infections such as otitis media or sinusitis. Its occurrence during pregnancy is exceptionally rare, and optimal management requires balancing maternal stabilization with fetal well-being. **Methods:** We report the case of a 24-year-old G2P1(1001) at 28 4/7 weeks age of gestation presenting with decreased sensorium and seizures. Neuroimaging confirmed bilateral subdural empyema with leptomeningeal meningitis secondary to chronic suppurative otitis media with cholesteatoma. A multidisciplinary team including neurosurgery, otorhinolaryngology, infectious disease, neurology, anesthesiology, obstetrics, and neonatology coordinated management. Maternal stabilization, infection source control, and continuous fetal surveillance guided treatment decisions. **Results:** The patient underwent emergency frontotemporal craniotomy at 28 5/7 weeks and radical mastoidectomy at 31 weeks. Perioperative care included broad-spectrum antibiotics, seizure prophylaxis, fetal monitoring, corticosteroids for lung maturity, and anesthetic modifications for maternal-fetal safety. Fetal surveillance remained reassuring, and delivery was deferred until spontaneous labor at 36 3/7 weeks. A healthy male neonate was delivered via repeat cesarean section. Postpartum recovery was complicated by a transient ischemic episode, managed successfully with medical therapy. Both mother and infant were discharged well. **Conclusion:** This is, to our knowledge, the first reported case of bilateral subdural empyema with leptomeningeal meningitis during pregnancy in a low- to middle-income country. The case underscores the importance of early recognition, timely neurosurgical and otorhinolaryngologic intervention, and multidisciplinary collaboration. Intensive maternal-focused management while prioritizing fetal safety can optimize outcomes in these rare but life-threatening infections.

POSTPARTUM CEREBRAL EMBOLIC INFARCTION

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Cerebral infarction related to childbirth is rare and not well known, but the risk of occurrence during pregnancy is known to increase more than



13 times compared to the general population. We report a case in which uterine artery embolization was performed due to placenta previa after delivery by cesarean section, and subsequent amniotic fluid embolism and embolic cerebral infarction occurred. **Case:** A 38-year-old woman with a history of previous cesarean sections in 2018 and 2020, gave birth to a 3,070g female child by cesarean section at 38 weeks and 5 days of pregnancy due to placenta previa and a previous cesarean section. After delivery, placental site bleeding continued, so uterine artery embolization and blood transfusion were performed after surgery. After the surgery, her consciousness was normal and vital signs were stable, but she suddenly showed respiratory failure and decreased blood pressure. After moving to the intensive care unit, vasopressors, blood transfusion, and endotracheal intubation were performed. She showed symptoms of convulsions, so anticonvulsants were administered. Coagulopathy was also observed, so reoperation was performed to detect bleeding, but there were no bleeding points. Afterwards, the loss of consciousness continued, and a brain examination showed an embolic cerebral infarction (MCA, cerebellum). During subsequent follow-up, consciousness was recovered, but she is receiving rehabilitation treatment for cognitive impairment and Broca's aphasia. This case is an extremely rare embolic cerebral infarction that occurred after delivery. In particular, it appears to have been caused by an amniotic fluid embolism, and although all other symptoms have improved, the patient remains disabled due to the aftereffects of cerebral infarction and is currently receiving rehabilitation treatment. Amniotic fluid embolism is difficult to predict and requires a multidisciplinary approach when it occurs. In particular, if decreased consciousness persists, the development of cerebral infarction must be considered.

PATIENTS' SATISFACTION ON COMBINED MEDICAL CLINIC IN A UNIVERSITY HOSPITAL IN HONG KONG

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Problem statement: An increasing prevalence of medical diseases pregnancy is observed during pregnancies. Current evidence suggests that multidisciplinary care during pregnancy improves patient satisfaction and may improve clinical outcomes. This questionnaire study aims to explore satisfaction and expectation towards the combined clinic arrangement versus separate obstetric and medical clinics for women with pre-existing medical diseases at a university hospital in Hong Kong. **Methods:** This questionnaire was distributed in the waiting area of the high risk antenatal clinic. Information on demographics, attitudes and expectations towards the combined obstetric and medical clinic. Satisfaction score was calculated for those attending combined clinic. Proportions were calculated to compare the views towards combined and separate clinics for different aspects of care. **Results:** A total of 111 responses were collected, including 50 from patients who attended the combined clinic, and 61 from patients who attended separate obstetric and medical clinics. Baseline characteristics were comparable. 51 (45.9%) patients had endocrine diseases, with pre-existing diabetes or gestational diabetes requiring insulin control being the most common medical problem in our recruited population. Of all the patients, 91 had pre-existing medical condition, and 81 (73.0%) of these had regular follow-up before the pregnancy. 82% of patients attending the combined clinic gave a patient satisfaction score classed as satisfied or very satisfied. The majority of patients who attended the combined clinic find the clinic helpful or very helpful in different aspects. 100% of patients found the combined clinic helpful or very helpful with regards to having the opportunity to ask questions, monitoring of disease condition, and ease of new case appointment making. In the combined clinic group, the patients preferred combined clinic when evaluating most aspects, except for waiting time (where 6% of patients opted they would prefer separate clinics). One patient preferred separate clinic in terms of communication among different doctors. **Conclusion:** The combined medical clinic allows better patient satisfaction towards condition monitoring, clinical decision making and patient communication compared to separate antenatal and medical clinics and could be adopted to benefit women with pre-existing medical conditions.

CONGENITAL CYSTIC ADENOMATOID MALFORMATION OF THE LUNG. ULTRASOUND IMAGES OF A CLINICAL CASE REPORT

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Congenital cystic adenomatoid malformation of the lung (now more commonly termed congenital pulmonary airway malformation, or CPAM) is a rare, non-hereditary developmental anomaly of the lower respiratory tract characterized by abnormal proliferation of terminal bronchioles, resulting in cystic and/or adenomatoid lesions within the lung parenchyma. These lesions are typically unilateral and most often involve a single lobe, though multilobar or even whole-lung involvement can rarely occur. The cysts may vary in size and number, and histologically, the cysts are lined by ciliated columnar or cuboidal epithelium, with varying degrees of smooth muscle, elastic tissue, and sometimes mucous cells in the cyst walls. CPAMs are usually detected antenatally via ultrasound, but may also present postnatally with respiratory distress, recurrent infections, or be found incidentally. The clinical spectrum ranges from asymptomatic to severe respiratory compromise, particularly if the lesion is large or associated with fetal hydrops. The risk of malignant transformation, particularly to mucinous adenocarcinoma or pleuropulmonary blastoma, is recognized, especially in type 1 lesions with mucinous cell clusters. Management is individualized: symptomatic lesions generally require surgical resection, while the approach to asymptomatic lesions is debated, with some centers favoring elective resection to mitigate infection and malignancy risk, and others opting for observation with long-term follow-up. **Case Report:** 20 year old woman. No relevant medical history. Second trimester pregnant. Normally progressing gestation. She came in the 20th week of gestation for a morphological ultrasound. A diagnosis of CPAM occupying the two upper lobes of the left lung was made, the rest of the morphological examination was within normal limits. Follow-up ultrasounds were performed at weeks 28 and 30, observing persistent CPAM with the same size and displacement to the right of the heart without altering the cardiac axis or its size, the rest of the morphological examination and fetal growth were within normal limits.

CASE OF TRISOMY 9 MOSAIC

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Trisomy 9 is a rare chromosomal disorder characterized by the presence of an extra (third) copy of chromosome 9 in some or all cells. It can occur as complete trisomy 9, mosaic trisomy 9, or partial trisomy 9. Complete trisomy 9 is typically lethal, with most cases resulting in miscarriage or perinatal death. It is associated with multisystem congenital anomalies, including craniofacial dysmorphism (such as microcephaly, micrognathia, low-set ears, and hypertelorism), central nervous system malformations, congenital heart defects, skeletal abnormalities, and urogenital anomalies. Survivors are rare and usually have mosaic forms, which present with a variable phenotype depending on the proportion and distribution of trisomic cells. Common features in mosaic cases include growth retardation, developmental delay, hypotonia, and a spectrum of organ malformations. Partial trisomy 9, especially involving the short arm (trisomy 9p), is more common and presents with characteristic facial features, psychomotor delay, and variable intellectual disability, depending on the size and location of the duplicated region. Diagnosis is established by karyotype analysis or chromosomal microarray. Management is supportive and multidisciplinary, focusing on the specific anomalies present in each patient. **Case report:** Woman 34 years old. Pregnant of 18 weeks. Pathological history of hemoglobin D malignancy in homozygosis and chronic HBV infection. TPAL 3013, 3 healthy sons and an 18-week premature delivery due to premature rupture of membranes. Current gestation (18 w): High risk for aneuploidy was observed in the analysis in the first trimester and we observed an early intrauterine growth restriction with suspected heart disease on ultrasounds controls.

- Non-invasive prenatal test : No chromosomal alterations are detected in chromosomes 13, 18 and 21. It is not possible to reanalyze the data of chromosome 9 of the NIPT.

- Karyotypes (cultured amniotic fluid cells): 47,XX,+9 [8] / 46,XX [12].

- Array CGH (amniotic fluid): arr(9)x3[?]. Interpretation: It has a increase dose in chromosome 9 probes, consistent with a trisomy 9, most likely



in mosaic. The estimated percentage of mosaicism (proportion of cells with the trisomy) is 40-60%.

Diagnosis: Mosaic trisomy 9 in 18 weeks gestation with early intrauterine growth restriction and suspected heart disease.

PRENATAL DIAGNOSIS OF A RIGHT AORTIC ARCH

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Prenatal diagnosis of a right aortic arch is established by fetal echocardiography, specifically using the three-vessel and trachea (3VT) view during the second-trimester anatomy scan. In this view, the aortic arch is visualized coursing to the right of the trachea, rather than the normal left-sided position. The diagnosis is confirmed by identifying the sidedness of the aortic arch relative to the trachea and the branching pattern of the head and neck vessels, as well as the relationship and course of the ductus arteriosus. The configuration may appear as a "U-shaped" or "V-shaped" confluence of the aortic arch and ductus arteriosus, which helps differentiate between subtypes and the presence of a vascular ring. Once a right aortic arch is identified, a detailed fetal echocardiogram is warranted to assess for associated intracardiac anomalies (most commonly conotruncal defects), extracardiac anomalies, and to evaluate for a double aortic arch or aberrant subclavian artery. Chromosomal microarray or targeted genetic testing for 22q11.2 microdeletion should be considered, as there is a recognized association, even in apparently isolated cases. Fetal MRI may be considered in select cases to further delineate vascular anatomy and assess for extracardiac anomalies. In summary, prenatal diagnosis of a right aortic arch relies on systematic fetal echocardiography with attention to the 3VT view, followed by comprehensive evaluation for associated anomalies and genetic counseling. 36-year-old woman with no medical or surgical history of interest. Currently pregnant in the 2nd trimester with normal development of pregnancy. In routine follow-up ultrasound, cardiac malformation is suspected. Fetal echocardiography is indicated that observed in the 3-vessel plane; a right aortic arch. No other fetal malformation or pathology was found. The growth up of the fetus was normal. We show the image of the right aortic arch.



A SERIES OF UNFORTUNATE EVENTS: A CASE SERIES ON LUTEOMA OF PREGNANCY

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Pregnancy luteoma is a rare, benign ovarian neoplasm that arises from luteinized stromal cells associated with elevated testosterone levels. It is thought to have a benign cause with complete resolution postpartum. This study reports two cases of pregnant women diagnosed with luteoma in University of Cebu Medical Center. The first, a 24-year-old primigravida, with initial ultrasound findings, suggested a fibroid. Maternal virilization was noted in the second trimester, but upon admission for abdominal pain and unstable vital signs, she was diagnosed with a

ruptured left ovarian new growth during an emergency cesarean section. The neonate had ambiguous genitalia, with 46, XX karyotype, and was diagnosed with cerebral palsy. The second case involved a 26-year-old woman with adnexal mass on ultrasound. She had virilization in the third trimester, admitted for right lower quadrant pain and underwent cesarean section. The neonate had normal genitalia with an unremarkable outcome. Histopathology confirmed luteoma in both patients, with postpartum symptom resolution. In this case series, we presented two cases of pregnancy luteoma, detailing the complete medical history, antenatal diagnosis, management, and postpartum follow-up. This case is of particular significance due to the likely underestimation of its incidence, the potential for misdiagnosis, and the hormonal imbalances associated with it that can negatively affect maternal and neonatal outcomes. Our clinical approach to diagnosis and management will enhance Obstetricians' understanding of this condition. However, further cases are needed to develop a more transparent framework for comprehending the onset, progression, and impact of pregnancy luteoma on maternal and fetal health.

FEASIBILITY AND LEARNING CURVE OF UNIVERSAL TRANSVAGINAL CERVICAL LENGTH SCREENING AMONG OPERATORS WITH DIFFERENT LEVELS OF EXPERIENCE USING THE PROTOCOL OF THE FETAL MEDICINE FOUNDATION (FMF)

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Objective: To determine the number of transvaginal cervical length (TVCL) measurements required for a less experienced operator to achieve performance comparable to that of a more experienced operator, and to assess inter- and intra-observer reliability between operators with different levels of experience. **Materials and Methods:** A prospective observational study was conducted at Prapokklao Hospital, Chanthaburi, Thailand, from February to July 2025. Singleton pregnancies between 18 and 24 weeks' gestation were included. TVCL measurements were independently performed by an obstetrics and gynecology resident and a maternal-fetal medicine (MFM) specialist, following the Fetal Medicine Foundation (FMF) protocol. Inter- and intra-observer reliability was evaluated using intraclass correlation coefficients (ICCs) in sequential steps. **Results:** 90 TVCL measurements were successfully completed. Inter-observer reliability progressively improved, with intraclass correlation coefficients (ICCs) increasing from 0.69 to 0.93. Intra-observer reliability remained consistently high for both the resident (ICC: 0.93–0.97) and the MFM specialist (ICC: 0.94–0.97). Acceptable inter-observer agreement was observed after approximately 54 to 72 cases. **Conclusion:** TVCL measurement using the FMF protocol is feasible for less experienced operators. With appropriate training, reliable and consistent performance can be achieved over time, demonstrating a clear learning curve.

GYNECOLOGY

GYNECOLOGY - CASE REPORT / STUDY

DIAGNOSIS AND SURGICAL MANAGEMENT OF PERITONEAL INCLUSION CYST MIMICKING OVARIAN CYST: A CASE REPORT

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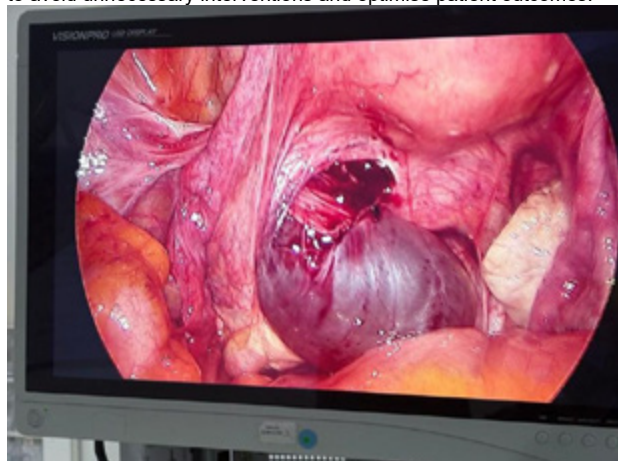
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Problem Statement: Peritoneal inclusion cysts are benign cystic lesions that often mimic ovarian cysts, making diagnosis challenging, especially in women of reproductive age. Risk factors include previous abdominal surgeries and chronic inflammatory conditions like endometriosis. Although these cysts are non-malignant, misdiagnosis can lead to significant morbidity and reduced quality of life. **Case Description:** We present the case of a 40-year-old woman, para 1 + 3, with a history of cesarean section and two prior laparoscopic surgeries for ovarian cysts (cyst drainage and cystectomy), who presented with abdominal pain. Details of these procedures were unavailable. Examination revealed left-sided tenderness; CA-125 and CA 19-9 were normal. Transvaginal ultrasound showed a 6 cm simple ovarian cyst, with a normal uterus and mild free fluid in the pouch of Douglas. Due to financial constraints, MRI was not performed. She was managed with oral contraceptives for two months. At follow-up, repeat ultrasound



showed a left-sided complicated ovarian cyst measuring 75 mm. In view of the cyst's increasing size, lack of response to medical management, and the patient's desire to conceive, surgical intervention was planned. Laparoscopy revealed dense adhesions and a large, thin-walled, blue cystic lesion in the pouch of Douglas, adherent to the left ovary. The cyst was drained, and the capsule was completely excised from the posterior uterine wall and pouch of Douglas. Histopathology showed fibrous connective tissue lined by a single layer of mesothelial cells, with no evidence of malignancy—consistent with a peritoneal inclusion cyst. The patient recovered well and was discharged the next day. At her 10-day follow-up, she was symptom-free, and the ultrasound was normal.

Conclusion: This case emphasises the need to consider peritoneal inclusion cysts in the differential diagnosis of pelvic cysts, especially in women with prior surgeries. Imaging alone may be insufficient for accurate diagnosis, and definitive treatment often requires surgical exploration. Establishing standard management guidelines is essential to avoid unnecessary interventions and optimise patient outcomes.



CASE REPORT: ADNEXIAL TORSION

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Problem statement: Adnexal torsion is a gynecological emergency characterized by the twisting of the ovary, fallopian tube, or both. This may lead to decreased blood flow and finally to tissue damage. This condition can occur in women of all ages, though it is most common during reproductive years. The causes are represented by Ovarian masses or cysts, ligament laxity sudden trauma or hormonal changes. The symptoms include acute pelvic pain nausea and vomiting. can occur in women of all ages, though it is most common during reproductive years. Prompt diagnosis and management are critical to preserve ovarian function and prevent complications. **Methods:** The paper represents a case report of a 28-year-old woman, presenting with nausea, vomiting and abdominal pain, symptomatology which occurred within 12 hours. She was diagnosed 3 months prior with Ovarian cyst-Scor ROMA- 6,8%. **Results:** Ultrasound examination revealed the presence of a 110/90 mm tumoral mass with thin walls and ground glass content and 2 papillar structures of 25 mm, located in the projection area of the right adnexa. The diagnosis of adnexal torsion is established, for which surgical intervention is performed. Intraoperative, necrosis of the right fallopian tube is observed, and adnexectomy is performed. Subsequent progress is favorable. The histopathological examination and IHC tests revealed a borderline serous tumor of the right ovary and tubar intraepithelial serous carcinoma. **Conclusions:** Adnexal torsion is one of the main complications in ovary cysts. Rapid diagnose and management are playing an important role in preventing irreversible damage and preserving ovarian function Typically treatment consists of detorsion or in necrosis complicated cases adnexectomy is performed via laparoscopy.

EFFECTS OF A MONOPHASIC HORMONAL CONTRACEPTIVE WITH NORGESTIMATE + ETHINYLESTRADIOL ON MENSTRUAL BLEEDING: INTERIM ANALYSIS OF A MULTICENTER, PROSPECTIVE, OPEN-LABEL, NON-COMPARATIVE STUDY IN ITALY

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Problem statement: Norgestimate (NGM) is a progestin with negligible androgenic activity, available in combination with ethinylestradiol (EE) as a monophasic combined oral contraceptive (COC). Despite its long-standing use, recent data on its broader impact beyond contraceptive efficacy are limited. The primary objective of the study is to evaluate the cycle control of a monophasic COC containing NGM 0.25 mg and EE 0.035 mg. Its impact on mood, sexual function, acne and dysmenorrhea are also evaluated utilizing established methodologies and patient-reported outcomes. **Methods:** This ongoing prospective multicentric study involves 228 healthy Italian women aged 18–35, starting or switching to this COC. Enrollment began in July 2023. The participants are asked to complete a 6-cycle diary recording menstrual cycles characteristics, unscheduled bleeding, dysmenorrhea (using a 100-mm visual analog scale (VAS)) and adverse events. Acne is assessed using the Global Acne Grading Scale (GAGS), mood via the Profile of Mood States (POMS) and sexual function using the Female Sexual Function Index (FSFI) at baseline, 3 and 6 months. **Results:** Currently, approximately 40% of the target population has been enrolled. These analyses included 32–38 patients with complete data at baseline and cycles 3 and 6, depending on the parameter. Breakthrough bleeding data show no relevant change from baseline. No significant differences were observed in pulse, blood pressure or body weight. By cycle 6, withdrawal bleeding occurred in all women; cycle duration and regularity reached 100%, and flow shifted toward lighter bleeding, with only 1/36 reporting heavy flow. Mean VAS score for dysmenorrhea decreased from 50.5 to 28.1 at cycle 6. Total Mood Disturbance average scores from POMS also declined. Sexual dysfunction prevalence dropped from 58% to 42%, while the proportion of patients without acne rose from 45,9% to 67,6% at cycle 6. **Conclusions:** Preliminary results suggest that monophasic COC NGM/EE 0.25mg/0.035mg improves menstrual cycle control, could reduce dysmenorrhea and appear to have a positive trend on mood, sexual function and acne. Nevertheless, these encouraging findings must e interpreted cautiously due to the limited number of patients enrolled evaluated. Ongoing data collection will be crucial to confirm these tendencies.

Italfarmaco SpA is study sponsor.

PATIENT WITH TWO SYNCHRONOUS TUMORS OF GYNECOLOGICAL LOCALIZATION

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Summary: Introduction: Multiple primary tumors occurring in the same patient are relatively rare. Multiple or synchronous independent tumors are two or more tumors that arise at the same time, independently of each other. They were first described by Billroth in 1879. The frequency ranges from 2 to 10%. According to the results of the EUROCARE-4 study, multiple tumors account for 6.3% of all malignant tumors in the total population, ranging from 0.4% to 12%. In the future, with the extension of life expectancy, earlier detection of malignant diseases, better treatment and an increase in the number of oncology patients, we can expect a larger number of patients with multiple malignant diseases. The aim of this study is to present a patient with two different tumors of gynecological origin. **Case report:** A 54-year-old patient was referred for an examination by the Health Care Center due to abdominal pain and ultrasound of the seen myoma on the uterus. Gynecologists were not monitored on a regular basis. Her last menstruation was a year ago, and she has a history of not having given birth. It denies surgeries, chronic diseases and drug allergies. After the examination, an intervention is scheduled for endometrial hyperplasia and tumors markers are required due to suspicious ovarian tumor. Upon receipt of histopathological findings (Endmetroid carcinoma, FIGO gr 2), the patient was referred to the Council. After complete preoperative preparation and according to the conciliary decision, laparotomia mediana was performed, followed



by total hysterectomy with adnexectomy on both sides, lymph node biopsy, appendectomy, peritoneal biopsy and omentectomy. Histopathological findings: The patient was diagnosed with synchronous ovarian carcinoma and endometrial carcinoma (Clear cell carcinoma ovarii bilateralis FIGO stage IIIA1 and Carcinoma endometrii endometrioides, NOS, FIGO stage IB). It is indicated to start treatment with Taxol CBDCA with Bevacizumab. **Conclusion:** Distinguishing between primary, independent, synchronous and metastatic tumors is important not only for the prognosis, but also for the application of adequate therapy. There are no reliable clinical and histological criteria for diagnosis. Treatment is always tailored to each patient's individual approach.

VAGINAL LEIOMYOMA: NAVIGATING THE DIAGNOSTIC AND THERAPEUTIC UNCERTAINTIES

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Vaginal leiomyomas are rare benign mesenchymal tumors. In the literature, there are only a few number of cases documented. Because of the rarity of the disease and the complexity of the vaginal anatomy, definitive diagnosis and treatment are challenging for clinicians. AL is a 25-year-old nulligravid who presented with a vaginal mass in the sub-urethral area and recurrent foul-smelling vaginal discharge. The vaginal origin of the mass was verified through ultrasonography and MRI. The initial attempt at excision of the mass was unsuccessful due to the very close proximity and dense adhesion to the urethra and the bladder. Further investigation using doppler studies and vaginal mass biopsies helped rule out malignancy. The patient was given 3 doses of GnRH after which she underwent preoperative cystoscopy, bilateral retrograde pyelography, bilateral double J stenting followed by excision of the mass. Final histopathologic diagnosis is leiomyoma. Sub-urethral leiomyoma is a rare benign vaginal tumor with a broad range of symptoms. Malignant transformation and recurrence are rare. Pre-operatively, ultrasonography and magnetic resonance imaging are useful modalities to establish the morphology, location, and relationship of the mass to the adjacent structures. Surgical excision is the treatment of choice. Establishing the diagnosis requires a high index of clinical suspicion, given its potential confusion with cystocele, Bartholin gland cyst or skene duct abscess. Despite its benign nature, reports have indicated local recurrence following incomplete resection and sarcomatous changes.

WHAT HAS ERYTHEMA AB IGNE GOT TO DO WITH MULTIPLE UTERINE FIBROIDS

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Problem Statement: Erythema Ab Igne is a skin condition, also known as "toasted skin syndrome" caused by chronic exposure to subthreshold-intensity infrared radiation not intense enough to burn the skin. Over weeks to months, repeated and prolonged heat exposure leads to the development of a rash. This presents initially as mild, transient, and erythematous macules and patches in a reticular pattern, then eventually becomes a hyperpigmented lesion. Heating pads are widely used, and for patients with chronic pain, as they provide relief. This is a multiparous Caucasian female with chronic abdominal and pelvic pain due to multiple uterine fibroids, who developed erythema Ab Igne from prolonged heating pad use. **Methods:** Case report; institutional review board exempt. **Results:** A 45-year-old multiparous Caucasian woman with diabetes, chronic pelvic pain, dysmenorrhea, and uterine fibroids presented with six months of worsening back and pelvic pain, severe dysmenorrhea, and menometrorrhagia. Past history included a known intrauterine leiomyoma, two cesarean deliveries and a malpositioned intrauterine device. Imaging demonstrated an enlarged uterus (14 cm by ultrasound, 16 cm by CT). Hemoglobin was 9.9 g/dL. On exam, she had a diffuse hyperpigmented reticular rash across her back. She admitted to daily heating pad use for six months to control pain. She was counseled to discontinue heat therapy and treated with parenteral iron, followed by oral supplementation, with plans for definitive management of her fibroids. Three months later, she was readmitted with heavy vaginal bleeding, worsening pelvic pain, and hemoglobin of 6 g/dL requiring transfusion. After discussion of risks and

benefits, she underwent total abdominal hysterectomy with left salpingo-oophorectomy. Pathology confirmed leiomyomas without hyperplasia or malignancy. She recovered well and was discharged on postoperative day two. **Conclusion:** This case highlights Erythema Ab Igne as a complication of chronic heating pad use in patients with chronic pelvic pain from uterine fibroids. Clinicians should counsel patients on safe heat use and consider dermatologic side effects when evaluating persistent rashes in this population.

LAPAROSCOPIC ASSESSMENT OF THE OVARIES AFTER RESOLVING THE ENDOMETRIOMAS WITH ULTRASOUND-GUIDED TRANSVAGINAL ETHANOL SCLEROTHERAPY - A CASE SERIES

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Problem statement: Ultrasound-guided transvaginal ethanol sclerotherapy belongs to one of the minimally invasive methods for ovarian endometrioma management. Complications of this procedure are rare and usually include mild discomfort such as abdominal pain, abscess formation, or fever. Nevertheless, some reports suggested a possible link between this method and the presence of pelvic adhesions. Therefore, our study aimed to describe ultrasound-guided transvaginal sclerotherapy with high-percentage ethanol, which resulted in the preservation of normal anatomy of the minor pelvis and the normal appearance of affected ovaries in the laparoscopic images obtained during post-sclerotherapy surgeries. **Methods:** We present four cases of patients who underwent laparoscopic surgeries several months after ethanol sclerotherapies for ovarian endometriomas. All ultrasound-guided transvaginal ethanol sclerotherapies were performed according to the following protocol. The procedures were performed under general anesthesia. The cyst content was aspirated under ultrasound guidance, and endometrioma cavities were flushed with saline. 96% ethanol was injected into the cyst cavities to approximately 60% of their initial volume for ten minutes, and then was completely aspirated. All patients underwent laparoscopic surgeries after sclerotherapy. One of the patients underwent a myomectomy and a cystectomy of an endometrioma one month after sclerotherapy. The other patients underwent tubal patency tests one, three, or seven months after sclerotherapy. **Results:** The sclerotherapies were successfully conducted. Laparoscopic images obtained during post-sclerotherapy surgeries revealed the normal anatomy of the minor pelvis and the normal appearance of affected ovaries. Moreover, all patients reported alleviated pain symptoms after the procedure. **Conclusion:** Ultrasound-guided transvaginal ethanol sclerotherapy did not induce excessive adhesion formation in the pelvic cavity and did not affect the ovaries. Hence, this treatment method did not impair fertility in this mechanism.

INCIDENTAL UTERINE INFLAMMATORY MYOFIBROBLASTIC TUMOR FOLLOWING MYOMECTOMY: A CASE SERIES AND LITERATURE REVIEW

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Background: Uterine inflammatory myofibroblastic tumors (IMTs) are uncommon mesenchymal neoplasms with intermediate malignant potential, characterized by a significant risk of local recurrence (~25%) and a low risk of distant metastasis (~2%). Fewer than 100 uterine cases have been reported, and diagnosis is often incidental following surgery for presumed leiomyoma. IMT is associated with ALK gene rearrangements, with immunohistochemistry (IHC) for ALK serving as a sensitive diagnostic and therapeutic marker. **Case Description:** In 2024, three cases of uterine IMT were diagnosed at KK Women's and Children's Hospital. All patients were premenopausal women aged 30, 36, and 44 years who underwent elective laparoscopic myomectomy for presumed uterine fibroids. Morcellation was performed within a containment bag in each case. Histopathology unexpectedly revealed IMT. Completion surgery, consisting of hysterectomy and peritoneal survey, was recommended for the 44-year-old patient but declined. The two younger women expressed fertility desires and opted for surveillance. All three patients remain under close follow-up, with surveillance imaging showing no evidence of recurrence to date. **Discussion:** This case series underscores several important



considerations in the diagnosis and management of uterine IMT. First, uterine IMT is likely underrecognized due to its clinical and radiological resemblance to leiomyoma. Second, safe surgical practice, particularly contained morcellation, is essential to minimize intraabdominal spillage and reduce recurrence risk when IMT is later identified histologically. While surgery remains the primary treatment, recognition of IMT has important implications. In the event of recurrence, targeted therapy with tyrosine kinase inhibitors can be considered, especially in ALK-positive cases. As many patients are of reproductive age, management should balance oncologic safety with fertility preservation. The occurrence of three cases within a single institution over one year suggests that uterine IMT may be more prevalent than previously thought. Greater awareness among clinicians and pathologists is critical for timely diagnosis and individualized management.

ROBOT-ASSISTED EXCISION OF A PRIMARY OVARIAN LEIOMYOMA: A CASE REPORT

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Background: Leiomyomas are the most common benign tumor of the uterus. These smooth muscle cell tumors can also occur in other organs including genitourinary tract, but are rare. Ovarian leiomyomas are likewise uncommon, accounting for 0.5-1% of all ovarian tumors. Differential diagnosis of ovarian leiomyomas from other ovarian tumors, particularly fibromas, remains challenging in preoperative imaging, making it difficult to confirm definitive diagnosis before surgery. With the increasing use of robot-assisted surgery in gynecology, precise tumor dissection and ovarian preservation have become possible in young, fertile women. We present a rare case of a primary ovarian leiomyoma treated with robot-assisted surgery illustrating both diagnostic and surgical considerations. **Case presentation:** A 40-year-old nulliparous woman presented with a one-year history of heavy menstrual bleeding. She had been diagnosed with severe anemia (hemoglobin 5.2g/dL) in her routine health checkup and had received supportive treatment before being referred to our clinic. In our outpatient clinic, we found a 10x8cm sized intramural myoma, a 4x4cm sized subserosal myoma, and a 5x4cm sized left ovarian mass, initially suspected as fibroma via pelvic ultrasound and magnetic resonance imaging (MRI). Robot-assisted uterine myomectomy was performed for the uterine lesions, followed by excision of the ovarian mass. Meanwhile, the tumor was clearly separated from the ovarian cortex unlike typical fibromas and was successfully dissected using robot-assistance without damage of the normal tissue, allowing ovarian preservation. The excised tumor grossly resembled a leiomyoma, and histopathology confirmed leiomyoma. Immunohistochemical staining for desmin was positive, supporting a smooth muscle cell origin, most likely arising from the ovarian vessel. The patient recovered without acute complication and returned to her normal menstruation cycle. **Conclusion:** We report a Robot-assisted surgical case of a primary ovarian leiomyoma, which is a rare benign mesenchymal tumor arising from the smooth muscle of walls of ovarian vessels. This case emphasizes the importance of considering ovarian leiomyoma in the differential diagnosis of solid ovarian mass and demonstrates the advantages of robot-assisted surgery in achieving precise tumor removal without damage of normal ovarian tissue, leading to fertility preservation in reproductive-age women.

RAPID PROGRESSION OF MUCINOUS BORDERLINE OVARIAN TUMOR TO INVASIVE CARCINOMA: A CASE REPORT

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Borderline ovarian tumors (BOTs) are generally considered to have a favorable prognosis due to their low malignant potential. The recurrence rate of these tumors is approximately 10%, and the 10-year overall survival rate is around 97%. However, in rare cases, BOTs can rapidly progress to invasive carcinoma, leading to metastasis and fatal outcomes. We report a rare case of rapid malignant progression of a mucinous borderline ovarian tumor to invasive carcinoma, followed by metastasis and a fatal clinical outcome. A 59-year-old woman presented with abdominal pain, and a 9.3 cm multiloculated ovarian cyst was discovered in the right ovary. Tumor markers were within normal limits (CA-125, 11.9 U/mL [reference: 0–35]; CA 19-9, 3.4 U/mL [reference:

0–37]). The patient underwent single-port access bilateral salpingo-oophorectomy, and pathological examination confirmed a mucinous BOT (stage IA). Postoperative PET-CT revealed no evidence of metastasis, and during two years of follow-up with tumor markers and CT scans, no metastatic lesions were detected. However, two years after surgery, an umbilical mass was identified and pathological examination confirmed metastatic mucinous adenocarcinoma of ovarian origin. The patient underwent excision of the mass and received six cycles of paclitaxel-carboplatin chemotherapy. One month after completing chemotherapy, the patient developed abdominal pain and was diagnosed with perforated appendicitis. During the subsequent surgery, multiple seeding nodules were identified in the peritoneal cavity. Pathological examination of the appendix also confirmed metastatic carcinoma of ovarian origin. Following the diagnosis of peritoneal dissemination, the patient was started on second-line chemotherapy. Despite chemotherapy, the patient subsequently developed adhesive ileus, requiring surgical intervention. Intraoperatively, widespread peritoneal metastases were again observed. The patient's disease continued to progress despite systemic therapy and supportive care. The patient died nine months after the umbilical recurrence. This case demonstrates the rare but aggressive progression of a mucinous borderline ovarian tumor to invasive mucinous adenocarcinoma, with a fatal outcome. BOTs are generally associated with favorable outcomes, but this case demonstrates that they may occasionally recur rapidly and progress in an aggressive manner. Therefore, careful and long-term surveillance is essential to detect such atypical recurrences and to provide timely management. There are no COI.

RETROPERITONEAL ECTOPIC PREGNANCY FROM A TERTIARY OBSTETRICS HOSPITAL IN VIETNAM: A CASE SERIES AND LITERATURE REVIEW

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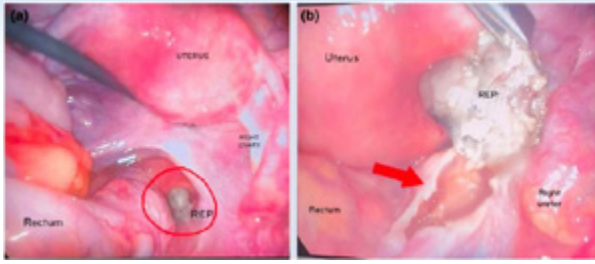
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Problem statement: Retroperitoneal ectopic pregnancy (REP) is one of the rarest forms of ectopic gestation, with fewer than 50 cases reported in the English literature. Its atypical anatomical location complicates timely diagnosis and effective management, potentially resulting in life-threatening outcomes. The increasing incidence of REP, particularly in women with a history of assisted reproductive technologies or salpingectomies, underscores the need for greater clinical awareness and evidence-based treatment strategies. **Methods:** We present a retrospective case series of three REP patients treated at a tertiary obstetrics hospital in Vietnam, spanning 2016 to 2023. Clinical data were collected from medical records, including patient history, diagnostic imaging, serum β -hCG levels, treatment modalities, and outcomes. Each case underwent diagnostic evaluation using ultrasound and/or magnetic resonance imaging (MRI), followed by tailored medical and/or surgical management. A literature review was conducted to contextualise findings. **Results:** Case 1 involved delayed diagnosis post-in vitro fertilisation, ultimately requiring two surgical interventions. Case 2 was managed non-surgically with a multi-agent chemotherapy regimen due to suspected gestational trophoblastic disease, resulting in mass reduction and a subsequent successful intrauterine pregnancy. Case 3 demonstrated combined surgical excision and methotrexate therapy for a pathologically confirmed choriocarcinoma. Across cases, high serum β -hCG levels and suspicious imaging were critical to diagnosis. The management approach evolved from isolated surgical or chemotherapeutic strategies to a comprehensive, multimodal regimen tailored to the clinical scenario. **Conclusion:** REP poses significant diagnostic and therapeutic challenges due to its rarity and potential for severe complications. A high index of suspicion is warranted in patients with elevated β -hCG levels and inconclusive transvaginal ultrasound findings. MRI and transabdominal ultrasound play a vital role in localising ectopic gestations. Multidisciplinary management—combining surgery, chemotherapy, or both—should be individualised based on the patient's clinical stability, gestational location, and histopathological findings. This case series highlights an institutional learning curve and contributes to the limited literature on REP, advocating for refined diagnostic protocols and treatment algorithms.





A CASE OF UTERINE ADENOMATOID TUMOUR WITH CYSTIC FEATURES PRESENTING AS LARGE OVARIAN CYST

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Problem statement: Adenomatoid tumours are rare benign tumours of mesothelial origin arising from the reproductive tract. They may mimic uterine fibroids, ovarian cysts or other malignant conditions. They are usually small in size and are diagnosed histologically after surgical removal. We present a case of uterine adenomatoid tumour with cystic features presenting as a large ovarian cyst. **Methods:** The patient was a 37-year-old single nulliparous female with past medical history of benign breast and thyroid nodules, and a previous open appendectomy. She was referred from her GP for a large right ovarian cyst that was found incidentally on health screening. She was asymptomatic and physical examination was unremarkable. Ultrasound pelvis showed a 12 cm right adnexal multilocular cyst with thickened septa and vascularity. The cyst had an Ovarian-Adnexal Reporting and Data System (O-RADS) score of 4. Fibroids measuring up to 4 cm were also noted. A normal right ovary was not visualized and the left ovary was normal. Ovarian tumour markers were normal. A CT scan of the thorax, abdomen and pelvis showed no pelvic side wall involvement, ascites, peritoneal disease or regional adenopathy. The patient was keen for future fertility. **Results:** The patient underwent an open myomectomy and right ovarian cystectomy. Intraoperatively, a large uterine mass with 2 cystic components (8 cm and 5 cm) arising from the right posterior uterine wall was noted. This was thought to be likely a subserosal degenerated fibroid with bilocular cystic components. A separate pedunculated fibroid of 4cm was also noted at the left uterus. A right ovarian corpus luteal cyst was also seen. Final histopathology revealed that the larger mass arising from the uterus was an adenomatoid tumour with cystic features, whereas the smaller mass was a uterine leiomyoma. The patient recovered well after the surgery. **Conclusion:** This case demonstrates that although adenomatoid tumours, especially those with cystic features are rare, they can often mimic other gynaecological pathologies. Surgery is the mainstay of treatment and prognosis is generally favourable. Histopathological assessment should be performed for definitive diagnosis.

VAGINAL NATURAL ORIFICE TRANSLUMINAL ENDOSCOPIC SURGERY (vNOTES): AN ALTERNATIVE APPROACH FOR MANAGEMENT OF TUBAL ECTOPIC PREGNANCIES, THE SINGAPORE EXPERIENCE

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Problem Statement: Conventional transabdominal laparoscopy has been the go-to surgical technique for gynaecological emergencies. In the last decade, vNOTES has been an emerging minimally invasive surgical technique for gynaecological surgeries. It has been increasingly utilized for benign hysterectomies and benign adnexal surgeries such as salpingectomies and cystectomies. The NOTABLE trial, a randomized trial comparing vNOTES with laparoscopy for benign adnexal masses, has shown that vNOTES have shorter operating times, lower pain scores and lower trend of adverse events. Retrospective cohort studies have also shown similar outcomes for management of benign ovarian tumours and gynaecological emergency cases. In Singapore, vNOTES has mainly been used for benign hysterectomies, but has not been widely utilized for gynaecological emergencies, in particular, ruptured ectopic pregnancies. **Methods:** This is a case series of 4 cases of ruptured tubal ectopic pregnancies who underwent vNOTES

salpingectomy, performed in KK Women's and Children's Hospital, Singapore. **Results:** All 4 cases had minimal post-operative pain, minimal blood loss and were discharged on post-operative day one without any complications. Length of surgery was comparable with conventional laparoscopy. **Conclusion:** vNOTES as an alternative surgical approach for gynaecological emergencies have numerous benefits but more robust evidence is needed to prove its advantage over conventional laparoscopy.

OUTPATIENT HYSTEROSCOPIC GUIDED INSERTION OF INTRAUTERINE DEVICE IN PATIENTS WITH A LARGE COMPLEX CAESAREAN SCAR DEFECT (NICHE)

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Problem Statement: A niche in the uterus, can be present up to 65.4% in women with previous caesarean sections. Majority of these women are asymptomatic. Intrauterine device (IUD) migration into caesarean section niches can be as a result of initial placement of the IUD, or as a result of dislodgement of the IUD into the niche. This can be a potential concern as the IUD can become embedded or perforated through the large complexed niche, leading to complications like abnormal bleeding or pain. Interventions such as insertion of IUD under ultrasound guidance, or niche repair for large niches prior to IUD placement had been recommended to prevent such complications. **Methods:** We recommend that outpatient hysteroscopy can be used to guide the placement of IUD in patients with large complex niches, especially in retroverted uteruses where there is a high likelihood of IUD insertion into the niche. **Results:** We present two cases of mirena IUD migration and suspected embedment in the caesarean scar niche, of which an outpatient hysteroscopy was utilized to visualize and remove the IUD, and subsequently used to confirm and adjust the positioning of a new IUD in the uterine cavity. **Conclusions:** Outpatient hysteroscopy is a safe and effective way to guide placement of IUD in patients with a large complex caesarean scar niche.

GYNECOLOGY – OTHER

TRADITIONAL AND COMPLEMENTARY AND INTEGRATIVE MEDICINE (TCIM) FOR PAIN MANAGEMENT IN WOMEN WITH HYSTERECTOMY

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Background: Hysterectomy is the clinical procedure of removing the uterus and its surrounding structure. Hysterectomy prevalence varies widely across high-income countries, ranging from 173/100,000 women in Denmark to 510/100,000 in the United States, with many countries reporting a decline over time due to advances in alternative interventions. The lifetime risk of hysterectomy in the United States is 45%. **Method:** This review will be discussed in line with the literature in order to emphasize the importance of traditional and complementary and integrative medicines used in pain management in women with hysterectomy. Women's health is the state of women's physical, psychological, social, and cultural well-being. In this respect, TCIM has an important place in the relief of post-hysterectomy pain. **Results:** In recent years, interest in TCIM approaches has increased to reduce such side effects and support the healing process. Complementary methods such as meditation, aromatherapy, massage, acupuncture, yoga, breathing exercises, and herbal treatments are utilized to relieve pain and stress levels, improve mood, and support general well-being. In addition, hand and back massage are among the nonpharmacological nursing interventions, and these practices increase the autonomy of the profession. Therefore, they can be used by nurses as a non-invasive intervention to relieve pain. One of these methods is table massage is a cheap and easily applicable method with no side effects and ensures that the body relaxes. It is supportive care based on touch that is well tolerated by patients and makes them feel well. We thought that the increase in circulation and the muscle relaxant effect of massage contributed to these results. It is also known that massage creates an analgesic effect by increasing the release of neurochemical substances such as endorphins and serotonin. Accordingly, the study showed that the reduction in pain was not only a mechanical relief but also effective



in neurophysiological processes. **Conclusion:** In addition, hand and back massage are among the nonpharmacological nursing interventions, and these practices increase the autonomy of the profession. Therefore, they can be used by nurses as a non-invasive intervention to relieve pain.

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DISCLOSURE OF NEGATIVE SEXUAL EXPERIENCES TO GYNAECOLOGISTS AND MIDWIVES: A QUALITATIVE STUDY OF WOMEN'S PREFERENCES

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Problem statement: A negative sexual experience (NSE) can have serious consequences for physical, mental, social, and reproductive health. Worldwide, about one in three women report experiencing physical NSE. Despite this high prevalence, previous research shows considerable variation in how gynaecologists and midwives address the topic. Only a minority consistently inquire about NSE during initial consultations. At the same time, many healthcare providers (HCPs) express a need for more training to improve their communication and referral skills, enabling them to discuss NSE with greater confidence. This qualitative study therefore explores women's preferences regarding disclosure of negative sexual experiences to gynaecologists and midwives, with the aim of identifying how HCPs can best address this sensitive issue. **Methods:** A cross-sectional qualitative design was used with a web-based questionnaire among women who disclosed their negative sexual experience to a gynaecologist or midwife. The questionnaire was distributed via the Dutch Sexual Assault Center, social media channels and outpatient clinics. A reflexive thematic analysis was conducted. **Results:** Based on 147 responses, we identified three themes: (1) women's need for empathy and understanding of trauma response in healthcare providers. This entailed a non-emotional stance, authenticity, validation after disclosure and sufficient time for a conversation. (2) Women's need for healthcare providers to take the lead in addressing negative sexual experiences. This entailed inquiring about negative sexual experiences proactively, informing women about possible connection between negative sexual experience and symptoms, addressing needs and options, and providing follow-up care. (3) Women's need to be in control over the narrative and care pathway. This entailed control over the level of detail women wish to share, the terminology used, medical records, and who is present during consultations. **Conclusion:** The three identified themes of this study can be used to inform education and trauma-informed guidelines on how gynaecologists and midwives can best address negative sexual experiences in practice. By displaying an empathetic attitude and understanding of trauma responses, taking the lead in addressing negative sexual experiences and giving women control over the narrative and care pathway, healthcare providers may avoid further harm or re-traumatisation.

EVALUATION OF KNOWLEDGE AND ATTITUDES ON RATIONAL USE OF BLOOD AND BLOOD PRODUCTS AMONG OBSTETRICS AND GYNECOLOGY, SURGERY, AND ANESTHESIOLOGY RESIDENTS AND FELLOWS IN PHILIPPINE GENERAL HOSPITAL

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Problem Statement: The rational utilization of blood and blood products is heavily influenced by the knowledge and attitudes of physicians on blood transfusion. Obstetricians-gynecologists, surgeons, and

anesthesiologists are among the specialty physicians who frequently use blood products. This study evaluated the knowledge and attitudes on rational use of blood and blood products of residents and fellows in these specialties. **Methods:** A cross-sectional survey was conducted in a representative sample of physician residents and fellows who completed at least one year of training from the department of Obstetrics and Gynecology, Surgery, and Anesthesiology in the Philippine General Hospital. The knowledge on restrictive blood transfusion and utilization of blood products of physicians was compared across different medical specialties and professional levels using Chi-square test and Kruskal-Wallis test. The proportionate distribution of attitude was described.

Results: There were 104 participants. The overall knowledge mean score was 36.4%. The mean score was 69.9% for questions specifically related to restrictive blood transfusion knowledge. Anesthesiology residents and fellows have significantly higher mean knowledge score (42.3%, $p = 0.003$) compared to those from Obstetrics and Gynecology (34.0%) and Surgery (33.9%). There was no significant difference in knowledge scores between residents and fellows. There were no statistically significant differences in restrictive blood transfusion knowledge mean scores either among the different departments or between residents and fellows. **Conclusion:** There is inadequacy in transfusion medicine knowledge among residents and fellows in Anesthesiology, Obstetrics and Gynecology, and Surgery departments in the Philippine General Hospital; hence, further education and training on transfusion medicine is needed.

REPEAT INDUCED ABORTION IN A PORTUGUESE TERTIARY CENTER: A COMPARATIVE ANALYSIS

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Problem statement: Induced abortion (IA) remains a public health concern. In Portugal, IA rates declined until 2021 but have since increased, reaching one IA per four births in 2023. Repeat IA (RIA), defined as more than one IA per woman, reflects reproductive healthcare quality. Identifying its determinants is essential to inform effective interventions. **Methods:** Retrospective observational study including all women attending IA consultations at a tertiary hospital between January 2024 and July 2025. Sociodemographic, obstetric, and family planning (FP) characteristics were compared between women undergoing their first IA and those with RIA. **Results:** Of 1887 IAs performed, 23% were RIA. Women with RIA were older, and had higher BMI, gravidity, parity, and more prior abortions ($p = 0.001$). RIA was also more frequent among women from Portuguese-speaking African countries and those with lower education or unskilled employment ($p = 0.001$). Most women had not attended FP appointments in the preceding year, although attendance was higher among RIA (14.4% vs 8.4%, $p = 0.001$). Prior to the procedure, the majority in both groups were not using contraception (80.3% vs 76.5%). Long acting reversible contraception (LARC) use was rare (1.6% vs 0.7%). Post-procedure contraceptive choices did not differ between groups ($p = 0.484$). Overall, most women chose LARC (59.0% vs 55.1%), mainly IUDs (30.5% vs 28.5%). About one quarter chose non-LARC methods (28.8% vs 21.7%), predominantly combined oral contraceptives (19.9% vs 22.7%). A proportion of women did not select any contraceptive method (12.2% vs 12.8%). Notably, 12.8% vs 16.3% maintained their pre-procedure method. **Conclusion:** RIA is associated with higher gravidity, parity, and socioeconomic vulnerability. Contraceptive use before IA was similarly low across groups. Post-procedure uptake of more effective methods, namely LARCs, was not higher among women with RIA. Despite counseling and free access to contraception, approximately 12% of all women left without selecting a method. These findings suggest that contraceptive failures may not primarily reflect barriers to healthcare or FP services. Sustained investment in sexual education and public awareness campaigns is warranted.



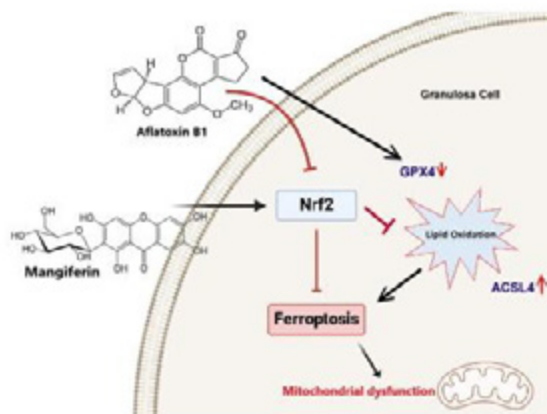
MANGIFERIN TRIGGERS NRF2-MEDIATED PROTECTION AGAINST AFLATOXIN B1-INDUCED CYTOTOXICITY AND FERROPTOSIS IN HUMAN GRANULOSA CELLS

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Problem Statement: Aflatoxin B1 (AFB1), the most prevalent mycotoxin in contaminated corn, peanuts, and rice, poses significant reproductive health risks and is recognized as toxic compound. Polycystic ovary syndrome (PCOS), a common endocrine disorder, involves polycystic ovaries, anovulation, and infertility. Granulosa cells (GCs) are essential for nutrient support and follicular development. Recent research indicates that oxidative stress markers are significantly elevated in GCs of women with PCOS. Oxidative stress, resulting from an imbalance between antioxidants and oxidants such as reactive oxygen species (ROS), plays a key role in PCOS pathogenesis. In response to ROS-induced damage, the body activates protective mechanisms, including nuclear factor erythroid 2-related factor 2 (NRF2), a key transcription factor in the antioxidant defense system that helps mitigate oxidative stress in PCOS. Ferroptosis, a recently identified form of cell death, is characterized by the reduction of the cystine transporter solute carrier family 7 member 11 (SLC7A11) and glutathione peroxidase 4 (GPX4), along with an increase of Acyl-CoA Synthetase Long Chain Family Member 4 (ACSL4). Recent findings confirm NRF2's role in regulating SLC7A11. Mangiferin (MA), a natural flavonoid found in various fruits, has been shown to activate NRF2. However, its protective effects against AFB1-induced damage in GCs have not yet been investigated.

Methods: Human GCs were treated with AFB1 under in vitro conditions mimicking PCOS. Cell viability was assessed using the Cell Counting Kit-8 (CCK8) assay. Lipid peroxidation, oxidative stress, and mitochondrial ROS levels were measured via malondialdehyde (MDA) assay and flow cytometry using dihydroethidium and MitoSOX staining. Protein expression levels were evaluated by Western blotting. **Results:** Our results revealed that AFB1 significantly decreased GCs viability, as shown by CCK8 analysis. AFB1 treatment led to increased lipid peroxidation and ferroptosis, as evidenced by increased ACSL4 and decreased GPX4 expression. However, MA decreased ACSL4 and increased GPX4 expression through NRF2-mediated pathways under AFB1 treatment. **Conclusion:** MA was found to attenuate AFB1-induced oxidative stress and ferroptosis by upregulating NRF2. This study explored the underlying mechanisms by which MA inhibits oxidative stress and ferroptosis induced by AFB1, suggesting a potential strategy for treating PCOS.



FACTORS ASSOCIATED WITH KNOWLEDGE AND ATTITUDES OF FILIPINO OBSTETRICIAN AND GYNECOLOGISTS ON TRANSGENDER HEALTHCARE: A CROSS-SECTIONAL STUDY

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Background: Transgender individuals face significant healthcare disparities, often due to inadequate knowledge and attitudes among

healthcare providers. In the Philippines, limited research exists on obstetrician-gynecologists' (OB-GYNs) understanding of transgender healthcare. **Objective:** To determine the factors associated with knowledge and attitudes of Filipino obstetrician and gynecologist on transgender healthcare. **Methods:** A cross-sectional study was conducted among 123 OB-GYNs from four accredited institutions in the Philippines. A validated questionnaire assessed knowledge and attitudes towards transgender healthcare. Factors examined included age, gender, religion, position, hospital affiliation, and transgender care experience. Chi-square tests and logistic regression were used for analysis. **Results:** Experience in transgender care was significantly associated with good knowledge (adjusted OR 0.29, 95% CI 0.12-0.68 for those without experience). Younger age (26-35 years) was associated with good attitudes (adjusted OR 0.11, 95% CI 0.06-0.67 for ages 36-60). Female gender showed a strong association with good attitudes. Protestant religion and resident position were also associated with better attitudes. Overall, 43.1% of respondents demonstrated good knowledge, while only 10.6% showed good attitudes towards transgender healthcare. **Conclusion:** Experience in transgender care is crucial for improving OB-GYNs' knowledge, while younger age and female gender are associated with more positive attitudes. These findings highlight the need for targeted educational interventions and increased clinical exposure to enhance transgender healthcare competency among Filipino OB-GYNs.

Keywords: Transgender healthcare, obstetrician-gynecologists, knowledge, attitudes, Philippines

GYNECOLOGY - TECHNOLOGICAL INNOVATIONS

GLOBAL ARTIFICIAL INTELLIGENCE (AI) DEVELOPMENT IN GYNECOLOGY AND OBSTETRICS TO SUPPORT CLINICAL PRACTICE CURRENT LANDSCAPE AND FUTURE DIRECTIONS

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Statement: The integration of artificial intelligence into gynecologic and obstetric practices demonstrates significant research growth and promising clinical applications globally. However, this advancement faces substantial challenges including the scarcity of large, high-quality, diverse datasets, and concerns about generalizability across different demographic populations. The transition from research prototypes to clinical implementation is hindered by technological costs, integration complexities within existing healthcare systems, and the need for comprehensive healthcare professional training. **Methodology:** This investigation employed a systematic literature review across multiple databases including TrialTrove.com, clinicaltrials.gov, Google Scholar, PubMed, Europe PMC, and Computer Methods Programs Biomed. Data collection was synchronized during August 2025, focusing on global studies conducted since 2018 to provide a comprehensive snapshot of the current research landscape for AI solutions. Key search terms for literature included "Artificial Intelligence," "obstetrics and gynecology," "AI in obstetrics," "AI in gynecology", "Pregnancy AI", "Women's health AI". **Results:** Regional Distribution: Research leadership in AI applications for gynecology and obstetrics in descending order: Asia, North America, and Europe. **Clinical Applications:** AI diagnostic and predictive applications dominate the clinical trial landscape with the following observations: Ultrasound diagnosis represents the most advanced and evidence-supported application area across pregnancy care domains. Risk prediction models effectively forecast complications including preeclampsia, gestational diabetes, and preterm birth. AI algorithms in cardiotocography (CTG) for fetal monitoring and obstetric ultrasound demonstrated ≥90% accuracy in predicting delivery route. An example; Jialu Li et al (2024) developed an integrated minimax entropy and domain invariance framework for intelligent interpretation of multicentric prenatal CTG data by that showed an improvement on sensitivity of machine learning approaches. Machine learning models show promising accuracy in cervical cancer screening through digital cytology analysis. Breast cancer screening models demonstrated high efficacy in mammography interpretation, with ongoing development of combined imaging-biomarker predictive models. **Conclusion:** AI offers transformative potential for gynecology and obstetrics, enhancing both operations and clinical care. Advancement requires diverse datasets to prevent bias, robust regulations, infrastructure investment, and professional training. Success depends on collaboration between clinicians, data scientists, and policymakers to fully leverage AI's capabilities for improving maternal and fetal outcomes worldwide.



SQUAMOUS CELL CARCINOMA IN A MATURE OVARIAN TERATOMA: A POSTMENOPAUSAL CASE REPORT

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Introduction: Mature cystic teratomas are common ovarian germ cell tumors; however, malignant transformation occurs in less than 2% of cases, typically during the postmenopausal period. It involves the change of one of the components of the dermoid cyst into cancerous tissue of a non-germinal nature. Squamous cell carcinoma (SCC), arising from the ectoderm, accounts for 75–80% of cases, being the most common malignant degeneration. This transformation may result from a long-term, continuous process of squamous metaplasia, atypical hyperplasia, carcinoma in situ, interstitial infiltration, and invasive carcinoma within an unresected mature cystic teratoma. Despite the importance of early detection for improved prognosis, no established diagnostic criteria exist before histological analysis. Preoperative diagnosis remains challenging, as imaging and tumor markers are often nonspecific. **Case Report:** We report a 62-year-old postmenopausal woman presenting with abdominal distention, nausea, and postmenopausal bleeding. Imaging revealed a large ovarian mass (23×18 cm) with peritoneal effusion, suggestive of a teratoma. Laparotomy identified a 30 cm left ovarian mass, and bilateral adnexectomy was performed after intraoperative frozen section was negative for malignancy. Final pathology, however, revealed moderately differentiated SCC arising within a mature cystic teratoma, confirmed by immunohistochemistry (PAX8+, CK7+). Completion surgery, including hysterectomy and omentectomy, detected peritoneal metastases, upgrading the stage from FIGO IA to IIIC1 (peritoneal metastasis and cytology positive for neoplastic cells). Adjuvant carboplatin–paclitaxel chemotherapy was initiated. **Discussion:** This case illustrates three major challenges. First, malignant transformation may be missed on imaging and frozen section, delaying definitive treatment. Second, unexpected upstaging underscores the aggressive nature of SCC in teratomas. Third, and finally, immunohistochemistry is essential for accurate diagnosis. A high index of suspicion is crucial for mature teratomas in postmenopausal women, particularly for intraoperative histopathology. Frequently, subsequent surgical intervention is required, which may increase the risk of tumor progression as well as morbidity and mortality. Despite optimal cytoreduction and chemotherapy, prognosis remains poor in advanced stages. **Conclusion:** SCC arising in ovarian teratomas is rare but clinically significant. In postmenopausal women with large teratomas, early suspicion of malignancy is critical to guide comprehensive initial surgery and may improve outcomes.

USING ULTRASOUND CHARACTERISTICS TO IMPROVE DETECTION OF ENDOMETRIAL HYPERPLASIA AND CANCER IN WOMEN WITH POSTMENOPAUSAL BLEEDING

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Problem statement: Endometrial hyperplasia (EH) and cancer (EC) often present with postmenopausal bleeding (PMB). Ultrasound measurement of endometrial thickness (ET) is routinely used to determine the need for further investigations. With improvements in ultrasound techniques, other ultrasound characteristics may also predict the risk of EH and EC. This study investigated the association between these ultrasound characteristics and the diagnosis of EH and EC in women with PMB. **Methods:** This was a retrospective comparative study performed at a single centre (KK Women's and Children's Hospital) from January to June 2022. Exclusion criteria included incomplete data, incorrectly labelled diagnosis, pelvic ultrasounds not performed by the study centre, and no histopathological diagnosis. Data from 176 women were included for analysis. Our radiology department performed pelvic ultrasounds, documenting ET, intracavity fluid, cystic spaces, endometrial vascularity, and polyps, nodules, or masses. Endometrial biopsies were then obtained. Chi-square and Fisher's exact tests were used to examine the association between ultrasound characteristics and histopathological diagnosis. Receiver-operating characteristic curves were used to analyse sensitivity and specificity at different ET cut-offs. **Results:** Women with EH or EC had a statistically significant higher median ET than those without (EC vs without EC/EH:

12.0mm vs 4.0mm, $p=0.001$; EH vs without EC/EH: 7.5mm vs 4.0mm, $p=0.005$). 33% of participants with EC had increased vascularity, compared to 12% of those without EH or EC ($p=0.009$). Other ultrasound characteristics were not significantly associated with EH or EC. Using ET cut-off ≥ 3 mm to detect EC had sensitivity of 96%, but with lower specificity of 26% and an AUC of 0.6. Women with $ET \geq 3$ mm were three times more likely to have EC as compared to those with $ET < 3$ mm (OR=3.26 (1.39-7.65)). Increasing the ET cut-off to ≥ 4 mm improved specificity to 49% and AUC to 0.7, albeit with a reduction in sensitivity to 89%. **Conclusion:** Despite improvements in ultrasound techniques, optimal ET cut-off remains at 4mm, offering the most balanced trade-off between detecting true positives and minimizing false positives. Only endometrial vascularity was significantly associated with the diagnosis of EC. By combining ET measurements with vascularity assessments, we may more accurately predict the risk of EH and EC in women with PMB.

A RARE CASE OF CARCINOID NEUROENDOCRINE TUMOR ARISING WITHIN A MATURE CYSTIC TERATOMA

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Problem Statement: Mature cystic teratomas (MCTs), also known as dermoid cysts, are common ovarian germ cell tumors composed of elements from multiple germ layers. Malignant transformation occurs in approximately 1–2% of cases, most often into squamous cell carcinoma. Carcinoid tumors are neuroendocrine tumors, and their development within a teratoma is exceedingly rare, with only a limited number of published cases available in medical literature. Many patients may not have symptoms of carcinoid syndrome, making preoperative diagnosis challenging. **Methods:** A 51-year-old perimenopausal woman presented with an asymptomatic abdominal mass that had grown over the past two years. She reported no issues with defecation or urination. During a physical exam, an adnexal mass was found and confirmed via ultrasound. The ultrasound showed a hypoechoic heterogeneous cystic mass 12 cm originating from the ovary. Further testing, including laboratory work and an abdominal CT scan, was conducted. Tumor markers CA-125, AFP, HE4, and CA19-9 were within normal ranges. The patient underwent an exploratory laparotomy, which revealed a large, encapsulated cyst on the left ovary, with no signs of ascites or peritoneal spread. A left salpingo-oophorectomy was performed. Gross examination of the specimen showed a cyst filled with sebaceous material and hair, consistent with a mature cystic teratoma. A 0.8 cm solid nodule was found on the cyst's inner wall. Histopathology confirmed a mature cystic teratoma with well-differentiated carcinoid tumor inside it. The tumor cells appeared uniform and typical of neuroendocrine origin. Immunohistochemical staining was positive for chromogranin A, CD56, and synaptophysin, confirming neuroendocrine differentiation. Surgical margins tested free of tumor. **Results:** Carcinoid tumors from ovarian MCTs are very rare, usually unilateral and confined to the ovary, with a good prognosis after surgery. Unlike gastrointestinal carcinoids, ovarian ones rarely cause carcinoid syndrome because vasoactive substances are metabolized before reaching the liver. In this case, lack of systemic symptoms and negative tumor markers made preoperative suspicion unlikely. **Conclusion:** This case highlights the importance of thorough histopathological evaluation of teratomas, especially when solid areas are present. Early surgery can lead to good outcomes, and awareness of this rare entity helps prevent misdiagnosis and guides proper management.

RELATIONSHIP BETWEEN DEATH ANXIETY, SPIRITUAL WELL-BEING, AND SOCIAL SUPPORT IN PATIENTS WITH GYNECOLOGIC CANCER

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Objective: This study was conducted to determine the relationship between death anxiety, spiritual well-being, and social support in patients with gynecological cancer. **Method:** This descriptive and cross-sectional study was conducted between December 2023 and September 2024. The study population consisted of 519 patients with gynecological cancers. Data were collected using a "Personal Information Form," the "Death Anxiety Scale," the "Spiritual Well-Being



Scale,” and the “Multidimensional Perceived Social Support Scale.” Data analysis was performed using SPSS version 26.0. Descriptive statistics, correlation analysis, and multiple regression analysis were applied, with the significance level set at $p < 0.05$. **Results:** It was determined that 63% of the patients were between the ages of 45 and 65, 36.6% had ovarian cancer, 32.6% had corpus uteri cancer, and 25.4% had cervical cancer. Additionally, 49.5% of the patients were diagnosed with the disease 13–24 months ago, and the treatment method applied was a combination of surgical intervention and chemotherapy. The mean total score of the Death Anxiety Scale was 6.8 ± 2.95 , the Spiritual Well-Being Scale 31.16 ± 5.24 , and the Multidimensional Perceived Social Support Scale 62.46 ± 13.76 . A positive correlation was found between the scores of the Multidimensional Perceived Social Support Scale and the Spiritual Well-Being Scale. However, death anxiety levels were not influenced by spiritual well-being or social support levels ($p < 0.001$). The Multidimensional Perceived Social Support Scale and the Spiritual Well-Being Scale were identified as factors that best explain each other. **Conclusions:** The findings suggest that patients with gynecological cancers experience a moderate level of death anxiety, while their levels of spiritual well-being and perceived social support are high. As the level of perceived social support increases, spiritual well-being also increases; however, no significant relationship was found between death anxiety and either spiritual well-being or perceived social support. **Keywords:** death anxiety, gynecologic cancer, gynecologic oncology, social support, spiritual well-being
 “This study was supported by the Scientific and Technological Research Council of Turkey (TUBITAK).”

RISK FACTORS FOR READMISSION FOLLOWING STAGING SURGERY FOR ENDOMETRIAL CANCER

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Problem Statement: Endometrial cancer is the most common gynecologic malignancy, and staging surgery is essential for its management and treatment. Despite advances in surgical techniques, postoperative complications and hospital readmissions remain a clinical concern. Despite its clinical relevance, the identification of risk factors for readmission warrants further investigation. We aimed to identify factors associated with hospital readmissions following staging surgery for endometrial cancer. **Methods:** A retrospective cohort study of women undergoing staging surgery for endometrial cancer was conducted between January 2016 and December 2022 at a single tertiary center. The primary outcome was hospital readmission within 30 days of surgery. Demographics, clinical, laboratory data and pre intra and postoperative data were collected from electronic records. Univariate and multivariable logistic regression analyses were performed to identify independent predictors of readmission. **Results:** Of the 470 patients, 36 (7.7%) were readmitted within 30 days. Multivariable analysis identified four independent risk factors for readmission: intraoperative complications (OR 15.94; 95% CI 3.22–78.88; $p < 0.001$), preoperative hemoglobin 10 g/dL (OR 5.52; 95% CI 1.23–24.81; $p = 0.026$), prior abdominal surgery (OR 3.26; 95% CI 1.29–8.74; $p = 0.012$) and ASA score ≥ 3 (OR 3.17; 95% CI 1.30–7.74; $p = 0.011$). The most common causes of readmission were infection or fever (30.5%), uncontrolled pain (22.3%), and vaginal bleeding (16.6%). **Conclusion:** The findings emphasize the importance of recognizing risk factors such as intraoperative complications, preoperative anemia, previous abdominal surgeries and elevated ASA scores as predictors of readmission. These findings underscore the importance of risk stratification, optimized perioperative planning, and close postoperative monitoring to improve patient outcomes and reduce avoidable readmissions.

PRE-OPERATIVE NEUTROPHIL TO LEUKOCYTE RATIO AS A MARKER FOR SHORT-TERM POST-OPERATIVE COMPLICATIONS FOLLOWING SURGICAL STAGING OF ENDOMETRIAL CANCER

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Problem statement: Staging surgery for endometrial cancer carries risks of both short- and long-term complications. Identifying preoperative risk factors is essential for improving patient outcomes. This study investigates the association between preoperative complete blood count

(CBC) components and short-term postoperative complications following endometrial cancer surgery. **Methods:** This retrospective cohort study was conducted at a university-affiliated tertiary medical center, involving patients who underwent staging surgery for endometrial cancer from January 2016 to December 2022. Composite short-term postoperative complications included the need for blood transfusions, antibiotic treatment, admission to the intensive care unit (ICU), prolonged hospitalization (defined as exceeding the 75th percentile), and hospital readmissions within 30 days post-discharge. Data were collected on demographics, comorbidities, surgical parameters, and CBC results obtained within 30 days before surgery, including hemoglobin (Hb) levels, platelet counts, white blood cell (WBC) counts with differential, absolute neutrophil and leukocyte counts, and the Neutrophil to Leukocyte Ratio (NLR). Univariate and multivariate analyses were performed to identify CBC components as risk factors for postoperative complications. **Results:** A total of 149 women underwent staging surgery, with 38 (25.5%) experiencing at least one postoperative complication. Patients with complications had lower preoperative hemoglobin levels (average 11.8 vs. 13.3 g/dL, $P < 0.001$). An NLR greater than 3 was significantly associated with complications (52.5% vs. 31.2%, $P = 0.017$) and identified as a significant independent risk factor (OR 3.11, CI 1.01–9.52, $P = 0.047$). Additional risk factors included age over 65, higher tumor grade, and specific surgical approaches. **Conclusion:** These findings emphasize the importance of preoperative CBC components, particularly an NLR 3, as critical risk factors for short-term complications after endometrial cancer surgery. Insights from this study may help clinicians optimize preoperative assessments and improve surgical outcomes. Further research is necessary to investigate additional risk factors associated with postoperative complications.

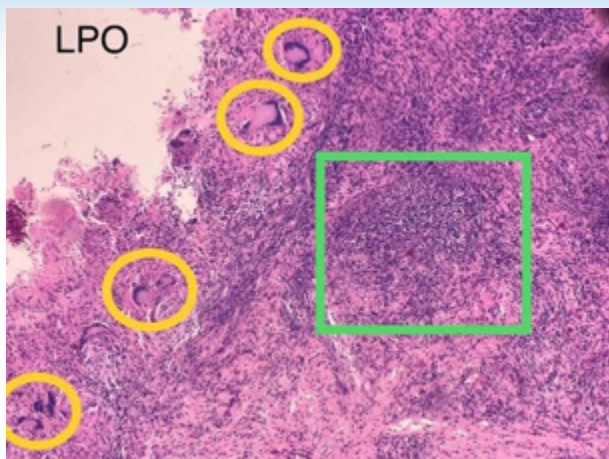
GYNECOLOGY – GYNECOLOGY

TRAVERSING BOUNDARIES: CERVICAL EXTENSION OF PULMONARY TUBERCULOSIS IN A REPRODUCTIVE-AGE FEMALE IN THE PHILIPPINES – A CASE REPORT

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Problem Statement: Tuberculosis (TB) remains a significant public health concern in the Philippines, accounting for 6.8% of global cases—around 500 per 100,000 population—according to the 2024 WHO Global Tuberculosis Report. Reporting TB cases supports evidence-based decisions on funding, drug procurement, and infrastructure, making case reports vital for shaping government and non-government responses. It affects multiple organ systems, and while lungs are the most common, systemic spread leads to extrapulmonary forms, of which genitourinary TB comes second. **Methods:** This case report details a 38-year-old Filipino female presenting with a three-year history of a gradually enlarging hypogastric mass, amenorrhea, and weight loss. Initial investigations suggested a cervical malignancy coexisting with a uterine leiomyoma; however, cervical punch biopsy (Figure 1) revealed granulomatous reaction with caseous necrosis, consistent with TB. Further evaluation confirmed disseminated TB with pulmonary involvement (miliary nodules and cavitation) and extensive intra-abdominal disease with enlarged lymph nodes. Transvaginal sonography findings revealed a disseminated intra-abdominal Koch's infection with uterine involvement, and an enlarged uterus with Myoma Uteri (Posterior Wall, FIGO 4). **Results:** Cervical tuberculosis can mimic carcinoma both clinically and histologically, presenting as ulcerative, proliferative, or hypertrophic cervical lesions. In many cases, it remains asymptomatic until advanced, which makes early detection difficult. Patients commonly report abnormal vaginal bleeding, chronic discharge, or infertility, of which none were seen in the patient's case. Symptoms can be vague, such as those of menstrual irregularities or pelvic pain, which may lead to delayed, missed, or misdiagnosis. In this case, tuberculosis treatment was prioritized following a two-month intensive phase and ten-month maintenance phase with Isoniazid, Rifampicin, Pyrazinamide, and Ethambutol therapy under the TB Directly Observed Treatment Short course (TB DOTS) Program. **Conclusion:** Definitive treatment for the uterine leiomyoma and reassessment of tube patency by hysterosalpingogram will follow once the intensive phase is completed. Given the heavy burden of the two conditions on these patients, increased awareness, early biopsy, and a multidisciplinary approach are vital for timely diagnosis and better outcomes.





PRELIMINARY STUDY ON SERUM ETHANOL LEVELS AFTER ULTRASOUND-GUIDED TRANSVAGINAL ETHANOL SCLEROTHERAPY

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Problem statement: Ultrasound-guided transvaginal ethanol sclerotherapy is an increasingly common method for treating endometriomas. This management involves cyst content aspiration and the following injection of high-percentage ethanol. Some reports suggest that a complication of the ethanol sclerotherapy can be alcohol intoxication; however, so far, none of the studies specifically measured serum alcohol concentrations in patients undergoing sclerotherapy. Therefore, the objective of the study was to assess concentrations of ethanol in serum of women who underwent the procedure. **Methods:** The study was conducted on patients who underwent ultrasound-guided transvaginal ethanol sclerotherapy for ovarian endometriomas. During the procedure, cyst content was aspirated, and the cyst cavity was flushed until clear fluid was obtained. Then, 96% ethanol was instilled into 60% of the initial cyst volume for 10 minutes and then was completely drained. Vein blood samples (5 ml) were collected 20 minutes and 2 hours after the procedure into the EDTA tubes. Immediately after collection, blood samples were centrifuged at 1,500 RPM (21,890 × g) for 5 min. Ethanol concentrations were assessed using the enzymatic method (Roche cobas pro c503). Results less than 0.2g/l of ethanol were considered ethanol-negative, and the results equal to or greater than this value were classified as ethanol-positive. **Results:** We included 30 patients who underwent ultrasound-guided transvaginal ethanol sclerotherapy. 3 out of 30 women (10%) were ethanol-positive in measurement performed 20 minutes post-procedure. In the second measurement, there were 4 ethanol-positive cases (13.3%). There was no correlation between ethanol concentrations and the number of the resolved cysts (p0.05) or the volume of injected alcohol (p0.05). **Conclusion:** Our results indicate that the presence of ethanol in the blood is a rare but occurring complication of the sclerotherapy procedure. Our observations can help make appropriate post-treatment recommendations for patients. More studies are required to monitor the frequency of such a complication further.

UNDERTREATED PAIN IN WOMEN UNDERGOING COMMON GYNECOLOGICAL PROCEDURES: A CALL FOR GENDER-SENSITIVE CARE

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Background: Many women experience significant pain during routine gynecological procedures such as IUD (Intrauterine device) insertion, hysteroscopy, colposcopy, and endometrial biopsy. However, studies indicate that their pain is often underestimated or undertreated by healthcare providers. This issue may be influenced by implicit gender bias, lack of standardized protocols, and inadequate patient preparation.

Objective: To examine the extent of pain experienced by women during outpatient gynecological procedures, identify contributing factors to

inadequate pain relief, and propose practical recommendations for gender-sensitive care. **Methods:** A narrative review of literature published between 2014 and 2024 was conducted using PubMed, Scopus, and CINAHL databases. Studies reporting women's self-reported pain levels, satisfaction with care, and provider behaviors during gynecological procedures were included. Qualitative and quantitative findings were synthesized. **Results:** The review identified a recurring pattern of insufficient pain management in common gynecological procedures such as IUD insertion, colposcopy, and hysteroscopy. Women consistently reported moderate to severe pain, with average scores between 5 and 8 out of 10, while providers often perceived these procedures as minimally painful. Despite this, the use of analgesia was limited, and many women were not offered adequate pain relief or preparation. A notable gap emerged between patients' experiences and clinicians' perceptions, influenced in part by unconscious gender bias and assumptions about women's pain tolerance. Inadequate communication, lack of informed consent about pain expectations, and absence of standardized pain protocols contributed to distress. Psychological effects included anxiety, avoidance of future care, and reduced trust in providers. These issues were more pronounced among women from minority and immigrant backgrounds. The findings highlight the need for patient-centered, gender-sensitive approaches that incorporate routine pain management and improved clinician training. **Conclusions:** This review underscores the need for standardized pain management protocols in outpatient gynecology, emphasizing the routine use of local anesthesia and improved communication with patients. Training programs should incorporate education on gender bias and trauma-informed care to bridge the gap between provider perception and patient experience. Addressing this issue is essential not only to reduce patient suffering but also to strengthen trust, promote adherence to follow-up care, and improve overall quality of women's healthcare.

POSTMENOPAUSAL SPONTANEOUS RUPTURE OF PYOMETRA

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Pyometra is an uncommon condition defined by the collection of pus in the uterine cavity. Its incidence is reported between 0.1 to 0.5% of all gynecological patients. It occurs when there is interference or obstruction of the uterine normal drainage. The main cause is genital tract malignancy, and other causes are treatment such as radiotherapy, benign lesion like fibroid, and congenital cervical anomaly. The accumulation of pus in the uterine cavity and necrotic process of the uterine wall can lead to perforation and spontaneous uterine rupture, an extremely rare complication of pyometra. Its incidence being about 0.01%0.05%. Case: A 83- year-old women transferred from local clinic with peritonitis with focal wall defect of uterus on CT. She had hypertension, diabetes and we treated her in ICU because of her septic shock We started antibiotics and inotropic, not surgery, because of her poor general condition. after 10- days antibiotics treatment, her general condition was recovered, so we had diagnostic laparoscopy. Intra op findings showed pus in the pelvic cavity, and rupture site of the uterine fundus. Peritoneal lavage and drainage was performed. The culture of the pus showed negative. we did not hysterectomy because of her underlying disease and old age. The patient was discharged more than a week antibiotics therapy. Although spontaneously perforated pyometra is rare, the condition must be kept in mind regarding elderly women with acute abdominal pain. Its early diagnosis leads to adequate medical and surgical treatment that can reduce the important morbidity and mortality.

CLEAR CELL CARCINOMA ARISING FROM ABDOMINAL WALL ENDOMETRIOSIS IN A CESAREAN SECTION SCAR: A RARE CASE REPORT

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Objective: Malignant transformation of endometriosis is rare, occurring in approximately 0.7% to 1.5% of all endometriosis cases. Most of these



transformations are observed in the ovaries. Malignant transformation of abdominal wall endometriosis (AWE), particularly in cesarean section scars, is extremely rare and often diagnosed late due to nonspecific symptoms. **Case Presentation:** A 57-year-old woman with a history of two cesarean sections—the last performed in 2000—presented with a long-standing history of cyclic lower abdominal discomfort beginning after her second cesarean delivery. In 2019, she visited the emergency department due to pelvic pain, but her medical history was otherwise unremarkable aside from the cesarean sections. In 2024, she was evaluated at another hospital for a skin lesion near the umbilicus, initially suspected to be a benign tumor based on tissue biopsy. She was subsequently referred to our hospital for surgical management. On physical examination, an ill-defined, reddish-brown lesion with an underlying mass was noted near the umbilical area. Surgical excision revealed a multilobulated mass measuring $7.2 \times 3.7 \times 3.5$ cm. Histopathological examination using hematoxylin and eosin staining, along with immunohistochemistry, confirmed the diagnosis of clear cell carcinoma arising from endometriosis. Postoperative PET-CT imaging showed multiple hypermetabolic lesions in the right chest wall, consistent with metastatic spread. The patient is currently considering systemic chemotherapy. **Conclusion:** Although endometriosis is typically a benign condition, rare malignant transformation—particularly in abdominal wall endometriosis following cesarean sections—should be considered in middle-aged women presenting with mass lesions near surgical scars. Given its rarity, there are no standardized treatment guidelines, and outcomes are generally poor. Management typically includes surgical resection and systemic chemotherapy.

A DIRECT RELATIONSHIP OR A MERE COINCIDENCE?

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Problem Statement: The most common site of ectopic pregnancy (EP) is the Fallopian tube, and its etiology is often associated with inflammation of this site. *Chlamydia trachomatis* (CT) is an organism which colonizes the cervico-vaginal mucosa, being the most common bacterial cause of pelvic inflammatory disease (PID). A CT infection can be a predisposing factor for EP, since autoimmune inflammation leads to tissue damage. Is it possible that an ongoing infection by CT might correlate with a new diagnosis of tubal ectopic pregnancy? **Methods:** Assessment of a case of a PID with the isolation of *Chlamydia trachomatis* by PCR analysis in a woman who simultaneously had a pregnancy suspected to be of tubal location. **Results:** A 29-year-old woman with an amenorrhea of 7w+1d came to the emergency room with a history of pelvic pain, vaginal bleeding and fever. On arrival, she was hemodynamically stable. No other vaginal discharge was noted. An ultrasound was performed, which showed a heterogeneous oval image next to the left ovary, suspected to be a tubo-ovarian abscess (TOA). The blood tests showed an elevation of inflammatory parameters, and a positive beta-HCG (664mIU/mL). She was hospitalized with a suspected PID complicated by TOA and pregnancy of undetermined location. Vaginal and endocervical swabs were collected for *Chlamydia trachomatis*, *Neisseria gonorrhoeae* and *Mycoplasma* and triple IV antibiotic therapy was introduced. During her stay, the ultrasound was repeated, documenting a left annexa measuring 46x40x49mm, with a probable TOA; inside this heterogenous image, another round mass with a “ring of fire” signal was noted, measuring 15x17mm, probably corresponding to an ectopic pregnancy. The beta-HCG was 615mIU/mL by then. A tubal EP was assumed, and methotrexate protocol was started. Vaginal CT was positive. She completed 6 days of IV antibiotics and later discharged on oral antibiotics. Afterwards, beta-HCG gradually decreased, until a negative value was documented. **Conclusion:** In this case report, the timing of diagnosis of both conditions poses a challenge, since we don't know which condition was primarily installed. However, the coexistence of both seems to be in favor of the relationship between CT infection and EP.

HIGH ACCURACY AND EARLY PREDICTION FOR ECTOPIC PREGNANCY IN WOMEN WITH PREGNANCY OF UNKNOWN LOCATION- A MULTICENTRE COHORT STUDY

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Problem statement: The preferred method of differentiating patients with ectopic pregnancy (EP) from those with pregnancy of unknown location (PUL) is still a clinical challenge and no worldwide consensus exists on this issue. The aim of this study is to improve early prediction of EP in women with PUL using a combination of serum human chorionic gonadotropin (hCG) ratio and progesterone at initial visit. **Methods:** This prospective multicentre study included 1575 women with PUL, assessed using hCG ratio and progesterone to stratify EP risk. **Results:** Final outcome were available in 1509 (95.8%) women; 160 EP (10.6%), 548 intrauterine pregnancies (36.3%), 786 failed PUL (52 %), and others. The area under ROC curve for EP prediction using hCG ratio was 0.81. The sensitivity and negative predictive value (NPV) for hCG ratio alone were 0.85 and 0.97, respectively. Combining hCG ratio 1.65 with progesterone 35 nmol/L improved sensitivity to 0.96 and NPV to 0.99. **Conclusion:** Combined serum hCG ratio and progesterone measurement at initial visit reliably rule out EP among PUL patients in real-world clinical practice.

PATIENT UNCERTAINTY IN WOMEN WITH GYNECOLOGIC CANCER

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Introduction: According to Globocan 2020 data, when the most common cancers in women are analyzed; cervical cancer ranks 2nd, endometrial cancer ranks 6th and ovarian cancer ranks 7th. According to the 2024 data in Turkey; among the 10 most common cancers in women, endometrial cancer ranks 4th, ovarian cancer ranks 6th and cervical cancer ranks 9th. **Method:** This review was prepared to discuss patient uncertainty in women diagnosed with gynecologic cancer in line with the literature. **Results:** Cancer patients face many physiological, psychological, social and economic problems due to the prolonged and costly treatment, the need for prolonged hospitalization, and the spread and recurrence of the disease. Uncertainty is an inherent part of life. Cancer patients may perceive different levels of uncertainty as “cause or effect” at any stage of the disease. Uncertainty is always unsettling for people and more debilitating than a situation with a known outcome. It occurs when situations are unpredictable, often due to inconsistent or incomplete information. Merle H. Mishel was the first theorist to address uncertainty in terms of nursing. Within the framework of the concept of “uncertainty in illness”, Nurse Theorist Merle Mishel developed the Uncertainty in Illness Theory (UIT) in 1988, which is an intermediate level theory, and addressed the uncertainty caused by the disease state to the individual and family as a cognitive stressor. It has been found that nursing interventions related to uncertainty management increase the quality of life of patients and are effective in coping with uncertainty during treatment. Studies have shown that uncertainty decreases with the provision of a cognitive framework, informing about the process and providing emotional support. In the literature, there are various studies in which nurses’ uncertainty management interventions are effective. **Conclusion:** Patient education for uncertainty management is one of the most important elements of patient-centered care. Meeting information needs increases satisfaction with treatment and supports informed decision-making. Furthermore, the provision of disease-related information is an important determinant of patient-reported health outcomes.

INTERVIEWING TRAINING ON SELF-EFFICACY AND MENOPAUSAL SYMPTOMS IN POSTMENOPAUSAL OFFICE WORKERS

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Problem statement: Menopausal symptoms can be a significant problem in working women. **Methods:** This study was conducted between 21.05.2022 and 20.05.2024 as a randomized controlled study to evaluate the effect of motivational interviewing training on self-efficacy



and menopausal symptoms in postmenopausal office workers. The study was conducted with a total of 65 postmenopausal administrative personnel, comprising 32 in the intervention group and 33 in the control group, working at five universities located in Ankara. Personal Information Form, Menopause Symptoms Assessment Scale and Self-Efficacy Scale were used to collect the data. In the study, women in the intervention and control groups were provided with online training on menopause and coping with menopausal complaints in the first session, and the training booklet was sent to the e-mail addresses of the women after the training. The women in the intervention group were also offered 3-session motivational interviewing trainings over the phone, consisting of three sessions held one week apart. The statistical significance limit was accepted as p ? **Results:** As a result of the study, no significant difference was found between the women in the intervention and control groups in the total and all sub-dimension scores of the Menopause Symptoms Assessment Scale in the pre-intervention, post-intervention and post-follow-up tests ($p > 0.05$). A significant difference was found between the total scores of the Self-Efficacy Scale of the women in the intervention and control groups in the post-intervention and post-follow-up tests ($p < 0.01$). The total scores of the women in the intervention group in the post-intervention and post-follow-up tests of the Self-Efficacy Scale were found to be higher than those in the control group. **Conclusion:** The study found that motivational interviewing training had no effect on menopausal symptoms but positively affected the level of self-efficacy in postmenopausal office workers. It is recommended to use motivational interviewing trainings to increase the self-efficacy levels of postmenopausal office workers.

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ETHANOL SCLEROTHERAPY: AN EFFECTIVE ALTERNATIVE TO LAPAROSCOPIC SURGERY

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Problem Statement: Sclerotherapy is a reliable, minimally invasive method applicable in outpatient procedures. **Methods:** Thirty women with an indication for transvaginal ethanol sclerotherapy were included at the Hospital Universitario de Canarias. This was a retrospective observational cohort study conducted between May 2023 and March 2025. The indication was the presence of an endometrioma or simple cyst for the treatment of pain or infertility prior to assisted reproduction treatment. We followed a standardized transvaginal ethanol sclerotherapy procedure consisting of an ultrasound-guided transvaginal puncture under local anesthesia. The cyst contents were completely removed and washed with saline solution. Ethanol (96%) was injected intracystically for 15 minutes before being completely eliminated. Failure was defined as a contraindication to starting ethanol injection due to saline leak or a contraindication to continuing ethanol injection due to suspected ethanol leak on ultrasound. Intraoperative complications were defined as pain preventing the procedure from continuing or an allergic reaction to ethanol. Postoperative complications were defined as fever, biological inflammatory syndrome, and ovarian abscess. **Results:** A total of 30 women aged between 23 and 82 years underwent the procedure. The main indication was pain and/or being in an assisted reproduction program. 28.57% were menopausal, 52.38% were endometriotic, and the remainder were simple cysts. The mean volume was 125 ml. The procedure lasted approximately one hour. Twenty percent of patients reported a VAS score of 5 or higher, although they would have the procedure repeated. No cases of intraoperative or postoperative complications were reported. All patients reported improvement in pain and/or were completely asymptomatic. One patient reported self-limited low-grade fever 8 hours after the procedure, which was treated with antipyretics. At follow-up visits at 3 and 6 months, only one patient persisted with a cystic adnexal cavity. This patient had endometriosis, although her pain had improved clinically. **Conclusions:** Transvaginal sclerotherapy appears to be an effective alternative to laparoscopic surgery for the treatment of benign ovarian cysts. It is a reliable, minimally invasive method that can be performed on an outpatient basis. Most

complications can be easily treated with early preventive measures and treatment.

SYNERGISTIC EFFECTS OF RESVERATROL AND CURCUMIN IN PROMOTING APOPTOSIS OF ENDOMETRIAL CANCER CELLS

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Problem statement: Endometrial cancer is one of the most prevalent gynecological malignancies, yet current therapeutic strategies remain limited. Naturally derived compounds, such as resveratrol and curcumin, exhibit anticancer activity individually, but their combined effects in endometrial cancer have not been well characterized. This study aimed to investigate the synergistic role and molecular mechanisms of resveratrol and curcumin in Ishikawa endometrial cancer cells.

Methods: The cytotoxic concentrations of resveratrol and curcumin were first determined using CCK8 assays. Ishikawa cells were treated for 24 hours in four groups: control, 20 μ M curcumin, 200 μ M resveratrol, and 200 μ M resveratrol + 20 μ M curcumin. Apoptosis rates were assessed using flow cytometry. RNA sequencing was performed on each group, followed by bioinformatics analysis and western blotting to identify relevant molecular pathways. **Results:** CCK8 assays indicated that 200 μ M resveratrol and 20 μ M curcumin were optimal co-treatment concentrations. Flow cytometry showed the combined group had the highest apoptosis rate compared with single-drug groups. Transcriptomic analysis revealed significant upregulation of the TNF signaling pathway in the combination group. Additionally, curcumin inhibited NF- κ B signaling, thereby further enhancing apoptotic processes. Western blotting confirmed these findings. **Conclusion:** The combination of resveratrol and curcumin significantly enhanced apoptosis in Ishikawa endometrial cancer cells. Mechanistically, resveratrol primarily activated the TNF pathway, while curcumin suppressed NF- κ B signaling. These findings highlight a potential therapeutic strategy for endometrial cancer using natural compounds in combination.

Disclosure of Interest: The authors declare no competing interests.

THE ROLE OF MICRORNAS, LONG NON-CODING RNAS, AND CIRCULAR RNAS IN THE PATHOGENESIS, DIAGNOSIS, AND THERAPY OF ADENOMYOSIS: A SYSTEMATIC REVIEW

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Problem statement: Adenomyosis is a chronic, estrogen-dependent disorder characterized by endometrial glands and stroma within the myometrium, often causing pain, abnormal uterine bleeding, and subfertility. Accumulating evidence supports a paradigm shift toward adenomyosis as a disorder of dysregulated tissue remodeling. Non-coding RNAs (ncRNAs) - including microRNAs (miRNAs), long non-coding RNAs (lncRNAs), and circular RNAs (circRNAs) - are emerging as regulators of these processes, modulating endocrine response, inflammation, fibrosis, and cell migration. **Methods:** We conducted a systematic review of original studies evaluating ncRNAs in adenomyosis using human tissue samples, in vitro or animal models, and omics/bioinformatic analyses. Literature searches were performed via PubMed and Google Scholar. Eligibility criteria were pre-specified, and 41 primary studies met the inclusion criteria. **Results:** miRNAs were the most studied subclass ($n=26$), followed by lncRNAs ($n=10$) and circRNAs ($n=5$). Key miRNAs (e.g., miR-10b, miR-30c-5p, miR-145) regulate epithelial invasion and EMT via PI3K-AKT, MAPK, and



cytoskeletal axes. The let-7a/LIN28B loop governs estrogen-driven smooth muscle proliferation in the junctional zone, while miR-21 shows compartment-specific effects on decidualization and survival. Exosomal miRNAs (e.g., miR-92a-3p, miR-25-3p, miR-4669) influence immune polarization and show preliminary diagnostic promise. Urinary exosomal miR-92a-3p distinguished cases from controls (AUC 0.94) and declined after hysterectomy; a tissue model combining circ_0008959 with symptom scores achieved strong in-sample discrimination (AUC 0.98). Lower miR-30c-5p levels were associated with dysmenorrhea and heavier bleeding, underscoring clinical relevance. lncRNAs (e.g., HAND2-AS1, H19, TUG1) and circRNAs (e.g., circ_0061140, circPVT1) act through chromatin modifiers and ceRNA scaffolds, linking endocrine and inflammatory signaling. In vivo, TUG1 knockdown improved disease readouts in a tamoxifen-induced mouse model, strengthening translational plausibility. Core signaling pathways - including PI3K-AKT-mTOR, ERK/MAPK, JAK-STAT, Wnt/ β -catenin, and Hippo-YAP - are recurrently modulated by ncRNAs, supporting a model of adenomyosis as hormonally modulated tissue remodeling rather than a static structural anomaly. **Conclusion:** ncRNAs regulate invasion, proliferation, immune remodeling, and hormonal sensitivity in adenomyosis. Mechanistically robust targets (e.g., miR-10b/ZEB1, let-7a/LIN28B) offer translational potential. EV-borne miRNAs are especially promising for non-invasive biomarkers. However, diagnostic models remain exploratory; cycle-matched, multicenter studies with protein-level validation and external replication are needed.

GYNECOLOGY – HPV

EVALUATING AI CHATBOTS ON HPV: QUALITY, READABILITY, AND RELIABILITY

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Problem statement: Human papillomavirus (HPV) is one of the most common sexually transmitted infections globally and is strongly associated with cervical and other anogenital cancers. Increasingly, individuals seek information about HPV, vaccination, and screening through artificial intelligence (AI) chatbots, yet the accuracy, quality, and clinical safety of their responses remain uncertain. **Methods:** Three AI chatbots—ChatGPT-3.5 (OpenAI), Gemini (Google), and Copilot (Microsoft)—were evaluated. A pool of 100 frequently asked questions (FAQs) was generated from WHO, ACOG, CDC, ACS, and ESGO resources; 35 were selected by women’s health nursing experts. Each question was posed in independent sessions to avoid bias. Responses were independently assessed by two reviewers using Ensuring Quality Information for Patients (EQIP), Modified DISCERN, Global Quality Scale (GQS), Flesch Reading Ease Score (FRES), Simple Measure of Gobbledygook (SMOG), and a three-criterion Clinical Safety tool. Descriptive statistics (mean $\pm$ standard deviation [SD], median, minimum–maximum, and interquartile range [IQR]) were reported. Group comparisons were conducted using Kruskal–Wallis tests, and Clinical Safety outcomes (Safe/Unsafe) were compared with the Chi-square test. Analyses were performed in IBM SPSS Statistics v26.0, with p . **Results:** Significant differences were observed among chatbots in EQIP, DISCERN, GQS, FRES, and SMOG scores ($p<0.001$). Copilot achieved higher scores in information quality (EQIP) and readability (FRES), yet its responses required higher education levels (SMOG). Gemini performed best in reliability (DISCERN and GQS). ChatGPT scored lower overall but provided more accessible readability. No significant differences were found in clinical safety, with most responses

judged safe ($p=0.23$). Detailed outcomes are shown in Figure 1.

General Information and Evaluation	ChatGPT (n=35)	Gemini (n=35)	Copilot (n=35)	n values
EQIP	42.83 $\pm$ 3.83 Median: 42.00 Min-Max: 41.00-47.00 25-75%: 42.00-45.00	47.43 $\pm$ 3.91 Median: 47.00 Min-Max: 46.00-51.00 25-75%: 47.00-48.00	49.94 $\pm$ 1.03 Median: 49.00 Min-Max: 48.00-52.00 25-75%: 48.00-51.00	<0.0001
Modified DISCERN	3.89 $\pm$ 0.19 Median: 3.90 Min-Max: 3.90-4.00 25-75%: 3.90-4.00	4.14 $\pm$ 0.48 Median: 4.00 Min-Max: 3.90-5.00 25-75%: 4.00-5.00	4.46 $\pm$ 0.62 Median: 4.00 Min-Max: 3.00-5.00 25-75%: 4.00-5.00	<0.0001
SMOG	51.84 $\pm$ 6.76 Median: 51.00 Min-Max: 43.00-63.00 25-75%: 43.00-62.00	34.99 $\pm$ 0.68 Median: 35.25 Min-Max: 34.00-36.00 25-75%: 34.00-35.00	17.28 $\pm$ 0.07 Median: 17.50 Min-Max: 16.00-18.00 25-75%: 16.00-17.00	<0.0001
FRES	55.43 $\pm$ 3.39 Median: 55.00 Min-Max: 50.00-62.00 25-75%: 53.00-58.00	62.04 $\pm$ 3.85 Median: 62.00 Min-Max: 57.00-67.00 25-75%: 60.00-64.00	66.03 $\pm$ 2.95 Median: 65.00 Min-Max: 61.00-71.00 25-75%: 64.00-68.00	<0.0001
GQS	3.89 $\pm$ 0.71 Median: 3.90 Min-Max: 2.00-4.00 25-75%: 2.00-4.00	4.14 $\pm$ 0.83 Median: 4.00 Min-Max: 3.00-5.00 25-75%: 3.00-5.00	4.46 $\pm$ 0.61 Median: 4.00 Min-Max: 3.00-5.00 25-75%: 3.00-5.00	<0.0001
Clinical Safety	91.4% Safe	97.1% Safe	83.7% Safe	0.2320

Conclusion: AI chatbots can complement HPV-related health communication by providing accessible and rapid information, but they should not be considered definitive sources of medical advice. Developers should improve readability, ensure alignment with up-to-date clinical guidelines, and reduce misleading content. Health professionals must guide patients in interpreting chatbot outputs, while future research should explore multilingual and cross-cultural evaluations, assess user experiences, and investigate the impact of chatbot-assisted education on health literacy and preventive behaviors. **Keywords:** Human papillomavirus (HPV), Sexually Transmitted Infections, Chatbot

VIRAL FOOTPRINTS: MAPPING HIGH-RISK HPV GENOTYPES AND SEXUALLY TRANSMITTED INFECTIONS DRIVING CERVICAL CHANGES IN KAZAKHSTAN

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Problem statement: Both cervical cancer and cervical precancerous lesions pose an important physical and mental health burden for women worldwide. The highest numbers of cervical cancer are in low- and middle-income countries which represents the existing healthcare problems. Human papillomavirus (HPV) is the leading cause of cervical cancer. There are limited data on epidemiology of HPV genotypes in Central Asia. The aim of this study is to describe the distribution of high-risk HPV genotypes among Kazakhstani women and their relationship with cervical precancerous lesions and other sexually transmitted infections (STIs). **Methods:** This is a prospective cross-sectional study conducted in the tertiary care hospital in Astana, Kazakhstan, between November 2024 and March 2025. This study included 397 non-pregnant women of reproductive age (18-45 years). We performed polymerase chain reaction (PCR), liquid-based cytology and targeted cervical biopsies to assess infections and cervical precancerous lesions. Data was analyzed using appropriate univariate and multivariate binary logistic regression models. **Results:** 140 out of 397 (35.3%) patients were tested positive for HPV in our cohort. HPV-16 was the most prevalent (11.34%, 45/397) followed by HPV-52 (6.55%, 26/397) and HPV-33 (5.54%, 22/397). *Mycoplasma hominis* had a significant association with HPV infectivity. There was two times more probability of being HPV-positive with *Mycoplasma hominis* infection ($p = 0.02$). Among biopsy subset (40 patients), 10 patients had mild dysplasia (25.0%), 28 patients had moderate-to-severe dysplasia (70.0%), and 2 of the patients had cervicitis with no identified precancerous lesions (5.00%). HPV-16 was the dominant genotype in moderate-to-severe cervical lesions, consistent with its leading role in cervical carcinogenesis. A positive association between *Gardnerella vaginalis* and severity of cervical dysplasia was recorded, which probably reflects a relationship between this infection and the progression of cervical pathology. Importantly, moderate-to-severe dysplasia were detected on biopsy of women with normal cytology, underlining the limitations of cytology alone and the importance of HPV genotyping. **Conclusion:** HPV-16 is the most prevalent HPV genotype with a strong association with high grade cervical lesions in our cohort. This study results emphasize the role of other STIs in increased risk of HPV infectivity and progression of cervical pathology.

EFFICACY OF A MULTI-INGREDIENT CORIOLUS VERSICOLOR-BASED VAGINAL GEL IN HR-HPV CLEARANCE: FINAL POOLED RESULTS FROM THE PALOMA 1 AND PALOMA 2 CLINICAL TRIALS

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Introduction: Following PALOMA 1's demonstration of Coriolus versicolor-based vaginal gel efficacy in HPV-dependent low-grade cervical lesions, PALOMA 2 incorporated HR-HPV clearance as a secondary endpoint. We present the pooled results on HR-HPV clearance at 6 months from both trials. **Methodology:** Randomised, multi-centre, prospective, open-label, parallel-group, watchful waiting-controlled clinical trial. Unvaccinated HR-HPV positive women aged between 30 to 65 years, with Atypical Squamous Cells of Undetermined Significance (ASCUS) or low-grade squamous intraepithelial lesions (LSIL) cytology and concordant colposcopy were randomised (1:1:1) into: A) Standard regimen: once daily for one month, followed by every other day for five months; B) Intensive regimen: once daily for three months, followed by every other day for three months; C) Control group. This analysis presents pooled 6-month HR-HPV clearance results comparing intensive regimen versus control. HPV clearance was defined as total (negative test/disappearance of all baseline species) or partial (disappearance of ≥ 1 baseline genotype along with normal cytology and concordant colposcopy). All patients signed informed consent, and studies were approved by centralized IRBs. **Results:** Data from 101 patients were analyzed: 48 in the treatment group (PALOMA 1, n=22; PALOMA 2, n=26) and 53 in the control group (PALOMA 1, n=25; PALOMA 2, n=28). A significantly higher rate of HR-HPV clearance was observed in the treatment group compared with controls (85.4% vs 47.2%; p0.0001; RR=1.81). In the subgroup of patients positive for HPV 16, 18, and/or 31 at baseline, clearance rates were also significantly higher in the treatment group (82.6% vs 37.0%; p=0.0016; RR=2.23). **Conclusion:** These findings suggest that the intensive regimen of a Coriolus versicolor-based vaginal gel significantly enhances HR-HPV clearance, highlighting it as a valuable clinical tool for managing HR-HPV infections compared to watchful waiting approach.

Disclosure: This study was supported by Procure Health. Patricia Sanmartin is a Medical Advisor at Procure Health.

GYNECOLOGY - PMS/PMDD

EVALUATION OF A NOVEL FOOD SUPPLEMENT IN THE MANAGEMENT OF DYSMENORRHEA: INSIGHTS FROM A SURVEY TO PRACTICING GYNECOLOGISTS

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Problem statement: Primary dysmenorrhea affects up to 95% of women of reproductive age, with an impact in their quality of life (QoL). Although NSAIDs as first-line treatment are effective, their prolonged use often causes adverse effects including gastrointestinal, renal and cardiovascular problems. DOLCARE® Woman is a novel ginger, curcumin, and palmitoylethanolamide-based food supplement for the management of dysmenorrhea. The recommended regimen is 2 capsules per day during 4 days before menstruation followed by the first 3 days of menstruation. The objective of this project is to determine the opinion of physicians in relation to the effectiveness, satisfaction, and tolerability of DOLCARE® Woman, after its recent commercialization.

Methods: A structured survey of 6 questions was administered to

practitioner gynecologists who have prescribed DOLCARE® Woman to their patients under their standard clinical practice during 2 menstrual cycles. **Results:** A total of 353 gynecologists from Spain responded to the survey. More than 90% of gynecologists reported a perceived improved QoL of their patients, whereas 68% reported a reduction of NSAIDs for pain relief. Moreover 88% of them reported that patients were satisfied/highly satisfied with the treatment and 90% perceived a good tolerability. Lastly, 93% would recommend to other gynecologists the use of DOLCARE® Woman for the relief of dysmenorrhea.

Conclusion: Survey results suggest that DOLCARE® Woman food supplement improves dysmenorrhea with very good tolerability and satisfaction rates. Gynecologists reported that this food supplement can be an excellent option for the management of dysmenorrhea.



Notes





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Italy

Opening remarks

Chair: Pr. Christian Becker

In favor of the embryo

Dr. Kelly Tilleman

In favor of the uterus

Pr. Attilio Di Spiezio Sardo

Symposium on

Friday 28th November
from 12:05-13:05

Place: Hall A

SAVE
THE DATE



GEDEON RICHTER

Laser and Magnetic Stimulation for Women's Health

Course Program:

0. Introduction by Program Coordinator
5 min (Speaker: Zdenko Vizintin)
01. Overview of Laser and Magnetic Technology for Gynecology
15 min (Speaker: Zdenko Vizintin)
- PART I – Laser and Magnetic Stimulation for Urinary Incontinence**
02. Non-Ablative Erbium Laser for SUI – Where are we now?
15 min (Speaker: Dr. Aleksandra Novakov-Mikic)
03. Laser Treatment as an Option for Complications Post Mid-Urethral Sling Surgery for SUI
10 min (Speaker: Zdenko Vizintin)
04. Magnetic Stimulation and Incontinence
10 min (Speaker: Dr. Katja Pirc)
05. How to Select the Proper Patient for Laser Treatment
15 min (Speaker: Dr. Ivan Fistonic)
06. Q&A of Part I
5 min (Moderators: Dr. Aleksandra Novakov-Mikic, Zdenko Vizintin)
- PART II – Laser in Menopause – from Vagina to Vulva**
07. Non-Ablative Er:YAG Laser for GSM – 10 Years of Experience
15 min (Dr. Marco Gambacciani)
08. Laser Treatment of Lichen Sclerosus
15 min (Dr. Aleksandra Novakov-Mikic)
09. Laser and Sexual Health
15 min (Speaker: Dr. Marco Gambacciani)
10. Safety of Non-Ablative Er:YAG Laser in Gynecology
10 min (Speaker: Dr. Ivan Fistonic)
11. Q&A of Part II
5 min (Moderators: Dr. Marco Gambacciani, Dr. Katja Pirc)
- PART III – Emerging Roles for Laser in Gynecology**
12. Effects of Laser on Vaginal Microbiota and Urogenital Infections
15 min (Speaker: Dr. Katja Pirc)
13. Other Laser Applications in Gynecology
15 min (Speaker: Zdenko Vizintin)
14. Q&A of Part III
5 min (Moderators: Dr. Aleksandra Novakov-Mikic, Dr. Marco Gambacciani)
- PART IV – Test**
15. **10 min** End-of-Course Test

Short Course Description:

Course participants will learn the basic principles of using lasers and magnetic stimulation in a variety of non-surgical and surgical procedures within the field of minimally invasive gynecology.

The entire course consists of eleven topics divided into four parts. In Part I the use of FotonaSmooth Erbium laser and magnetic stimulation for female urinary incontinence will be discussed. The second part is dedicated to laser in menopause, while Part III will present additional new innovative applications as well as a range of possible laser treatments. In the last part (IV) participants will complete an End-of-Course Test.

Upon completing the End-of-Course Test, participants will receive the Course Certificate.



Caring Innovation

NOVEMBER 27, 2025
16:30 - 17:15

IBSA INDUSTRY SYMPOSIUM

COGI, ROME
Hall A

HCC: A new frontier in the management of vulvo-vaginal atrophy



Uro-gynaecology

Chairman:

Joaquin Calaf-Alsina (Spain)

Speakers:

Oriol Porta Roda (Spain)

Maciej W. Socha (Poland)

Programme:

16:30 - 16:40 Setting the scene: unmet needs and current challenges in Menopause and VVA
Joaquin Calaf-Alsina (Spain)

16:40 - 16:55 HCC in VVA: from clinical evidence to procedural approach
Oriol Porta Roda (Spain)

16:55 - 17:10 From theory to practice: real world experiences
Maciej W. Socha (Poland)

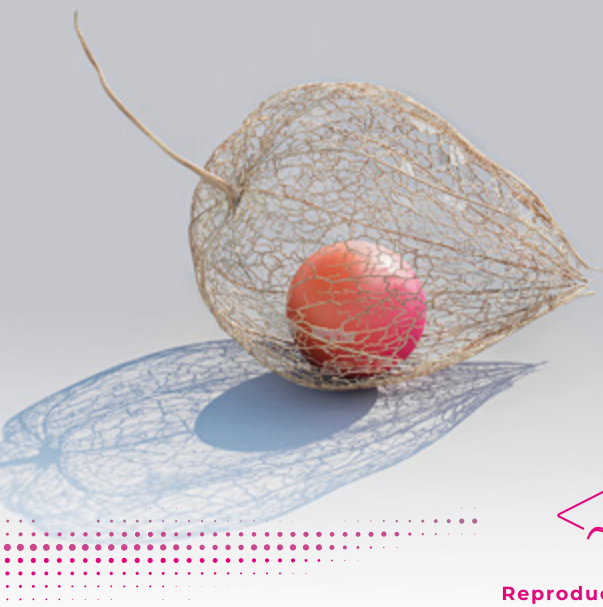
17:10 - 17:15 Closing remarks & Q&A
Joaquin Calaf-Alsina (Spain)

NOVEMBER 28, 2025
14.00 - 15.00

IBSA INDUSTRY SYMPOSIUM

COGI, ROME
Hall A

Hormonal teamwork in follicular growth and ovarian stimulation: from biology to everyday clinical practice



Reproductive Medicine

Chairmen:

Dominique de Ziegler (Cambodia)

Andrea Borini (Italy)

Speakers:

Claus Yding Andersen (Denmark)

Ernesto Bosch (Spain)

Programme:

14:00 - 14:05 Welcome and opening
Dominique de Ziegler (Cambodia)
Andrea Borini (Italy)

14:05 - 14:30 How FSH isoforms, androgens and Inhibin-B work together to support follicular development and selection
Claus Yding Andersen (Denmark)

14:30 - 14:55 Hormone Modulation in Stimulated Cycles: Focus on LH activity
Ernesto Bosch (Spain)

14:55 - 15:00 Closing remarks
Dominique de Ziegler (Cambodia)
Andrea Borini (Italy)

VISIT US AT **BOOTH #6**

Industry Symposia

THURSDAY, NOVEMBER 27, 2025

16:30-17:15 Hall A (Leptis Magna 2)

HCC: A NEW FRONTIER IN THE MANAGEMENT OF VULVO-VAGINAL ATROPHY

Chairperson **Joaquin Calaf-Alsina**, Spain

16:30-16:40 Setting the scene: unmet needs and current challenges in Menopause and VVA
Joaquin Calaf-Alsina, Spain

16:40-16:55 HCC in VVA: from clinical evidence to procedural approach
Oriol Porta Roda, Spain

16:55-17:10 From theory to practice: real world experiences
Maciej W. Socha, Poland

17:10-17:15 Closing remarks & Q&A
Joaquin Calaf-Alsina, Spain

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FRIDAY, NOVEMBER 28, 2025

12:05-13:05 Hall A (Leptis Magna 2)

WHAT MATTERS MOST IN ACHIEVING A SUCCESSFUL PREGNANCY: THE EMBRYO OR THE UTERUS?

Chairperson **Christian Becker**, UK

12:05-12:35 In favour of the embryo
Kelly Tilleman, Belgium

12:35-13:05 In favour of the uterus
Attilio Di Spiezio Sardo, Italy

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GEDEON RICHTER

14:00-15:00 Hall A (Leptis Magna 2)

HORMONAL TEAMWORK IN FOLLICULAR GROWTH AND OVARIAN STIMULATION: FROM BIOLOGY TO EVERYDAY CLINICAL PRACTICE

Chairpersons **Dominique de Ziegler**, Cambodia
Andrea Borini, Italy

14:00-14:05 Welcome and opening
Dominique de Ziegler, Cambodia
Andrea Borini, Italy

14:05-14:30 How FSH isoforms, androgens and Inhibin-B work together to support follicular development and selection
Claus Yding Andersen, Denmark

14:30-14:55 Hormone Modulation in Stimulated Cycles: Focus on LH activity
Ernesto Bosch, Spain

14:55-15:00 Closing remarks
Dominique de Ziegler, Cambodia
Andrea Borini, Italy

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Industry Profiles



www.bayer.com

Women's Health is in **Bayer's** DNA. As a global leader in women's healthcare Bayer has a long-standing commitment to delivering science for a better life by advancing a portfolio of innovative treatments. Bayer is also focusing on innovative options to address the unmet medical needs of women worldwide and on broadening treatment choices. Additionally, Bayer intends to provide 100 million women per year in low-and-middle income countries by 2030 with access to family planning by funding multi-stakeholder aid programs for capacity building and by supporting the availability of affordable modern contraceptives. This is part of the comprehensive sustainability measures and commitments from 2020 onwards and in line with the Sustainable Development Goals of the United Nations.



www.biocodexmicrobiotainstitute.com/en

Founded over 70 years ago with the launch of the world's first probiotic yeast strain, **Biocodex** has evolved into a global pharmaceutical company specializing in microbiota, rare diseases, and women's health — including Saforelle brand. Since 1989, Saforelle has been supporting women's intimate health with expert care solutions that help protect and maintain the natural balance of their intimate health. Biocodex launched in 2017 the Biocodex Microbiota Institute which is committed to better health by raising awareness of the key role played by human microbiota. Through educational, evidence-based, and accessible content, it informs the general public and supports healthcare professionals in integrating microbiota more fully into medical practice.



<https://en.medcanyon.com>

Canyon Medical Inc., Founded back in 1986, is leading, pioneering, and specializing in the R&D, manufacturing, sales & marketing of microwave ablation. By collaborating with doctors to solve clinical challenges and request, we are proud to be the prominent contributor for the use and spread of ablation treatment home and abroad. In China, over 300K patients has been treated successfully with our microwave ablation. In addition, Canyon is expanding its business operations to more than 40 countries and regions around the world, providing the best possible products and solutions globally. Canyon is actively broadening our products portfolio in interventional oncology, like biopsy needle, as well as different kinds of catheters. We are positioning ourselves as a more complete solutions provider in interventional oncology. For more information: <https://en.medcanyon.com/>



www.familyproject.it

Founded in 1997, **Eurofins Genoma Group** operates primarily as a diagnostic partner for genetic, cytogenetic and molecular analysis with the aim of providing a comprehensive service capable of meeting the most diverse needs in the field of molecular diagnostics. We offer one of the most comprehensive diversification of services in the national and international territory, enabling us to give our patients and physicians innovative diagnostic solutions for any clinical need. We are able to meet increasingly specialized requests in the field of cytogenetic and molecular diagnostics, providing our clients with a highly specialized, precise, effective and rapid service.



www.ferring.com

Ferring Pharmaceuticals is a research-driven, specialty biopharmaceutical group committed to helping people around the world build families and live better lives. Headquartered in Saint-Prex, Switzerland, Ferring is a leader in reproductive medicine and maternal health, and in specialty areas within gastroenterology and urology. Ferring has been developing treatments for mothers and babies for over 50 years and has a portfolio covering treatments from conception to birth. Founded in 1950, privately-owned Ferring employs over 7,000 people worldwide. The company has operating subsidiaries in more than 50 countries and markets its products in over 100 countries.



www.fertilovit.com

Gonadosan Distribution GmbH Austrian-based Gonadosan Distribution GmbH is dedicated to the development and research of state-of-the-art nutraceuticals meeting the specific nutritional needs of men and women planning for pregnancy. The Fertilovit® range of supplements is based on the latest scientific data, tested in cooperation with big European ART centers and has been proven to support fertility treatment effectively. A variety of patent-protected preparations offer highly specific solutions for different male and female fertility patients, ranging from mature patients to patients with thyroid autoimmunity, endometriosis, PCOS, and idiopathic OAT.



www.fotona.com

With 60 years of experience, **Fotona** is a world-leading medical laser manufacturer recognized for its innovative, award-winning laser systems for applications in gynecology, surgery, aesthetics & dermatology and dentistry. Fotona's combined Er:YAG and Nd:YAG laser systems are proven to be less invasive and highly effective for clinical and aesthetic gynecology treatments. We are proud to be the first manufacturer to introduce SMOOTH® mode technology for a range of non-invasive laser vaginal treatments. Our global distribution network spans across more than 90 countries, ensuring comprehensive support and service for Fotona laser users, including clinical training, workshops and hands-on demonstrations.



GEDEON RICHTER

www.gedeonrichter.com

Richter aspires to be a global innovator in some key scientific fields, while dedicated to making medicines more accessible worldwide. Founded in 1901, headquartered in Hungary, with a market capitalization of EUR 4.7bn and sales of EUR 2.2bn in 2024, it operates Central Europe's largest R&D hub. Its research drives breakthroughs in Neuropsychiatry and Women's Healthcare, while Biotechnology and General Medicines strengthen its affordable treatment portfolio. Committed to sustainable growth, Richter invests in R&D, manufacturing excellence, and digitalization to advance medical innovation.





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www.ibsagroup.com

IBSA is a Swiss multinational pharmaceutical Company, founded in 1945 in Lugano. Its products are present in over 90 Countries on 5 continents, through subsidiaries located in Europe, China, and the USA. IBSA holds 90 families of approved patents, plus others under development, as well as a vast portfolio of products, covering 10 therapeutic areas. It is one of the global leaders in the reproductive medicine area, offering groundbreaking solutions such as progesterone for subcutaneous injection and highly purified human gonadotrophins. IBSA is also one of the world's leaders in hyaluronic acid-based products including in the urogynaecology area.



<https://ivmedovo.com>

IVMED OVO provides high-quality donor material for IVF, egg, and sperm donation programs. We supply clinics and agencies with reliable end-to-end solutions - from carefully screened donors to logistics and cryopreservation that meet international standards. With an in-house laboratory, advanced technology, and an experienced reproductive medicine team, we ensure consistent quality and proven efficiency. IVMED OVO is a trusted partner for clinics across Ukraine, the EU, and beyond - delivering professional service, transparency, and dependable cooperation.



<https://kitazato-ivf.com/>

Kitazato Corporation is a Japan-based global company specializing in assisted reproductive technologies. Since its foundation in 1996, Kitazato has been researching, developing and manufacturing medical devices and media to support a wide range of fertility treatments supplying products for the entire IVF Life Cycle. Thousands of IVF clinics place their trust in one of Kitazato's largest contributions to the field, The Cryotop® Method, a market leading solution for cryopreservation of human gametes. Collaborating with scientists, physicians, and embryologists, Kitazato provides continuous access to the latest knowledge and technology, as well as all-year-round training programs to IVF professionals to expand their expertise and enhance effectiveness in daily procedures.



<https://procarehealth.com>

Procure Health, a young Spanish pharmaceutical laboratory, stands out for its technological innovation and global reach. Specialising in natural solutions backed by scientific evidence, it offers high-quality therapeutic products for women's health, particularly for HPV, fertility, menopause and osteoarthritis, accompanying women at every stage of their lives.



www.receptura.de

For over 30 years, **Receptura Apotheke** has been a leading expert in natural hormone replacement therapy (HRT) using bioidentical hormones. Based in Frankfurt, Germany, we specialize in the fields of preventive medicine, gynecology, andrology, dermatology, and longevity medicine. Our pharmaceutical expertise also extends to the development of anesthetic gels for dermatological and laser therapies, as well as hormonal cosmetics designed to combat skin aging and support hormonal balance. We are renowned for our individualized formulations, precisely tailored to each patient's unique medical needs. Every product is manufactured under strict laboratory-controlled conditions and adheres to the highest pharmaceutical quality standards, including comprehensive quality testing.



www.soniquence.com

The **Soniquence** SmoothWave "Soniqfrequency" technology is the latest innovation from the Ellman family pedigree. These high-powered generators provide the GYN specialist with the most efficient, dependable, and highest-quality surgical generators available. Whether for LEEP, Condyloma, Anal Tags, or Cosmetic GYN the Soniquence Soniqfrequency technology produces micro-specific incisions and excisions with simultaneous bleeding control without the thermal damage associated with traditional electrosurgical and laser technologies."



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www.yenibio.com

Founded in 2024, **Yeni Biotechnology Inc.** operates in a state-of-the-art facility covering 630 m² of enclosed space, located within the Izmir Aegean Free Zone. The company is dedicated to developing innovative products in the fields of reproductive biotechnology and veterinary biotechnology. Our main product portfolio includes microfluidic sperm sorting chips (ROMAN™, toROMAN™), high-efficiency exosome isolation systems (ExoSiD™). In addition, our on-site advanced R&D laboratories are equipped to perform a wide range of high-precision analyses, including Nanoparticle Tracking Analysis (NTA). These capabilities not only support our product development pipeline but also provide a robust scientific foundation for academic and industrial collaborations.





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Ferring Pharmaceuticals is a privately owned, research-driven, specialty biopharmaceutical group committed to building families and helping people live better lives. We are leaders in reproductive medicine and maternal health, and in areas of gastroenterology and urology. We are at the forefront of innovation in microbiome-based therapeutics and uro-oncology intravesical gene therapy.

Ferring was founded in 1950 and employs more than 7,000 people worldwide. The company is headquartered in Saint-Prex, Switzerland, and has operating subsidiaries in more than 50 countries which markets its medicines in over 100 countries.

Learn more at www.ferring.com, or connect with us on LinkedIn, Instagram, YouTube, Facebook and X (Twitter).



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