



AOGD 2025

47th Annual AOGD Conference 2025

Organised by: Department of Obstetrics and Gynaecology
Lady Hardinge Medical College & Associated Hospitals, New Delhi

**Theme: Tiny Heartbeats to Timeless Strength - Honouring
the Journey of Women Through Birth & Beyond**

Venue: India Habitat Centre, New Delhi

Date: 13th - 14th September 2025

Souvenir & Book of Abstract



AOGD SECRETARIAT

Department of Obstetrics and Gynaecology
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Message

It gives me immense pleasure to extend my warm greetings to all the delegates, speakers, and organizers of the 47th Annual Conference of the Association of Obstetricians and Gynaecologists of Delhi (AOGD), hosted by the Department of Obstetrics and Gynaecology, Lady Hardinge Medical College. The theme—**“Tiny Heartbeats to Timeless Strength – Honouring the Journey of Women Through Birth & Beyond”**—is both powerful and poignant. It reminds us that a woman's health is not confined to the childbearing years but spans an entire lifetime, deserving continuous attention, care, and respect.

Delhi, as the capital city, has made substantial advances in maternal and reproductive health. We have seen a rise in institutional deliveries, stronger antenatal and postnatal outreach, and the integration of respectful maternity care in our public hospitals. Yet, challenges persist—especially when it comes to equitable access, cultural sensitivity, and continuity of care. As we build stronger systems, our focus must extend beyond clinical metrics to the lived experiences of women. We must strive for care that is not only effective but also compassionate, inclusive, and tailored to individual needs.

Conferences like AOGD provide an invaluable opportunity to re-examine our practices, share innovations, and collaborate across disciplines. This year's scientific program covers a rich spectrum—from high-risk obstetrics and fetal medicine to gynecologic oncology, infertility, and menopausal health. The inclusion of debates, case-based discussions, and inter-professional panels makes it dynamic and relevant for today's evolving healthcare landscape.

I especially applaud the effort to involve young professionals and postgraduate students in meaningful academic discourse. They are the future torchbearers of women's health, and their engagement in evidence-based, empathetic care will shape the next era of service delivery.

Beyond clinical advancements, we must also embrace technology and public health strategies to close the gaps in care. Telemedicine, digital health platforms, and AI-assisted diagnostics hold immense potential—provided we implement them ethically and equitably. Strengthening primary healthcare, enhancing referral linkages, and addressing the social determinants of health must be core priorities as we move forward.

The journey of every woman—from adolescence through motherhood, menopause, and beyond—deserves to be met with dignity, continuity, and respect. It is in our hands, as policymakers, practitioners, educators, and researchers, to ensure that her journey is not marked by struggle but by strength, not by silence but by support.

I extend my heartfelt congratulations to the entire organizing committee for curating such a robust and inclusive conference. May this gathering of minds and hearts lead to meaningful dialogue, actionable insights, and a renewed commitment to the care of women across all walks of life.

Wishing you all a successful and inspiring conference.

Warm regards,

(Sunita Sharma)

Message from Guest of Honour



Dr Sarita Beri

It gives me immense pleasure and pride to be a part of the 47th Annual Conference of the Association of Obstetricians and Gynaecologists of Delhi (AOGD), being hosted by Lady Hardinge Medical College (LHMC)—an institution with a legacy of over a century in advancing women's health, clinical excellence, and medical education.

The theme of this year's conference, "Tiny Heartbeats to Timeless Strength – honouring the journey of women through birth and beyond aptly underscores the continuum of care that women require throughout their lives. It emphasizes not only clinical competence but also compassion, evidence-based decision-making, and patient-centered care. The scientific program is impressively diverse, with sessions ranging from high-risk obstetrics and reproductive endocrinology to gynaecological oncology, technological innovations, and evolving public health priorities.

AOGD, one of the most respected academic organizations in India, has continuously upheld high standards in professional development, research dissemination, and collaborative learning. Its members including senior faculty, practicing clinicians, researchers, and postgraduates—are the driving force behind its dynamic academic environment.

We at Lady Hardinge Medical College are especially honoured to serve as the current Secretariat of AOGD (2024–2025). This association has infused our institution with renewed academic energy, offering opportunities to organize innovative sessions, promote cross-institutional learning, and foster leadership among young professionals. The collaborative efforts of the AOGD executive team, faculty, and organizing committee have resulted in a meticulously crafted conference program that addresses contemporary challenges while embracing future possibilities.

I extend my heartfelt congratulations to the organizing team and wish the conference grand success. May this event serve as a catalyst for new ideas, partnerships, and continued excellence in women's healthcare.

Dr. Sarita Beri

Director, Lady Hardinge Medical College & Associated Hospitals
New Delhi

From the President's desk



It gives me immense pleasure to welcome you all to the 47th Annual Conference of the Association of Obstetricians and Gynaecologists of Delhi (AOGD), being hosted by the Department of Obstetrics and Gynaecology, Lady Hardinge Medical College, under the inspiring theme “Tiny Heartbeats to Timeless Strength – Honouring the Journey of Women Through Birth & Beyond.”

When the AOGD Secretariat resumed at Lady Hardinge Medical College in April, we began this academic journey with renewed energy and commitment. Over the past months, we have witnessed an enthusiastic participation of our members in a series of workshops, CMEs, clinical meetings, and academic initiatives. Each of these activities has reflected the vibrancy and dedication of our fraternity, setting the stage for this scientific conclave.

This year's conference has been thoughtfully curated to serve as a comprehensive academic feast. With 13 pre-conference workshops covering diverse domains of obstetrics and gynaecology, participants will have the opportunity to enhance practical skills and deepen their understanding of key clinical areas. The two-day scientific program that follows is designed to bring together leading experts, distinguished faculty, and young clinicians from across the country, offering a rich exchange of ideas, experiences, and innovations. Our theme resonates with the core vision of AOGD—to advance women's health across every stage of life, from the delicate beginnings of fetal development to the enduring strength of womanhood. The sessions planned will address not only the latest advancements in clinical practice, research, and technology but also the broader values of compassionate care, dignity, and equity in women's health. I am particularly delighted that this conference emphasizes interactive formats such as debates, panel discussions, surgical video sessions, and symposia. These engagements are not only informative but also stimulate critical thinking, enabling us to evolve as better clinicians and caregivers.

As President of AOGD, I feel deeply privileged to witness the coming together of such a dynamic academic community. I extend my heartfelt gratitude to the Organizing Committee, faculty, and members whose tireless efforts have made this event possible.

I warmly welcome all delegates and participants, and I am confident that this conference will be an enriching, memorable, and truly inspiring experience for everyone.

With best wishes for a successful conference,

Warm regards,

Dr Reena Yadav

President, AOGD 2025-26

Organizing Chairperson,

47th Annual AOGD Conference

डॉ. विनोद कुमार पॉल
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August 5, 2025

Message

I am pleased to extend my greetings to the organizers and delegates of the 47th Annual Conference of the Association of Obstetricians and Gynaecologists of Delhi (AOGD), being hosted by the Department of Obstetrics and Gynaecology, Lady Harding Medical College. The conference's theme—"Tiny Heartbeats to Timeless Strength – Honouring the Journey of Women Through Birth & Beyond"—is a timely reminder that the health of women must remain a central concern of national policy, institutional practice, and academic inquiry.

Women's health is at core of Swasth Bharat. The journey for Viskat Bharat demands women-led development for which it is our duty to ensure quality healthcare for every girl and every woman.

As we transition into a new era of healthcare—defined by technology, digital platforms, and personalized medicine—we must stay grounded in the principles of access, compassion, quality, and equity.

Women's healthcare requires a continuum-of-care approach that integrates preventive, promotive, curative, and rehabilitative services. The academic community has a key role to play in bridging the gap between evidence and implementation. Conferences like this serve as catalysts—enabling the translation of new research into practical tools, showcasing scalable innovations, and interrogating outdated practices.

Let us also remember that improving women's health is not only a imperative—it is a societal commitment. It calls for inclusive policies, accountable institutions, and gender-responsive ethos.

I commend the AOGD and the Department of Obstetrics and Gynaecology at LHMC for organizing this important conference, and I wish all participants a rewarding and productive engagement.

(Vinod Paul)
MD PhD, FAMS, FNAsc, FASc, FNA
Former Professor and
Head, Department of Pediatrics
All India Institute of Medical Sciences
New Delhi



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MESSAGE

It is with great pride and a deep sense of commitment to women's health that I extend my heartfelt wishes to the organizers and participants of the **47th Annual Conference of the Association of Obstetricians and Gynaecologists of Delhi (AOGD)**, hosted by the **Department of Obstetrics and Gynaecology, Lady Hardinge Medical College**.

The chosen theme **"Tiny Heartbeats to Timeless Strength–Honouring the Journey of Women Through Birth & Beyond"** beautifully captures the continuum of care that a woman needs and deserves throughout her life. It is a reminder that women's health is not defined by a single event or phase but is a dynamic, lifelong narrative-from the first flutter of fetal life to the enduring strength of womanhood.

In today's rapidly evolving healthcare landscape, we must redefine how we approach women's health-not as isolated clinical events but as interconnected milestones requiring sustained, evidence-based, empathetic care. The growing burden of non-communicable diseases among women, rising rates of gynecologic cancers, mental health challenges, and inequities in access to maternal care call for urgent, unified action.

This conference is a apt platform to deliberate on these challenges and share solutions that are both scientifically robust and socially responsive. I commend the organizing committee for their thoughtful curation of sessions spanning **high-risk obstetrics, minimally invasive gynecologic surgery, reproductive endocrinology, menopausal medicine, adolescent care and cancer screening and prevention**. These topics reflect not only the depth of clinical advancement but also the breadth of responsibility we hold as healthcare professionals.

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At the 47th AOGD Annual Conference, let us remember that every discussion, every paper, and every question raised during this conference holds the potential to impact the lives of countless women and families. Let us use this opportunity to collaborate across disciplines, learn from each other's experiences, and foster innovation that transcends traditional boundaries. Whether you serve in a rural PHC, a premier academic institution, or lead health systems, your contribution matters.

I urge each participant to leave this conference with renewed purpose—to be not just a provider of care, but a champion for women's dignity, agency, and wellness. Let us pledge to listen more closely to the needs of the women we serve, and to respond with skill, compassion, and courage.

Congratulations to Lady Hardinge Medical College and AOGD for leading this vital conversation.

With best wishes for a memorable and meaningful conference.

Station: New Delhi

Dated : 11 Aug 2025



(Arti Sarin)
Surg Vice Admiral
DGAFMS

From the Patron Desk



Prof. S. N. Mukherjee

It is a great pleasure to learn that the Association of Obstetricians and Gynaecologists of Delhi (AOGD) is organizing the 47th Annual Conference on 13-14 September 2025 at India Habitat Centre, New Delhi.

The Theme of the Conference is very appropriate as it honours the Journey of Women through Birth and Beyond. AOGD is academically busy all around the year organizing several seminars, CMEs, workshops and community awareness programs on important women health issues.

The scientific program, prepared by AOGD for the occasion, is very attractive and educative. Esteemed speakers will deliver prestigious Orations and eminent teachers will address the delegates on current important topics. I believe the participants will benefit greatly from high standards of scientific deliberations.

I wish the Conference a grand success.

Prof. S N Mukherjee.

Retd. Senior Consultant,

Gynecologist and Obstetrician

From the Patron Desk



It gives me immense pleasure to extend my warm greetings to all delegates, faculty, and participants of the 47th Annual Conference of the Association of Obstetricians and Gynaecologists of Delhi (AOGD), being held on 13–14 September 2025 at the India Habitat Centre, New Delhi.

The theme this year, “From Tiny Heartbeats to Timeless Strength – Honouring the Journey of Women Through Birth and Beyond”, beautifully captures the essence of our discipline. Obstetrics and Gynaecology is not only about safe childbirth but also about empowering women across every stage of life, ensuring their health, dignity, and well being.

AOGD, with its legacy of over decades and a membership of more than 2000 committed professionals, continues to be a vibrant platform for academic exchange, scientific advancement, and professional growth. This annual conference is a testimony to the society’s vision of fostering innovation, updating knowledge, and nurturing collaboration among specialists for the betterment of women’s health.

I am confident that the meticulously designed scientific program will enrich the participants with new insights, evidence-based practices, and inspiring deliberations. I congratulate the organizing committee for their tireless efforts in bringing together such a comprehensive and meaningful academic feast.

I warmly welcome you all and wish the conference grand success.

With best regards,

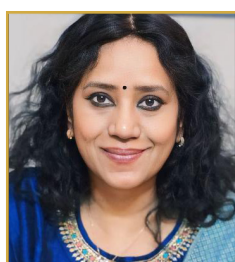
Dr. Kamal Buckshee

Patron, AOGD

From the Secretarial Desk



Dr Ratna Biswas
Honorary Secretary



Dr Sharda Patra
Joint Secretary



Dr Swati Agrawal
Joint Secretary



Dr Anuradha Singh
Joint Secretary

Dear All,

With great pleasure we welcome you to the 47th Annual Conference of AOGD to be held on 13-14 September 2025 at India Habitat Centre, Delhi and the Pre-conference Workshops to be held on 11-12 September .

It is exhilarating moment for the team AOGD at Lady Hardinge Medical College to bring their hard work to fruition by presenting a Conference Program which is scientifically sound, insightful, progressive and comprehensive.

The spectrum of content includes thought provoking orations, keynote addresses on vital topics , symposiums and panels on critical issues , video presentations on surgical techniques and sonographic advancements , brain racking quiz competition ,original research paper presentation , poster presentation on interesting cases and much more.

This program is set to fulfil the scientific temperament of all- from the youngsters to the distinguished seniors with something to learn, something to unlearn and relearn in the true spirit of science and knowledge.

The conference is also time to reacquaint with contemporaries, exchange notes on your professional and personal front , rejoice in each others achievements and enjoy the culinary delights in the open lawns or besides the pond full of aquatic life.

The editorial team has worked hard to collect the scientific deliberations into a Souvenir for ready reference . We appreciate their efforts in compiling the contents on such a short notice.

We express gratitude to our Chief Guest- Dr Vinod Kumar Paul , Guests of Honour- Dr Sunita Sharma, Dr Sarita Beri and Surg VAdm Arti Sarin for having consented to grace the occasion and encourage the participants . We are indeed inspired by their leadership qualities and exemplary vision and their esteemed presence is an honour to uphold.

We extend our heart filled appreciation to the faculty whose pearls of wisdom will enrich us greatly and the delegates whose presence motivates us to give our best.

We are thankful to our event team for executing the conference work to perfection, to our trade partners for supporting the educational event, to the audiovisual technical support staff and the hospitality team at India Habitat Centre for their help and support.

The organizing team at Lady Hardinge Medical College has been working behind the scenes tirelessly to put forward an academic extravaganza and we are overwhelmed by their dedication and hard work.

We hope you enjoy the conference and the workshops as much as we enjoyed curating it for you .

Waiting to welcome you at the event with open arms and joyful heart .

Regards

Team AOGD,

Department of Obstetrics & Gynecology, Lady Hardinge Medical College .

From the Editor's Desk



Dr Pikee Saxena



Dr Vidhi Chaudhary

Welcome to the 47th Annual Conference of the Association of Obstetricians and Gynaecologists of Delhi. It is with great pleasure that we gather as learned specialists, dedicated to advancing women's health and enhancing academic rigor.

Our guiding theme this year, "Tiny Heartbeats to Timeless Strength: Honouring the Journey of Women Through Birth & Beyond," is a heartfelt tribute to the incredible resilience of women. Through this souvenir book, which features contributions from our esteemed faculty, we aim to share our collective expertise on a wide range of topics in obstetrics and gynaecology.

We were delighted by the overwhelming response to our call for free communications and are proud to include abstracts for approximately 150 abstract papers and posters. This wealth of research and insight reflects the vibrant spirit of innovation within our community.

As we connect and share our discoveries, we strengthen our skills and move forward in our mission to shape a more compassionate and effective healthcare future. The souvenir book is more than a keepsake; it is a showcase of the cutting-edge advancements and diverse expertise of our members.

We deeply appreciate your vital contributions, from research papers to case studies, which have made this a truly comprehensive and informative compilation. Thank you for your commitment to advancing the field of obstetrics and gynaecology and for sharing your work with us.

As you read, we hope you will feel inspired to celebrate achievements, tackle challenges, and embrace transformative ideas. May this collection of shared knowledge bring us all closer to a future where every woman can experience complete well-being.

Happy Reading!

Dr Pikee Saxena

Dr Vidhi Choudhary



AOGD 2025

47th Annual Conference of AOGD

Organised by: Department of Obstetrics and Gynaecology
Lady Hardinge Medical College & Associated Hospitals, New Delhi

*Theme - Tiny Heartbeats to Timeless Strength - Honouring
the Journey of Women Through Birth & Beyond*

Venue - India Habitat Centre, New Delhi | Date - 13th - 14th Sep 2025

Scientific Brochure



Welcome Message

Dear Esteemed Members,

It gives us immense pleasure to welcome you to the 47th Annual Conference of the Association of Obstetricians and Gynaecologists of Delhi (AOGD), on 13th & 14th September 2025 at India habitat centre , New Delhi.

This year's theme, "Tiny Heartbeats to Timeless Strength – Honouring the Journey of Women Through Birth and Beyond," is a heartfelt tribute to the extraordinary continuum of women's health from the fragile yet powerful beginnings of life to the enduring resilience that defines womanhood across generations.

The scientific program has been thoughtfully curated to combine academic depth, clinical relevance, and practical skill enhancement. The highlights include: Inspirational Orations & Keynote Lectures by stalwarts in Obstetrics & Gynaecology, Video-Based Surgical Demonstrations showcasing advanced techniques, Case-Based Panel Discussions addressing real-world clinical dilemmas, Controversies and Debates that stimulate evidence-based thinking, Focused Symposia & 13 pre conference Workshops for learning and skill building, Free Papers ,Poster Presentations and Quiz , offering a platform for young researchers and clinicians

Beyond academics, the conference is envisioned as a meeting of minds and heart an opportunity to connect with peers, mentors, and thought leaders; to learn, share, and inspire; and to reaffirm our shared commitment to advancing women's health.

On behalf of the Organising Committee, we extend our warm invitation to all AOGD members to participate wholeheartedly in this academic feast. Your presence will not only enrich the deliberations but also strengthen the collective spirit of our fraternity.

We eagerly look forward to welcoming you and to your active participation in making the 47th AOGD Annual Conference a truly memorable and landmark event.

With warm regards,
Organising Committee,
47th Annual AOGD Conference 2025

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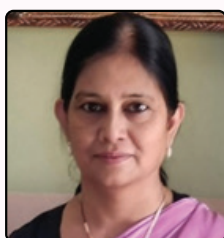
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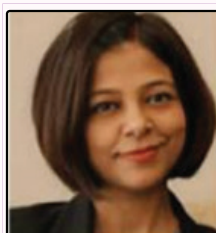


Dr Swati Agrawal
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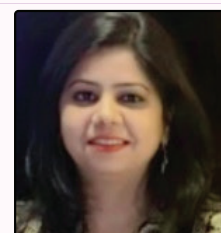


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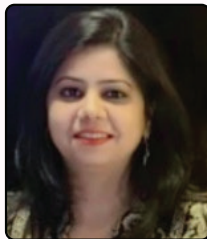


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Dr Sharda Patra
Prizes, medals, mementoes



Dr Swati Agrawal
Prizes, medals, mementoes



Dr Anuradha Singh
Prizes, medals, mementoes



Top row(Left to Right)- Dr. Neha Sharma, Dr. Mansi Kumar, Dr. Shilpi Nain, Dr. Deepika Meena, Dr. Anuradha Singh, Dr. Swati Agrawa, Dr. Sharda Patra, Dr. Meenakshi Singh, Dr. Vidhi Chaudhary, Dr. Apoorva Kulshreshtha, Dr. Aishwarya Kapur, . Divya Gaur

Bottom row (Left to Right)-Dr. Manisha Kumar, Dr. Pikee Saxena, Dr. Reena Yadav
Dr. Kiran Aggarwal, Dr. Ratna Biswas, Dr. Prabha Lal

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- Dr. Divya
- Dr. Divya Chauhan
- Dr. Divya Pandey
- Dr. Divya Singhal
- Dr. Durgesh
- Dr. BB Das
- Dr. Ekta Dhamija
- Dr. Garima Kachhawa
- Dr. Garima Kapoor
- Dr. Geeta Mendiratta
- Dr. Geetanjali Munda
- Dr. Gouri Gandhi
- Dr. Gouri M Devi
- Dr. Gunjan Gupta
- Dr. Hafeez Rehman (Dubai)
- Dr. Harsha Gaikwad
- Dr. Harsha Khullar
- Dr. Heera
- Dr. Himsweta Srivastava
- Dr. Indu Khatri
- Dr. J B Sharma
- Dr. Jaishree Sundar
- Dr. Jaya Agarwal
- Dr. Jaya Chawla
- Dr. JayShree
- Dr. Jharna Behura
- Dr. Jigyasa Govil
- Dr. Juhi Bharti
- Dr. Jyoti Bali
- Dr. Jyoti Chugh
- Dr. Jyoti Gupta
- Dr. Jyoti Khandekar
- Dr. Jyoti Meena
- Dr. Jyotsna Suri
- Dr. K Aparna Sharma
- Dr. Kamal Buckshee
- Dr. Kamna Datta
- Dr. Kanika Batra Modi
- Dr. Kanika Gupta
- Dr. Kanika Jain
- Dr. Kanika Kumari
- Dr. Kanika Modi Batra
- Dr. Kanwal Gujral
- Dr. Karishma Thariani
- Dr. Kashika Nagpal
- Dr. Kavita Aggarwal
- Dr. KD Nayar
- Dr. Kiran Bala Das
- Dr. Kiran Aggarwal
- Dr. Kiran Chandna
- Dr. Kiran Chhabra
- Dr. Kiran Guleria
- Dr. Kiranjeet Kapoor
- Dr. Kiranjeet Kaur

- Dr. Kishore Rajurkar
- Dr. Krishna Aggarwal
- Dr. Kuldeep Jain
- Dr. Kullu
- Dr. Kumar Gandhi
- Dr. L Shyam Singh
- Dr. Latika Sahu
- Dr. Leena Wadhwa
- Dr. Lisa Sharma
- Dr. Madhu Goel
- Dr. Mala Arora
- Dr. Mala Srivastava
- Dr. Malvika Sabharwal
- Dr. Mamta Dagar
- Dr. Manasi Deoghare
- Dr. Maninder Ahuja
- Dr. Manisha Kumar
- Dr. Manisha Navani
- Dr. Manisha Sharma
- Dr. Manju Arora
- Dr. Manju Hotchandani
- Dr. Manju Khemani
- Dr. Manju Puri
- Dr. Manpreet Sethi
- Dr. Maya Sood
- Dr. Meenakeshi Rana
- Dr. Meenakshi Adarsh
- Dr. Meenakshi Ahuja
- Dr. Meenakshi Sharma
- Dr. Meenakshi Singh
- Dr. Meenu Vashisht
- Dr. Megha Kansara
- Dr. Mitra Saxena
- Dr. Mohini Agarwal
- Dr. Monika Bhatia
- Dr. Mrinalini Gupta
- Dr. Mrinalini Mani
- Dr. Muntaha Khan
- Dr. Nalini Bala Pandey
- Dr. Narinder Kaur
- Dr. Neelam Bala Vaid
- Dr. Neelam Lekhi
- Dr. Neelima
- Dr. Neelu Mahajan
- Dr. Neema Sharma
- Dr. Neena Malhotra
- Dr. Neera Aggarwal
- Dr. Neerja Bhatla
- Dr. Neeru Kiran
- Dr. Neeta Singh
- Dr. Neeti Nisha
- Dr. Neeti Tiwari
- Dr. Neha Gulati
- Dr. Neha Khandelwal
- Dr. Neha Kumar
- Dr. Neha Kwatra
- Dr. Neha Mishra
- Dr. Neha Pruthi
- Dr. Neha Varun
- Dr. Nidhi Gupta
- Dr. Niharika Dhiman
- Dr. Nikita Naredi
- Dr. Nikita Trehan
- Dr. Nilanchali Singh
- Dr. Nirmala Aggarwal
- Dr. Nisha
- Dr. Nisha Bhatnagar
- Dr. Nisha Jain
- Dr. Nishant Kumar
- Dr. Nishat Amin
- Dr. Nishi Makhija
- Dr. Nishtha Jaiswal
- Dr. Nitasha Gupta
- Dr. Nupur

Faculty

- Dr. Nutan Aggarwal
- Dr. Nymphaea Walecha
- Dr. Pakhee Aggarwal
- Dr. Panchampreet Kaur
- Dr. Pankaj Garg
- Dr. Parinita Kalita
- Dr. Parul Garg
- Dr. Pawan Bhasin
- Dr. Payal Agarwal
- Dr. Pikee Saxena
- Dr. Poddar
- Dr. Pooja Pathak
- Dr. Poonam Goyal
- Dr. Poonam Joon
- Dr. Poonam Kashyap
- Dr. Poonam Khera
- Dr. Poonam Laul
- Dr. Poonam Sachdeva
- Dr. Prabha Lal
- Dr. Pranay Ghosh
- Dr. Prasanna
- Dr. Prasoon Gupta
- Brig. Dr. Prasad Lele
- Col. Pranjali Dhome
- Dr. Prassan Vij
- Dr. Pratibha Garg
- Dr. Preeti Gaur
- Dr. Prerna Kukreti
- Dr. Priti
- Dr. Priti Arora Dhamija
- Dr. Puneet Arora
- Dr. Punita Bhardwaj
- Dr. Pushpa Chandra
- Dr. R S. Sharma
- Dr. Rachna Agarwal
- Dr. Rachna Gupta
- Dr. Radha Jain
- Dr. Raghav Aggarwal
- Dr. Ragini Aggarwal
- Dr. Rahul Gera
- Dr. Rahul Manchanda
- Dr. Rahul Modi
- Dr. Raj Bokaria
- Dr. Rajesh Kumari
- Dr. Rajesh Kumari (SJH)
- Dr. Rajinder Kaur Saggu
- Dr. Raka Guleria
- Dr. Rakhi Singh
- Dr. Raksha Arora
- Dr. Rama Joshi
- Dr. Ranjana Sharma
- Dr. Rashmi Malik
- Dr. Rashmi Rekha Bora
- Dr. Rashmi Sharma
- Dr. Rashmi Shriya
- Dr. Ratna Biswas
- Dr. Ravi Wadhwa
- Dr. Reema Bhatt
- Dr. Reena Yadav
- Dr. Reeta Bansal
- Dr. Reeta Bansilwal
- Dr. Reeta Mahey
- Dr. Rekha Bharti
- Dr. Rekha Jain
- Dr. Renu Chawla
- Dr. Renu Mishra
- Dr. Renu Tanwar
- Dr. Renuka Malik
- Dr. Reva Tripathi
- Dr. Rhythm Gupta
- Dr. Richa Aggarwal
- Dr. Richa Sharma

- Dr. Rinku Lodha Negi
- Dr. Rinku Sen Gupta
- Dr. Rita Bakshi
- Dr. Ritu Rana (UK)
- Dr. Ritu Sharma
- Dr. Riya Agarwal
- Dr. Rk Sharma
- Dr. Ruchi Singhal
- Dr. Ruchika Garg
- Dr. Ruma Satwik
- Dr. Rupali
- Dr. Rupali Bassi
- Ms. Rushma Tandon
- Dr. Rupinder Shekhon
- Dr. S B Khanna
- Dr. S N Basu
- Dr. S N Mukherjee
- Dr. S S Trivedi
- Dr. Sabhyata Gupta
- Dr. Sakshi Nayar
- Dr. Saloni Arora
- Dr. Samanta Dhulipala
- Dr. Sanchita Dubey
- Dr. Sandeep Sharma
- Dr. Sandeep Talwar
- Dr. Sandhya Jain
- Dr. Sangeeta Garg
- Dr. Sangeeta Gupta
- Dr. Sanjay Thulkar
- Dr. Sanjivini Khanna
- Dr. Sarita Beri
- Dr. Saritha Shamsunder
- Dr. Satinder Kaur
- Dr. Saum
- Dr. Seema Prakash
- Dr. Seema Singh
- Dr. Seema Singhal
- Dr. Seema Thakur
- Dr. Sejal Naik
- Dr. Shakun Tyagi
- Dr. Shakuntla Kumar
- Dr. Shalini Aggarwal
- Dr. Shalini Khanna
- Dr. Shalini Rajaram
- Dr. Shalu Jain
- Dr. Shama Batra
- Dr. Shanti Jaisheelan
- Dr. Sharda Jain
- Dr. Sharda Patra
- Dr. Shashi L. Kabra Maheshwari
- Dr. Sheeba Marwah
- Dr. Shikha Chadda
- Dr. Shilpa Ghosh
- Dr. Shilpi Nain
- Dr. Shipra Srivastava
- Dr. Shirin Mangal
- Dr. Shiv Kumar Sarin (ILBS)
- Dr. Shivani Aggarwal
- Dr. Shivani Sabharwal
- Dr. Shruti Bhatia
- Dr. Shweta
- Dr. Shweta Sardana
- Dr. Smita Manchanda
- Dr. Smriti Gupta
- Dr. Soha
- Dr. Sohani Verma
- Dr. Soma Mitra
- Dr. Sonal Bathla
- Dr. Soni Anand
- Dr. Sonia Malik
- Dr. Sonia Naik
- Dr. Srishti Prakash
- Dr. Srividya Shankaran (UK)

- Dr. Sruthi Bhaskararan
- Dr. S S Trivedi
- Dr. Sudha Prasad
- Dr. Sudha Salhan
- Dr. Sujata Aggarwal
- Dr. Sujata Das
- Dr. (Brig) Sunil Takiar
- Dr. Suman Mendiratta
- Dr. Sumedha Sharma
- Dr. Sumita Manchanda
- Dr. Sumita Mehta
- Dr. Sumitra Bachani
- Dr. Suneeta Mittal
- Dr. Sunita Arora
- Dr. Sunita Lamba
- Dr. Sunita Malik
- Dr. Sunita Varma
- Dr. Sunita Yadav
- Dr. Supi
- Dr. Surveen Ghai
- Dr. Surveen Ghumman
- Dr. Sushila Gupta
- Dr. Sushma Sinha
- Dr. Suyash Naval
- Dr. Suresha Khanijao
- Dr. S V Malik
- Dr. Swasti
- Dr. Swati Agrawal
- Dr. Swati Sinha
- Dr. Sweena Arora
- Dr. Sweta Balani
- Dr. Sweta Gupta
- Dr. Tanya Buckshee
- Dr. Taru Gupta
- Dr. Tejashri S B
- Dr. Tejashri Shrotri
- Dr. Tripti Saxena
- Dr. Triveni G S
- Dr. Uma Rai
- Dr. Uma Rani Swain
- Dr. Uma Vaidyanathan
- Dr. Upasana Arora
- Dr. Upasana Barooah
- Dr. Upasana Verma
- Dr. Upma Saxena
- Dr. Urvashi Miglani
- Dr. Usha Gupta
- Dr. Usha Rani
- Dr. Vaishali Jain
- Dr. Vaishali Palliwal
- Dr. Vandana Agarwal
- Dr. Vandana Bagga
- Dr. Vandana Bansal
- Dr. Vandana Chadda
- Dr. Vandana Goel
- Dr. Vandana Gupta
- Dr. Vandana Jain
- Dr. Vandana Sood
- Dr. Veena Ganju Malla
- Dr. Vibha Bansal
- Dr. Vidhi Chaudhary
- Dr. Vidya Thobbi
- Dr. Vijay Zutshi
- Dr. Vijayata Sangwan
- Dr. Vikas Chaudhary
- Dr. Vikram Bhaskar
- Dr. Vinita Gupta
- Dr. Vinita Jaggi
- Dr. Vinod Kumar
- Dr. Wansalan K Shullai
- Dr. Yamini Sserwal
- Dr. Y M Mala
- Dr. Yukti Wadhawan
- Dr. Zombie

Workshop 1
Mastering Pelvic Organ Prolapse Surgery: Techniques, Complications & Comprehensive Management

11th September 2025 | 9:00 AM – 2:00 PM

Auditorium, Sant Parmanand Hospital, Civil lines, Delhi-110054

Time	Topic	Speakers/Moderators	Chairpersons/Panelists
8:30-9:00 am	Registration		
9:00-9:20 am	Applied anatomy in Pelvic Organ Prolapse	Dr Karishma Tharlani	Dr Kishore Rajurkar Dr Kiran Guleria Dr Manisha sharma
9:20-9:40 am	POPQ Classification	Dr Monika Gupta	Dr Nishi Makhij Dr Arbinder Dang
9:40-10:00 am	Role of Pessaries in Prolapse	Dr Geeta Mediratta	Dr C D Jassal
10:00-10:25 am	Inauguration		
Video Session on Conservative Surgeries for Prolapse			
10:25-10:40 am	Manchester Procedure and Repair	Dr Aruna Nigam	Dr Reena Yadav Dr Pawan Bhasin Dr Shakuntala Kumar Dr Sweta Balani Dr Shipra Srivastava Dr Nisha
10:40-10:55 am	Shirodkar's Vaginal Repair	Dr Bharti Uppal Nayyar	
10:55-11:10 am	Nadkarni Sleeve Surgery	Dr Mohini Agarwal	
11:10-11:25 am	Anterior Compartment Repair	Dr Manasi Deoghare	
11:25-11:40 am	Posterior Compartment Repair	Dr Priti Arora Dhamija	
Nulliparous Prolapse			
11:40-12:00 pm	Sacrospinous Hysteropexy	Dr Manju Puri	Dr Sunita Malik Dr Indu Chawla
12:00-12:20 pm	Sling Surgery in Nulliparous Prolapse	Dr Amita Jain	Dr Jaya Chawla Dr Anshul Rohtagi
12:20-12:40 pm	Purandare Sling Surgery	Dr Rajesh Kumari	Dr Payal Agarwal Dr Vandana Agarwal
Vault Prolapse			
12:40-12:55 pm	Suspension Procedures in Vault Prolapse	Dr Sonal Bathla	Dr Neelam Bala Vaid Dr Achla Batra Dr Kiran Chhabra Dr Jyoti Chugh Dr Anshuja Singla
12:55-1:10 pm	Lefort's Colpocleisis	Dr Sandhya Jain	Dr Anju Bala
Panel Discussion			
1:10-2:00 pm	Management of Complications in Pelvic Organ Prolapse Surgery	Dr J B Sharma Dr Uma Rani Swain	Dr Mitra Saxena Dr Mala Srivastava Dr Arpita Dey Dr Shalu Jain Dr Muntaha Dr Ashita Agarwal
Vote of Thanks followed by Lunch			

Workshop 2

Laparoscopy & beyond: A Hands-on Workshop

11th September 2025 | 9:00 am - 4:00 pm
Skill Centre, Sir Gangaram Hospital

8:00-8:30 am	Registration	
8:30-9:00 am	Quiz for postgraduate students and residents on Kahoot app in 'Hall B'	Quiz Masters: Dr. Ila Sharma, Dr.Aastha Agarwal, Dr Huma Ali
	* Final oral quiz for finalists in the afternoon (12:30-1:00 pm)	Quiz judges: Dr. Harsha Khullar, Dr. Shweta Mittal
9-10:00 am	Fertility enhancing laparoscopic surgeries (Hall A)	
	Chairpersons: Dr. SS Trivedi, Dr. Abha Majumdar, Dr Mamta Dagar, Dr. Neeti Tiwari	
9:00-9:15 am	Systemic Approach for diagnostic laparoscopy for infertility	Dr. Indu Chawla
9:15-9:30 am	Laparoscopic tuboplasty	Dr. Ruma Satwik
9:30-9:45 am	Dealing with endometriosis laparoscopically	Dr. Debasis Dutta
9:45- 10:00 am	Laparoscopic myomectomy	Dr. Sejal Naik
10:00-10:10	Discussion	
10:10 am-10:45 am	Robotic surgery revisited	
	Chairpersons: Dr. Malvika Sabharwal, Dr. K. Gujral, Dr.Geeta Mediratta, Dr. Chandra Mansukhani	
10:10-10:25 am	Basics of Robotic surgery	Dr. Pakhee Aggarwal
10:25-10:40 am	Robotic assisted laparoscopic hysterectomy	Dr. Mala Srivastava
10:40-10:45	Discussion	
10:45-11:15	Inauguration and Tea	
11:15-11:50 am	vNOTES- A rising star	
	Chairpersons:, Dr. Ratna Biswas, Dr. Rekha Bharti, Dr. Richa Sharma, Dr. Sharmistha Garg	
11:15-11:30 am	Overview of vNOTES & port placement	Dr. Swati Agrawal
11:30-11:45 am	vNOTES procedures	Dr. Suyash Naval
11:45-11:50 am	Discussion	
11:50-12:30 pm	Panel Discussion- Trouble shooting in laparoscopy	Panelists: Dr. Reena Yadav, Dr. Dinesh Kansal, Dr. Punita Bhardwaj, Dr.Kanika Jain, Madhu Goel, Dr. Shivani Sabharwal, Dr Aakanksha
	Moderators: Dr Sonia Naik , Dr. Ritu Sharma	
	Experts: Dr. Manju Khemani, Dr. Sanjivni Khanna	
12:30-1:00 pm	Oral Quiz and prize distribution	
1:00-2:00 pm	Lunch	
2:00 pm-4:00 pm	VENUE: SKILL CENTRE	SKILL CENTRE
	Hands-on sessions on multiple work-stations on endotainers (including hands on suturing on animal tissues and energy sources) & vNOTES models and simulators	CO-ORDINATORS:
		Dr. Ila sharma, Dr. Panchampreet Kaur, Dr. Astha Aggarwal, Dr. Renuka Brijwal, Dr. Priyanka Suhag, Dr. Asmita Jawa, Dr. Bhawani Shekhar
4:00 PM	Vote of Thanks	
		Dr. Kanika Jain

Workshop 3
From Imaging to Incision: Advancing Precision in Gynae
Oncologic Surgery

11th September 2025 | 1:00 - 5:15 PM

Dr. Ramalingaswami Board Room, All India Institute of Medical Sciences, New Delhi

Time	Topic	Presenter
1.25-1.30pm	Welcome Address	
1.30-2.00pm	Session 1: Endometrial Cancer Chairpersons: Dr Neena Malhotra, Dr Archana Mishra, Dr Nidhi Gupta	
1.30-1.35 pm	Case presentation	Safdarjang Hospital students
1.35- 1.45 pm	Imaging modalities in endometrial cancer	Dr Smita Manchanda
1.45- 1.55 pm	Robotic Hysterectomy BSO with Sentinel Node Biopsy and ovarian transposition	Dr Kanika Batra Modi
1.55-2.00 pm	Case discussion	All faculty
2.00-2.15pm	Inauguration and lamp lighting	
2.15-3.20pm	Session 2: Ovarian Cancer Chairperson: Dr Rama Joshi, Dr Vinita Jaggi, Dr Rajesh Kumari, Dr Y M Mala	
2.15-2.20 pm	Case presentation	AIIMS students
2.20-2.35 pm	Radiological assessment in Ovarian Cancer	Dr Sanjay Thulkar
2.35 pm – 2.45pm	Sentinel node mapping in ovarian cancer	Dr Shalini Rajaram
2.45-2.55pm	Diaphragmatic Stripping	Dr Nilanchali Singh
2.55 -3.05pm	HIPEC	Dr Seema Singhal
3.05-3.15pm	PIPAC Step-by-Step demonstration	Dr Rupinder Sekhon
3.15-3.20pm	Discussion	All faculty
3.20-4.10 pm	Session 3: Cervical Cancer Chairpersons: Dr Vijay Zutshi, Dr Mala Srivastava, Dr Anshuja Singla, Dr Monisha Gupta	
3.20-3.25pm	Case presentation	UCMS students
3.25-3.35pm	Cross sectional imaging in Cervical Cancer	Dr Ekta Dhamija
3.35-3.55pm	Radical Hysterectomy (Video)	Dr Neerja Bhatla
3.55-4.05 pm	Laparoscopic lymphadenectomy	Dr Satinder Kaur
4.05-4.10pm	Case Discussion	All Faculty
4.10-4.40 pm	Session 4: Vulvar Cancer Chairpersons: Dr Rashmi, Dr Rekha Bora, Dr Kanika Gupta, Dr Aruna Nigam	
4.10- 4.15pm	Case presentation: Early stage vulval Cancer	RGCI students
4.15- 4.25pm	Cross sectional imaging in Vulvar cancer	Dr Smita Manchanda
4.25- 4.35pm	Radical Vulvectomy with Robotic VEIL	Dr Vandana Jain
4.35-4.40pm	Case discussion	All faculty
4.40-5.15 pm	Panel Discussion: Enhancing precision in fertility sparing management of Gynaecological cancers	Moderators: Dr Shruti Bhatia, Dr Bindiya Gupta
	Experts: Dr Neena Malhotra, Dr Vijay Zutshi Panelist: Dr Sharda Patra, Dr Jyoti Meena, Dr Swasti Gupta, Dr Anju Singh, Dr Aarthi S Jayraj, Dr Pakhee Agarwal	
	5.15pm Vote of Thanks	

Workshop 4

Detect Early & Treat Effectively: Cervical and Breast cancer prevention

11th September 2025 | 11:00 AM – 04:00 PM
Conference Hall, Library Block, UCMS and GTB Hospital, Delhi

11:00 am to 11:30 AM	Registration	
Session 1		
Chairpersons: Dr A G Radhika, Dr Abha Sharma, Dr Parinita Kalita, Dr Balkesh Rathi		
Time	Topic	Speaker
11:30 to 11:45 AM	Basics to Advances: Cervical cancer screening	Dr Seema Prakash
11:45 to 12:00 PM	Algorithms for abnormal cervical cancer screening	Dr Kanika Gupta
Session 2		
Chairpersons: Dr Divya Singhal, Dr Seema Singh, Dr Dipika Logane, Dr Alpana Singh		
12:00 to 12:15 PM	Normal and abnormal Colposcopy	Dr Gunjan Gupta
Session 3		
Chairpersons: Dr Rachna Agarwal, Dr Richa Sharma, Col Pranjali Dhume, Dr Deepa Gupta, Dr Tripti Saxena		
12:15 to 12:30 PM	Triple assessment of Breast lump: Integrating essential knowledge with routine Gynae practice	Dr Rajinder Kaur Saggu
Session 4 - Tips & Tricks- Video session		
Chairpersons: Dr Mala Srivastava ,Dr Sumita Mehta, Dr Sandhya Jain, Dr Himsweta Srivastava, Dr Anjali Chaudhary		
12:30 to 12:45 PM	LEEP	Dr Niharika Dhiman
12:45 to 1:00PM	Cold knife conization & NETZ	Dr Rashmi
1:00 to 1:15 PM	Cryotherapy	Dr Rakhi Rai
1:15- 1:30 PM	Thermal ablation	Dr Sruthi Bhaskaran
1:30 to 2:00 PM	Inauguration	
2:00 to 2:30 pm	Lunch	
2:30PM to 4:00 PM	Hands on Session	Experts
	• Breast Palpation & Innovative Biopsy Techniques	• Dr Rajinder Kaur Saggu, Dr Riya Agarwal
	• Colposcopy	• Dr Richa Aggarwal, Dr Srishti Prakash
	• Thermal Ablation	• Dr Upasana Verma, Dr Rashmi Shriya
	• LEEP/CKC	• Dr Archana Chaudhary, Dr Neha Varun
	• Newer Devices such as Portable Colposcopes	• Dr Bhanupriya, Dr Astha Srivastava
Vote of Thanks (Dr. Neha Varun)		

Workshop 5 Bringing Quality Control Into Managing PCOS

11th September 2025 | 09:00 AM – 05:00 PM
VENUE: Hotel Eros, Nehru Place

Time	Topic	Speakers	Chairpersons
9:00-10:00 AM	Session 1: Nailing the Diagnosis: PCOS and the Quest for Quality (12+3 Min)		
	PCOS Phenotypes in role of diagnosis- Can they help in managing patients?	Dr. Himsweta Shrivastava	Dr. Bela Makhija Dr. Poonam Khera Dr. Raka Guleria Dr. Akanksha Sharma
	Rethinking Diagnostic & Assessment Standards – From Rotterdam to AMH and International guideline criterion 2023	Dr. Rupali Bassi	
	Getting It Right Early: Adolescent PCOS Diagnosis Without Ultrasound	Dr. Sonia Naik	
	What is the correct method of diagnosing Insulin Resistance in PCOS?	Dr. Bindu Bajaj	
10:00-10:15 AM	Inauguration		
10:15-11:15 AM	Session II: Polishing the Path: Quality Care Innovations in PCOS (12+3 Min)		
	Stem cells and PCOS	Dr. Sunita Arora	Dr. Reena Yadav Dr. Anita Sabharwal Dr. Manju Hotchandani Dr. Tanya Buckshee
	Handling the 3 Gs of PCOS - Genes, Gut, and Glucose - Emerging science: gut health, insulin resistance, and PCOS	Dr. Ratna Biswas	
	Quality enhancement in prediction and management of PCOS through technology Tech & Track Apps & Tools – A Machine learning Algorithm	Dr. Pranay Ghosh	
	Epigenetics, mitochondria and PCOS: Understanding the Role of Environmental Factor & Opportunities for treatment	Dr. Renu Tanwar	
11:15 AM-12:15 PM	Session III - PCOS & Parenthood: Quality Care that Delivers (12+3 Min)		
	Optimizing Ovulation: A Tiered Approach to Fertility Treatment in PCOS	Dr. Abha Majumdar	Dr. Sudha Prasad Dr. R K Sharma Dr. Shalini Khanna Dr. Nisha Bhatnagar
	PCOS : Infertility beyond anovulation	Dr. Sonia Malik	
	Role of ovarian drilling in an era of ART	Dr. Kuldeep Jain	
	Pregnancy and Beyond: Managing Reproductive Risks in PCOS	Dr. Mala Arora	
12:15-1:00 PM	Session IV - PCOS Management: How Do We Keep Quality on Track? (12+3 Min)		
	Tracking What Matters: Metabolic, hormonal, Clinical and Mental Markers for maintain Quality PCOS Care.	Dr. Surveen Ghumman	Dr. Sohani Verma Dr. Asmita Rathore Dr. Bk Rana Dr. Bithika
	Gaps, Goals & Guidelines: Auditing PCOS Practice for Continuous Quality Improvement - comparing actual practice against guideline-based standards	Dr. Rekha Bharti	
1:00-1:15 PM	Audience Comments on Improving Quality in PCOS Care		

Time	Topic	Speakers/Moderators / Panelists	Chairpersons
1:00-1:45 PM	Session V - Medicating with Meaning: Quality-Focused PCOS Therapies (12+3 Min)		
	Repositioning First-Line Therapies: Letrozole, Metformin, and COCs in 2025	Dr. Sangeeta Gupta	Dr. Anuradha Kapoor Dr. Kiranjeet Kapur Dr. Heera Dr. Aakriti Batra
	Managing Hirsutism and Acne: Evidence-Based Medical and Cosmetic Options	Dr. Garima Kapoor	
	New Frontiers: GLP-1 Receptor Agonists and managing obesity in PCOS	Dr. Pikee Saxena	
1:45-2:30 PM	Lunch		
2:30-3:30 PM	Session VI: The Bigger Picture: Quality Care Beyond the PCOS Ovary (12+3 Min)		
	The PCOS Risk Profile beyond ovaries: A Lifespan Approach to Metabolic and Cardiovascular Health	Dr. Manju Puri	Dr. Manju Khemani Dr. Ym Mala Dr. Narender Kaur Dr. Kamna Datta
	PCOS and Endometrial Cancer: Understanding and Preventing the Risk	Dr. Kanika Modi Batra	
	Aging with PCOS: Navigating Menopause and Bone Health	Dr. Kiran Guleria	
	Mind and Body: Screening for Mental Health and Sleep Disorders in PCOS	Dr. Garima Kachhawa	
3:30-4:20 PM	Session VII - PANEL: Decoding the hormonal Whispers and Bridging the Gap: Taking PCOS Quality Care from Policy to Practice		
Experts : Dr. Kd Nayar, Dr. Achala Batra		Moderator : Dr. Leena Wadhwa Dr. Monika Gupta	
Panelists: Dr. Deepti Goswami, Dr. Meenakshi Ahuja, Dr. Rashmi Sharma, Dr. Sweta Gupta, Dr. Reeta Mahey, Dr. Divya Pandey, Dr.Meenakshi Singh			
4:20-5:08 PM	Session VIII – PCOS in 360°: Is Multidisciplinary the Missing Piece in Quality Care? (10+2 Min)		
	PCOS and the Fatty Liver Connection: A Metabolic Double Whammy	Dr. Bhanupriya	Dr. Dinesh Kansal Dr. Alka Gujral Dr. Kavita Aggarwal Dr. Parul Garg
	Immune Imbalance in PCOS: The Overlooked Link	Dr. Reeta Bansibal	
	Moving beyond Weight Loss: Holistic and Patient-centred Nutrition and lifestyle management	Dr. Bhawani Shekhar	
	Insulin, Inositol & Vitamin D: Untangling the Metabolic Web in PCOS	Dr. Juhi Bharti	
5:09 PM	Vote of Thanks		

Workshop 6

From Risk to Resilience: Preventing Preventable Maternal Mortality

11th September 2025 | 9.30 AM- 4.30 PM

Auditorium, Northern Railway Hospital, Basant Lane, Cannaught Place.

Time		Speakers	Chairpersons	Expert
9.30 -45 AM Registration				
	Welcome address	Dr. Anita Bansal Dr Poonam Laul		
SESSION I	Topics		Dr Jharna Behura Dr Reva Tripathi Dr Sunita Verma	Dr Sharda Jain Dr AG Radhika
9.45 AM-10:05 AM	Taming the Storm: Conquering Hypertensive Disorders in Pregnancy (HDP)	Dr Anita Bansal		
10:05 AM -10.25 AM	Sepsis: The Stealthy Killer of Mothers – Time to Act"	Dr Shashi L Kabra Maheshwari		
10.25 AM -10.45 AM	Stop Sepsis Before It Starts: Prevention is Power	Dr Mrinalini Mani		
10.45 -11.05	Decode the Gases, Save Her Life: ABG Made Simple	Dr Jyotsna Suri		
11.05 AM-11.30 AM	Inauguration and Tea			
Session 2 DRILLS				
11.30 AM -11.45 AM	Eclampsia drill (Live)	Dr Dipali Maurya & team	Dr Vinita Gupta	Dr AG Radhika Dr Jyoti Sachdeva
11.50 AM -12:10 PM	Maternal Sepsis drill	Dr Shashi L Kabra Maheshwari & team	Dr Poonam Joon	Dr AG Radhika Dr Jyoti Sachdeva
12.10 PM -12.20 PM	Maternal collapse drill (Video)	Dr Mamta Dagar & team	Dr Taru Gupta	
12 .20 PM -12 .40 PM	PPH drill (Video)	Dr Shashi L Kabra Maheshwari and team	Dr Poonam Joon	Dr AG Radhika Dr Jyoti Sachdeva
12.40 PM-2:00 PM	HDP workstations Station 1: Demonstration of the eclampsia toolkit Station 2: Demonstration of standardized measurement of BP Station 3: FOGSI Gestosis score calculation and risk prediction and the Preventive strategy of HDP Station 4: Management of hypertensive emergency in a pregnant woman and demonstration of Infusion Pump Station 5 Approach of Maternal Collapse in Hypertension Emergencies Station 6: Management of non-severe hypertension in pregnant women Station 7: Magnesium sulfate solution: IM/IV dose: How to prepare and inject the solution and how to monitor.			
2:00 PM -2.30 PM Lunch				
2.30 PM -4.30 PM	Sepsis work stations: Station 1: SIRS criteria, SOFA score Station 2: Antibiotics Station 3: Non-adrenaline pump and vasopressin infusion	Dr Shashi L. Kabra Maheshwari Dr Rekha Bharti		
4 .30 PM	Vote of thanks	Dr Anita Bansal		

Workshop 7
Menopause Prescription: Hormones and more, Master the art
11th September 2025 | 9:00 am-2:00 pm
VENUE: Mini Auditorium, 5th floor, New Academic Block, LHMC

Time	Topic	Speakers/Moderators	Chairpersons / Panelists	Experts
9:00 – 9:15 am	Registration			
9:15 – 9:20 am	Welcome Address			
SESSION 1				
9:30-9:45 am	Menopause Transition and Beyond; Endocrinal changes- A Clinician’s Perspective	Dr Ragini Aggarwal	Dr Jyoti Khandekar Dr. Pikee Saxena Dr Chandra Mansukhani Dr Jigyasa Govil Dr Triveni GS	
9:45-10:00 am	Mood, Cognition&Depression : Aging or Estrogens	Dr Perna Kukreti		
10:00-10:15 am	Discussion			
SESSION – 2: Panel Discussion				
10:15-11:00 am	Panel: Assessment& Screening at Midlife &After: Case Based (Malignancy, BoneHealth, Sarcopenia &Cardio Metabolic Risks)	Dr Rakhi Singh Dr Ritu Sharma	Dr Mala Srivastava Dr Harsha Gaikwad Dr Dipti Nabh Dr Kiran Chandana Dr Bhavuk Garg Dr Vandana Gupta Dr Neha Gupta	Dr Ragini Aggarwal
11:00-11:30	INAUGURATION & TEA			
	Chief Guest Dr Sarita Beri			
	Guest of Honour : Dr Reena Yadav			
SESSION 3				
11:30 am-11:45 am	Know the Hormones Before Prescribing	Dr Ruchika Garg	Dr.Harsha Khullar Dr Chitra Raghunandan Dr Rita Bakshi Dr Susheela Gupta	
11:45am -12:00 pm	Tibolone & Testosterone	Dr. Anuradha Singh		
SESSION 4				
12:00-12:15 pm	Before & Beyond the Hormones	Dr Arti Gupta	Dr SS Trivedi Dr Raksha Arora Dr Prabha Lal Dr Vidhi Chaudhary Dr Aishwarya Kapur	
12:15-12:30 pm	Genito-urinary Syndrome of Menopause: Clinical Assessment & Management	Dr Asna Ashraf		
12:30-12:40 pm	Discussion			
SESSION 5				
12:40-1:40 pm	Panel: Menopause Prescription Writing: Case Based Scenarios	Dr Kiran Aggarwal	Dr. Manju Khemani Dr. Renuka Malik Dr. Asna Ashraf Dr.Uma Vaidyanathan Dr Poonam Laul Dr Rinku Negi Dr Yukti Wadhawan Dr Priti Arora Dr Anshita	Dr Maninder Ahuja Dr Arti Gupta
1:45-1:50 pm	VOTE OF THANKS			
1:50 pm onwards	LUNCH			

Workshop 8
Demystifying Primary Amenorrhea, Metabolic Syndrome and Contraception in Adolescents.

12th September 2025 | 9:00 AM – 1.30 PM
Kailash Deepak Hospital , Karkardooma , Delhi 92

TIME	TOPIC	SPEAKERS /MODERATORS	CHAIRPERSONS / PANELISTS
9:00 to 9:45 am	Registration Inauguration & Welcome		
	Session 1 MC: Dr Seema Gupta		
9.30-10.15 AM	How To Approach A Patient Of Primary Amenorrhoea	Dr Garima Kachawa	Dr J B Sharma Dr Shakuntla Kumar Dr Vandana Gupta Dr Ruma Satwik Dr Kiranjeet Kaur
10.20- 11.20 AM	Case Based Panel Discussion – Primary Amenorrhoea	Dr Manju Khemani Dr Taru Gupta Dr Geetanjali Munda	Dr A. G. Radhika Dr (Brig) R K Sharma Dr Raj Bokaria Dr Manpreet Sethi Dr Meenakshi Sharma Dr B B Dash
	SESSION 2 MC: Dr Shweta Sardana		
11.30 AM – 12.20 AM	Cross Talk : Contraception In Adolescents	Dr Sanjivni Khanna Dr Madhu Goel Dr Panchampreet Kaur	Dr Vandana Bagga Dr Sangeeta Gupta Dr Yamini Sarwal Dr Raka Guleria Dr Ruchi Singhal Dr Chandra Mansukhani Dr Shalini Aggarwal
	SESSION 3 MC : Dr Mrinalini Gupta		
12.30 -1.00 PM	Metabolic Syndrome In Adolescents – A Silent Epidemic	DR Kiran Aggarwal	Dr B K Roy Dr Chitra Setya Dr Deepa Passi Dr Renu Chawla Dr Pratibha Garg Dr Sujata Agrawal Dr Soni Anand

Workshop 9
Endometriosis decoded..
What the textbooks don't tell.

12th September 2025 | 01:00 PM – 05:00 PM

VENUE: AIIMS Gynae Seminar Room

Lunch Break 1:00 pm to 1:30 pm

TIME	TOPIC	SPEAKER	PANELIST
1:30 PM - 2:00 PM	Infertility with Endometriosis	Dr. Rita Bakshi Dr. Yukti	Dr. Ritu Chauhan Dr. Shakuntla Kumar Dr. Garima Sharma Dr. Nidhi Tiwari Dr. Tarini Taneja Dr. Rashmi Shriya
2:00 PM - 2:20PM	Fertility Sparing Surgery - Adenomyolysis, Uterine & Rectum including & pelvic shaving	Dr. Nikita Treha	Dr. Neerja Bhatia Dr. Manju Puri Dr. Sunita Lamba Dr. Sunita Gupta Dr. Mamta Mishr
2:20 PM - 2:40 PM	Endometrioma How to Handle	Prof. Garima Kachawa	Dr. Pushpa Chandra Dr. Manju Khemani Dr. Sushila Gupta Dr. Madhu Goel
2:40 PM - 3:00 PM	Adenomyosis & Adenomyomectomy	Prof. Neena Malhotra	Dr. Kamal Buckshee Dr. Rita Bakshi Dr. Anjila Aneja Dr. Rahul Manchanda
3:00 PM - 3:20 PM	Hysterectomy Frozen Pelvis	Dr. BB Dash	Dr. Poddar Dr. Bandana Sodhi Dr. Jaya Agarwal Dr. Vishakha Munjal
Discussion 03:20 pm -03:40 pm			
3:20 PM - 4:30 PM	USG & MRI in Endometriosis Case Based Discussion	Prof. Sumita Manchanda	Dr. Sandeep Sharma Dr. Raghav Aggarwal Dr. Rahul Gera Dr. Urvashi Jain Dr. Samanta Dhulipala
Panel Discussion			
4:30 PM - 5:00 PM	Medical Management of Endometriosis Adolescent in young women	Prof. Garima Kachawa Dr. Nutan	Dr. Sunita Lamba Dr. Bandana Sodhi Dr. Jayshree Sundar Dr. Vandana Gupta Dr. Monu Singh

Workshop 10
VAX TALK - ADULTS TOO NEED VACCINES

12th September 2025 | 1:00 PM – 5:00 PM
AUDITORIUM , SIR GANGA RAM HOSPITAL

12.30 to 1.30 PM Lunch					
Time	Topic		Speaker / Moderator		Chairpersons/Expert
1.30 -1.45 PM	Empowering Women through Immunization		Dr. Deepa Gupta		Dr. Amita Saxena
					Dr. Vibha Bansal
					Dr. Vandana Sood
					Dr. Chesta Gupta
					Dr. Amita Aggarwal
1.50 - 2.10 PM	Adolescent / Premarital Vaccines Immunize Young - Concieve Strong		Dr. Aaradhana		Dr. Anita Sabharwal
					Dr. Shama Batra
					Dr. Megha Kansara
					Dr. Seema Prakash
					Dr. Yukti Wadhawan
Time	Topic		Speaker / Moderator	Panelists	Chairpersons/ Expert
2.10 - 2.50 PM	Vaccines During Pregnancy Protect Two Lives with One Shot		Dr. Sujata Das Dr. Neelu Mahajan	Dr. A. G. Radhika	Dr. Sharda Jain Dr. Vandana Bagga
				Dr. Ratna Biswas	
				Dr. Deepika Meena	
				Dr. Madhavi	
				Dr. Kiran Chandna	
				Dr. Sanchita Dubey	
				Dr. Shivani Agarwal	
2.50 - 3.10 PM	INAUGRATION				
3.10 - 4.10 PM	Bridging the Gap - Adult Vaccination		Dr. Shakun Tyagi Dr. Ajay Kumar Gupta	Dr. Anurag Aggarwal	Dr. Achla Batra
				Dr. Pankaj Garg	
				Dr. Rashmi	
				Dr. Vikram Bhaskar	
				Dr. Kumaar Gandhi	
Time	Topic		Speaker / Moderator		Chairpersons/Expert
4.10 - 4.30 PM	Vaccine Hesitency		Dr. Vaishali Jain		Dr. Radha Jain
					Dr. Chander Lata
					Dr. Sweena Arora
					Dr. Preeti Gaur
					Dr. Deepali Garg
4.30 PM	Valedictory Function				

Workshop 11
Bump to Birth: Foundations of Fetal Health & Genetics

12th September 2025 | 9:00 AM – 5:00 PM

Old LT, Behind OPD Block, VMMC & Safdarjung Hospital, New Delhi – 110029

Time	Session / Activity	Speaker(s) / Moderator
	Welcome Note	Dr. Bindu Bajaj
Session I		
	Let's Talk Screening for Fetal Aneuploidy	Chair: Dr. Sunita Malik Dr. Usha Rani Dr. Anjila Aneja Dr. Anita Rajhoria, Dr Shivani Agarwal
9:00–9:20 AM (15min +5 min Q&A)	First Trimester Aneuploidy & PE Screening	Dr. Asmita Muthal Rathore
9:20–9:40 AM (15 min+5 min Q&A)	Second Trimester Aneuploidy Screening	Dr. Sangeeta Gupta (MAMC)
Session II		
Chairperson: Chair: Dr. Jyotsna Suri, Dr. Harsha S. Gaikwad, Dr. Tejashri Shrotri, Dr. Richa Agrawal		
09:40 –10:00AM (15 min +5 min Q&A)	Non-Invasive Prenatal Testing (NIPT)	Dr. Jaya Chawla
10:00 –10:20AM (15 min+5 min Q&A)	TORCH Infections	Dr. Reema Bhatt
10:20 –10:50AM Inauguration		
10:50 –11:00AM Tea Break		
Session III		
		Chair: Dr. Rekha Bharti Dr. Sunita Yadav Dr. Achla Batra Dr. Anjali Dabral Dr Sujata Das
11:00 -11.20AM (15 min+5 min Q&A)	Rh Isoimmunization	Dr. Upma Saxena
11:20 -11.40AM (15 min+5 min Q&A)	Fetal Therapy	Dr. Vandana Bansal
Session IV		

11:40 - 12.20 PM (40 min +5 min Q&A)	Panel: Medico-Legal Aspects of MTP for Late Fetal Anomaly	Moderator: Dr. M.C. Patel
		Panelists: Dr. Yamini Sarwal, Dr. Dipika Loganey, Dr. Neha M Bhagwati, Dr. Harmeet Khurana, Dr. Rinku Lodha Negi, Dr Manju Arora
Session V		
		Chair: Dr. Sujata Das Dr. Rajesh Kumari Dr. Krishna Agarwal Dr. Reva Tripathi
12:20 –12:40PM (15 min+5 min Q&A)	- Hemoglobinopathies	Dr. Ratna Puri
12:40 – 01:00 PM (15 min +5 min Q&A)	- Appropriate Genetic Testing Strategies	Dr. Seema Thakur
Session VI		
01:00 – 01:45 PM (40 min +5 min Q&A)	Panel – Case-based Discussion on Evolving Anomaly	Moderator: Dr. K. Aparna Sharma
		Panelists: Dr. Sumitra Bachani, Dr. Jyoti Gupta, Dr. Apoorva, Dr. Saloni Arora, Dr. Ruchi Gupta, Dr. Manisha Kumar, Dr.Aanchal Sablok, Dr.Vrunda Appannagari, Dr Veronica Arora
01.45-02:00 PM	Fetal Autopsy	Dr. Parag Tamankar
02.00-2.30 PM Lunch Break		
Session VII		
2:30 – 4:30 PM	Hands-on Workshops (Parallel Tracks)	
	LT-1 Prenatal Invasive Testing Station Facilitator: Dr. Sumitra Bachani, Dr. Vandana Chaddha, Dr. Aayush Jain, Dr. Meenakshi	LT-2 Ultrasound Workshop Station Facilitator: Dr. Alok Varshney Moderator: Dr. Rahul Gera - First Trimester 11-14 weeks scan - Second trimester anomaly scan (19-22 Weeks)
4:30 – 4:45 PM	Vote of Thanks	Dr. Upma Saxena
5:00 PM High Tea		

Workshop 12

IUI to IVF Masterclass: Enhancing Success Through Protocol Precision

12th September 2025 | 9:00 AM – 4:30 PM

Mini-Auditorium, Lady Hardinge Medical College & SSKH, New Delhi

Time	Topic	Speaker
8:30 AM – 9:00 AM	Registration and Welcome	
9:00 AM – 9:45 AM (10+2 min) Session 1 – Optimizing ovarian stimulation		
Chairpersons: Dr Anjali Tempe, Dr Prassan Vij, Dr Kiran Agarwal, Dr. Aishwarya Kapur, Dr Kavita Agarwal		
9:00 AM - 9:15 AM	Choosing Wisely: Ovarian stimulation in different clinical scenarios for IUI cycle	Dr Surveen Ghuman
9:15 AM - 9:30 AM	Improving Follicle to Oocyte Index by Individualised Controlled Ovarian Stimulation	Dr. Saumya Prasad
9:30 AM - 9:45 AM	Chronic endomeritis and endometrial microbiome : Unseen barriers of endometrial receptivity	Dr Mala Arora
9:45 AM – 10:45 AM (8+2 mins) Session 2 Dilemmas during Ovarian Stimulation in IVF- Case based discussions		
Chairpersons: Dr. Sandeep Talwar, Dr Meenakshi Singh, Dr. Bhawani Shekhar, Dr Anuradha Singh, Dr Megha Kansara		
9:45AM-9:55AM	Hypo Response in PCOS- what to do?	Dr Neeti Tiwari
9:55AM-10:05AM	No follicle retrieved during ovum pick up: What next?	Dr Maansi Jain
10:05AM-10:15AM	Asynchronous follicle cohort- How to proceed?	Dr Nikita Naredi
10:15AM-10:25AM	Adenomyosis during ART -What to do?	Dr Sweta Gupta
10:25AM-10:35AM	5cm Chocolate cyst on day 2 USG- Surgery or IVF	Dr Renu Tanwar
10:45 AM – 11:00 AM Tea		
11:00 AM 11:45 PM (12+3 mins) Session 3- Video session – Precision is the key!		
Chairpersons: Dr Manju Khemani, Dr Nymphea, Dr Tejashri Shrotri, Dr Shivangni, Dr Apoorva Kulshrestha		
11:00 AM- 11:15 AM	Ovum Pick-Up: Tips and tricks	Dr Sunita Arora
11:15 AM – 11:30 AM	Embryo Transfer Strategies: Critical Last Mile	Dr. Shweta Mittal Gupta
11:30 AM – 11:45 AM	3D & Doppler in ART Practice: Fine-Tuning Diagnosis and Decision-Making	Dr Juhi Bharti
15 Mins- Open House		
12:00 PM -12:45 PM Session 4 - Panel Discussion- ART Regulations		
12:00 PM -12:45 PM	ART & Surrogacy Regulations: Navigating the Legal and Ethical Landscape	Experts : Dr A.G Radhika Dr Satyajit Kumar Dr. Sohani verma
	Panelists: Dr. Bindu Bajaj, Dr Deepti Goswami,Dr Vandana Bhatia, Dr. Nisha Bhatnagar, Dr Ruma Satwik, Wg Cdr Dr Abha Khurana, Dr Aanchal Agarwal, Dr Alpana Singh, Dr. Meenu Vashisht	
12:45 PM - 1:00 PM	Inauguration	

1:00 PM– 1:30 PM (12+2 mins) Session- 6 Critical Factors to Optimize IVF Outcomes		
Experts- Dr. Reena Yadav, Dr. (Brig.) R. K. Sharma, Dr M. Gouri Devi, Dr. Neeru Thakral, Dr Mansi Kumar		
1:00PM-1:15PM	Andropause and Reproductive Health	Dr (Col) Pankaj Talwar
1:15PM-1:30PM	Indian Fertility Society Guidelines on poor ovarian response	Dr. K. D. Nayar
1:30 PM - 2:00 PM Lunch		
2:00PM -3:00 PM (8+2 mins) Session 7 - Video session Enhancing Outcomes - Hysteroscopy procedures		
Experts - Dr Reena Yadav, Dr Malvika Sabharwal, Dr Renu Mishra, Dr Punita Bharadwaj, Dr Swati Agarwal, Dr Ritu Sharma		
2:00PM -2:10 PM	Septal resection	Dr Neema Sharma
2:10 PM -2:20 PM	Hysteroscopic and intra ovarian PRP injections	Dr Neena Malhotra
2:20 PM – 2:30 PM	Myomectomy	Dr Kuldeep Jain
2:30 PM – 2:40 PM	Isthmocele repair	Dr Rahul Manchanda
2:40 PM – 2:50 PM	Asherman's syndrome	Dr Shivani Sabharwal
10 Mins. Open House		
3.10 – 3.45 PM (5+ 2min) Session 8- New arenas: Topics of contention		
Chairpersons: Dr Puneet Rana Arora, Dr Taru Gupta, Dr Neelima Chaudhry, Dr Shilpi Nain, Dr Deepika Meena		
3:10PM-3:19PM	Preimplantation Genetic Testing (PGT-A): Does It Improve Live Birth Rates or Lead to Embryo Waste?	Dr Sakshi Nayar
3:19PM- 3:29PM	Freeze-All Strategy in IVF: Evidence-Based or Overused?	Dr. Neha Khatri
3:29PM-3:35PM	Time-Lapse Imaging: Game-Changer or Expensive Gimmick?	Dr Supriya Kumari
3.35PM- 3.45 PM	Precision antioxidant therapy in oligoasthenoteratozoospermia	Dr Snigdha Soni
3:45 PM - 4: 30 PM Session 8 - Panel Discussion		
3:45 PM - 4: 30 PM	Recurrent Implantation Failures: Diagnostic Dilemmas and Therapeutic Directions	Experts: Dr Sudha Prasad, Dr Jyoti Bali
	Panelists: Dr Rupali Bassi, Dr Priti Dhamija, Dr Niti Vijay, Dr Rhythm Ahuja, Dr. Parul Garg , Dr Suyesha Khanjao Dr. Reeta Bansiwai, Dr Divya Pandey, Dr Lisa Sharma, Dr Vidhi Chaudhary	Moderators: Dr Rashmi Sharma Dr Reeta Mahey
Vote of Thanks followed by Tea		

Workshop 13
Postpartum Haemorrhage: Prevention & Cure - Learn & Master the Art

12th September 2025 | 11:00 am-05:00 pm

VENUE: HOTEL EROS, NEHRU PLACE

Time	TOPIC	SPEAKER	CHAIRPERSONS
10:30- 11 :00 AM	REGISTRATION		
11:00 -11-15AM	Welcome Address & orientation of PPH Programme	Dr Ashok Kumar Dr Kamna Datta	
11:15-11.30 AM	LAMP LIGHTING		
CHIEF GUEST Dr Kamal Buckshee		GUEST OF HONOUR Dr Reena Yadav	
11:30 – 11.45 AM	Overview of PPH & Preparedness	Dr Kanwal Gujral	Dr Veena Ganju Malla Dr Mala Srivastav
11.45AM-12:15PM	Traumatic PPH – A Video Session On Management Strategies	Dr Sushma Sinha	Dr Ravi Wadhwa Dr L Shyam Singh
12:15 – 1.00 PM	Case Based Panel Discussion	Dr Jyotsana Suri Dr Neha Pruthi Tandon	Dr Shanti Jeyaseelan Dr Prassan Vij Dr Nishi Makhija Dr Anita Bansal Dr Nisha Jain Dr Madhavi M Gupta Dr Rashmi Dr Smriti Gupta
1:00-2.00 PM	PPH Drill - Dr RML hospital	Dr Neha Mishra Dr Kamna Datta	EXPERTS – Dr Indu Chawla Dr K Aparna Sharma
02:00-2.45 pm	LUNCH SESSION		
2.45PM – 5PM	WORK STATIONS EXPERTS – Dr NP Kaur , Dr Renuka Malik		
STATION 1	Estimation Of Blood Loss & Initial Resuscitation	Dr Niharika Dhiman Dr Kashika	
STATION 2	Balloon Tamponade, NASG	Dr Nupur Dr Juhi Bharti	
STATION 3	Use Of Pailey vaginal uterine artery clamps/ Panicker Suction Cannula	Dr Triveni Dr Jaya Chawla	
STATION 4	Compression Sutures	Dr Neha Khandelwal Dr Durgesh	
STATION 5	Stepwise Devascularisation	Dr Urvashi Miglani Dr Kanika	
VOTE OF THANKS	Dr Durgesh		



AOGD 2025



47th Annual Conference of AOGD

Preconference Workshop

IUI to IVF Masterclass:
Enhancing Success Through
Protocol Precision

Organised by:

Infertility and Reproductive Endocrinology Subcommittee of AOGD



12th September 2025 | 9:00 AM – 4:30 PM

Mini-Auditorium, Lady Hardinge Medical College & SSKH, New Delhi

Convener

Dr. Pikee Saxena

Chairperson of Infertility & Reproductive Endocrinology Sub-Committee of AOGD

Co-convener

Dr. Vidhi Chaudhary

Dr. Meenakshi Singh

Chief Guest

Dr. Sarita Beri

Director, LHMC, New Delhi

Guest of Honour

Dr. Reena Yadav
President AOGD

Dr. Ratna Biswas
Secretary AOGD

Dr. A.G Radhika

(Director, Directorate of Family Welfare, Government of NCT Delhi)

Dr. (Col) Pankaj Talwar, VSM

(President, Indian Fertility Society)

MOC

Dr. Mansi Kumar

Dr. Apoorva Kulshrestha

President
Dr Reena Yadav

Vice President
Dr Kiran Aggarwal

Honorary Secretary
Dr Ratna Biswas



Scan the QR code
to register!

Time	Topic	Speaker
8:30 AM – 9:00 AM	Registration and Welcome	
9:00 AM – 9:45 AM (10+2 min) Session 1 – Optimizing ovarian stimulation		
Chairpersons: Dr Anjali Tempe, Dr Prassan Vij, Dr Kiran Agarwal, Dr. Aishwarya Kapur, Dr Kavita Agarwal		
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		Moderators: Dr Pikee Saxena, Dr Leena Wadhwa
12:45 PM - 1:00 PM	Inauguration	

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10 Mins. Open House		
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	Panelists: Dr Rupali Basssi, Dr Priti Dhamija, Dr Niti Vijay, Dr Rhythm Ahuja, Dr. Parul Garg , Dr Suyesha Khanjao Dr. Reeta Bansiwali, Dr Divya Pandey, Dr Lisa Sharma, Dr Vidhi Chaudhary, Dr Sujata Agarwal	Moderators: Dr Rashmi Sharma Dr Reeta Mahey
Vote of Thanks followed by Tea		

SCIENTIFIC PROGRAM

Hall A - Stein Auditorium (13.09.25)

Time	Hall A - Stein Auditorium	
8:00-9:00 am		
8.50am-9.00am	AOGD Flag hoisting	
	Topic	
9:00am-10:00 am	Session 1: Controversies in Obstetrics Chairperson : Dr Renuka Malik, Dr Rekha Jain, Dr Uma Vaidyanathan, Dr Kiran Bala Dash	
9:00am-9:10am	Fetal intrapartum CTG Monitoring in Low-Risk Pregnancies – Overuse or Essential?''	Dr Rinku Sen Gupta
9.10 am- 9.20 am	Cesarean on Demand – A Woman's Right or Medical Malpractice?	Dr Manju Khemani
9:20am -9:30 am	Role of Ultrasound – Too Much Screening or Essential for Fetal Health?	Dr Vandana Bansal
9.30am -9.40am	Pharmacotherapy in GDM- Metformin versus Insulin	Dr Pikee Saxena
9.40am -9.55am	Chairperson comments & Discussion	
10:00-11:00am	Session II Case based Panel discussion : When Infection Strikes – Obstetric Sepsis and Emerging Threats Moderators : Dr Ratna Biswas , Dr Jyotsna Suri Panelists : Dr Rachna Agarwal, Dr Rekha Bharti , Dr Rashmi Malik ,Dr Sheeba Marwah , Dr Praseon Gupta , Dr Vandana Goel , Dr Nalini Bala Pandey Experts: Dr Anjali Tempe , Dr Anjali Dabral,	
11:00am-12:00 noon	Session :III Symposium Critical Crossroads in High-Risk Obstetrics – Navigating Dual Lives with Precision and Compassion Chairpersons: Dr Harsha Khullar, Dr Nidhi Jha, Dr Rajesh Kumari (SJH) , Dr Ritu Sharma	
11.00am-11.12am	Managing Cardiac Disease in Pregnancy – Walking the Tightrope Between Physiology and Pathology	Dr YM Mala
11.12am-11.24am	Severe Preeclampsia and HELLP Syndrome – Early Clues, Timely Action, Better Outcomes	Dr Manisha Kumar
11.24am-11.36am	Predicting and Preventing Preterm Birth – From Cervical Length to Progesterone Protocols	Dr Kiran Aggarwal
11.36am- 11.48 am	Autoimmune Thyroid Disease in Pregnancy: Silent Threats and Strategic Interventions	Dr Muntaha Khan
11.48am-12.00	Chairpersons comments & Discussion	
12.00-12.30pm	Brigadier Khanna Oration Dr Arun Prasad Topic: Robotic Surgery -Hype or Hope Chairperson :Dr Kamal Buckshee, Dr SB Khanna, Dr Neera Aggarwal, Dr SS Trivedi , Dr Abha Singh	
12.30pm-12.50pm	Key Note Address Speaker : Dr Neerja Bhatla Breast Cancer screening-Essential for Gynaecologists Chairpersons: Dr Chitra Raghunandan, Dr Sharda Jain, Dr Reva Tripathi, Dr Kawal Gujral, Dr Kiran Aggarwal	
1.00-1.30pm	Inauguration	
1.30-2.15pm	Lunch	
2.15pm-3.15pm	Session IV Panel cum Symposium :Saving the Second Twin – Challenges in Multifetal Delivery Chairpersons: Dr Upma Saxena, Dr Indu Bala khatri, Dr Richa Sharma, Dr Dina Aisha Khan	
2.15pm-2.25 pm	When to Deliver Twins – Timing It Right	Dr Akshata Prabhu
2.25pm-2.35 pm	Second Twin in Breech or Transverse – What's the Best Route	Dr Sumitra Bachani
2.35pm -2.45 pm	Cord Prolapse and Fetal Distress – Real-time Decision Making	Dr Deepika Meena

2.45pm-3.25pm	Panel discussion -Case scenarios with discussion: Saving the Second Twin – Challenges in Multifetal Delivery	
	Moderator : Dr Reema Bhatt Panelists : Dr Poonam Tara, Dr Sumedha Sharma, Dr Richa Aggarwal ,Dr Neha Gulati , Dr Anju Kumari, Dr Aarushi Chaudhary Expert: Dr Deepika Deka , Dr Anita Kaul	
3.30pm onwards	Session V (A) : Surgical videos in Obstetrics: Difficult Cesarean Section Chairpersons: Dr Mrinalini Mani, Dr Suman Mediratta, Dr Poonam Kashyap, Dr Divya Pandey	
3.30pm-3.40 pm	Difficult Cesarean with Previous Scar : Techniques for Safe Delivery	Dr Vinita Gupta
3.40pm-3.50 pm	Cesarean Section in deeply impacted head	Dr Shakun Tyagi
3.50pm -4.00 pm	Cesarean hysterectomy in Placenta Accreta	Dr Taru Gupta
4.00pm-4.30pm	Session V (B) : Cutting-Edge Obstetric Surgery – Saving Lives, Preserving Futures Chairpersons :Dr Nutan Agarwal, Dr Alpana Singh, Dr Puja Sharma, Dr Divya Chauhan	
4.00-4.10 pm	POCUS in Obstetric Emergency Protocols for Pulmonary Edema and Hypertensive Disorders	Dr Nishant Kumar
4.10-4.20 pm	Cesarean Myomectomy – Safer Technique	Dr Aruna Nigam
4.20-4.30 pm	Laparoscopic Cervico-isthmic Cerclage in Second Trimester	Dr Garima Kachhawa

Hall B - Jacaranda (13.9.25)

Time	Hall B – Jacaranda	
8:00-9:00 am	Registration	
	Topic	
9:00am-10:00 am	Session :1 : Controversies in Gynecology Chairpersons Dr Dipti Nabh , Dr Surveen Ghumman, Dr Himsweta Srivastava , Dr Garima Kapoor	
9:00am-9:10am	Vaginal Rejuvenation and Cosmetic Gynecology – Should It Be a Priority ?	Dr JB Sharma
9.10 am- 9.20 am	Mid-Urethral Slings: Still the Gold Standard or Facing a Global Recall?	Dr Amita Jain
9:20am-9:30 am	Fertility Preservation surgery – Should it be Standard Practice for Women with Cancer ?	Dr Shalini Rajaram
9.30am-9.40 am	PCOS Management in Adolescents: Lifestyle First or Medical Therapy Upfront?	Dr Asmita Rathore
9.40am-9.50am	Chairperson comments & Discussion	
9.50am -10.20am	Session II : Panel cum Symposium- Adenomyosis – The Overlooked Twin of Endometriosis” Chairpersons: Dr Sudha Salhan, Dr Kuldeep Jain, Dr Bhavna Mittal , Dr Monika Bhatia	
9.50am-10.00am	Emerging imaging criteria: transvaginal USG vs MRI	Dr Bharti Jain
10.00am-10.10am	Molecular and Genetic Insights into Adenomyosis: Pathogenesis and Future Therapeutic Targets	Dr Nishtha Jaiswal
10.10am-10.20am	Newer uterine-sparing interventions	Dr Dinesh Kansal
10.20am -11.10am	Panel discussion -Case scenarios with discussion -Adenomyosis – The Overlooked Twin of Endometriosis”	
	“Moderator ;Dr Reena Yadav, Dr Indu Chugh Panelists : Dr Meenakshi Singh , Dr Reeta Mahey, Dr Neema Sharma, Dr Vidhi Chaudhary, Dr Renu Tanwar, Dr Kavita Agarwal	

11:10-12:00 noon	Session :III Surgical Innovation in Gynecology – Laparoscopy, Robotics and Beyond”	
	Chairpersons : Dr Renu Mishra , Dr Rama Joshi, Dr Ritu Goyal, Dr Debasis Dutta ,	
11.10-11.25am	Next-Gen Laparoscopy – Smarter, Safer, Sharper	Dr Alka Kriplani
11.25-11.40am	Robotic Gynecology – Expanding Access, Redefining Precision	Dr Rupinder Shekhon
11.40am-11.55am	“Digital Surgery, AI, and the Operating Room of the Future”	Dr Aruna kumari Yerra
11.55-12.00 noon	Chairperson comments & Discussion	
12.00-12.30pm	Brigadier Khanna Oration Dr Arun Prasad Topic: Robotic Surgery –Hype or Hope Chairperson : Dr Kamal Buckshee, Dr SB Khanna, Dr Neera Aggarwal, Dr SS Trivedi , Dr Abha Singh	
12.30pm -1.00pm	Key Note Address Speaker : Dr Neerja Bhatla Breast Cancer screening-Essential for Gynaecologists Chairpersons: Dr Chitra Raghunandan, Dr Sharda Jain, Dr Reva Tripathy, Dr Kanwal Gujral, Dr Kiran Aggarwal	
1.00-1.30pm	Inauguration	
1.30-2.15pm	Lunch	
2.15-2.35 pm	Session IV B Sponsor Session (Plus plus Life sciences , Makers of TRIMACARE) Chairperson:, Dr R S.Sharma, Dr JB Sharma	
2.15pm-2.35pm	Improve pregnancy outcome : Redefining antenatal care with nutrition -first approach	Dr Vidya Thobbi
2.35pm-2.45pm	Chairperson comments	
2.45pm -3.30pm	Session V : Panel Discussion on Pelvic masses demystified- Malignancy or Mimic	
	Moderator- Dr Sharda Patra , Dr Urvashi Miglani Panelists: Dr Swasti , Dr Bindiya Gupta, Dr Jyoti Meena, Dr Sonali Madaan Chaudhary, Dr Amita Naithani , Dr Pakhee Aggarwal , Dr Nishat Amina Experts- Dr Vijay Zutshi , Dr Sunita Malik,	
3.30pm onwards	Session VI A Surgical Videos in Gynaecology Chairperson: Dr Gouri Gandhi, Dr Neha Kumar, Dr Rahul Modi, Dr Anju Singh	
	Topic: Precision and Progress in Gynecologic oncologic Surgery	
3.30-3.40 pm	Cyto reductive surgery in ovarian malignancy	Dr Bhagyalaxmi Nayak
3.40-3.50 pm	Type C1 Radical Hysterectomy for Cervical Cancer”	Dr Seema Singhal
3.50-4.00 pm	Radical Vulvectomy	Dr Upasana Barooah
4.00pm-4.40pm	Session VI-B Laparoscopic & Hysteroscopic Video Chairpersons: Dr Latika Sahu, Dr Punita Bhardwaj, Dr Sumita Mehta , Dr Shivani Sabharwal	
4.00-4.10 pm	Total Laparoscopic Hysterectomy (TLH): Step-by-Step for a Difficult Uterus	Dr Nikita Trehan
4.10-4.20 pm	Laparoscopic vascular complication	Dr Bijoy Nayak
4.20-4.30 pm	Hysteroscopic myomectomy	Dr Biswa Dash
4.30-4.40 pm	Laparoscopic management of adenexal masses	Dr Kanika Jain

SCIENTIFIC PROGRAM

Hall A - Stein Auditorium (14.9.25)

Time	Hall A
8:00-9:00 am	Registration
	Topic
9:00 -10:00 am	Session 1: Symposium: Hormonal Harmony: Redefining Care in Reproductive Endocrinology Chairpersons: Dr Rita Bakshi, , Dr Leena Wadhwa, Dr Poonam LauL, Dr Raka Guleria
9.00am-9.10am	When to suspect pituitary or adrenal pathology in menstrual disorders Dr Aishwarya Kapur
9.10am-9.20am	Modern diagnostic dilemmas – adolescent vs adult PCOS Dr Neena Malhotra
9.20am-9.30am	Navigating Premature Ovarian Insufficiency – Restoring Hope, Not Just Hormones” Dr Abha Majumdar
9.30am-9.40am	Diagnosing perimenopause: Estrogen excess to estrogen exit – What’s missed and misinterpreted Dr Mala Srivastava
9.40am- 9.50 am	Chairperson comments & Discussion
10.00am-11:00am	Session : II (J& J Sponsor) Chairperson : Dr Poonam Goyal , Dr Anita Sabharwal, Dr Poonam Sachdeva , Dr Astha Srivastava
10.00am-10.20am	Barbed sutures – Cutting Edge of Technology for Gynaecological surgery Dr Jaishree Sundar
10.20am-10.40am	Science of Energy Dr BB Das
10.40-11.00am	Chairperson comments & Discussion
11.00am-12.00	Session :III Debate -The Evidence Face-Off Chairpersons : Dr Deepa Gupta, , Dr Shivani Aggarwal, Dr Seema Prakash, Dr Archana Mishra
11.00am-11.30am	Routine HPV Vaccination in Adults Over 26: Beneficial or Unnecessary
11.00am-11.10am	For -Beneficial Dr Nilanchali Singh
11.10am-11.20am	Against -Unnecessary Dr Satinder Kaur
11.20am-11.30am	Discussion -5mins
11.30-12.00PM	Session IV : Medico legal & Ethics (DMC)
11.30am-11.50am	Legal issues in Medical Practice – Current perspective Dr MC Patel
11.50am-12.00	Chairperson comments & Discussion
12-1.00pm	Session V: Keynote Lectures Chairpersons: Dr Suneeta Mittal., Dr Usha Gupta, Dr Sanjivini Khanna , Dr Bindu Bajaj, Dr Ratna Biswas
12.00-12.15pm	The power of One Thought Dr Mohit Dayal Gupta
12.15pm-12.30pm	Laparoscopic Vaginal reconstructive surgery Dr Hafeez Rehman (Dubai)
12.30pm-12.45pm	Fatty liver is core to all NCD’S Dr Shiv Kumar Sarin (ILBS)
12.45pm-1.00pm	Chairperson comments & Discussion
1.00-1.30pm	AOGD Past President Oration Dr Ashok Kumar Topic : Oral health & Pregnancy Chairpersons: Dr Maya Sood, Dr NB Vaid , Dr Achla Batra, Dr Malvika Sabharwal, Dr L Shyam Singh
1.30-2.15pm	Lunch

1.30-2.15pm	Lunch	
2.15-3.15pm	Session V: Competition paper Judges : Dr S. S. Trivedi, Dr Y M Mala, Dr Chandra Mansukhani	
CF1	Rapid cycle improvement model as an effective quality tool for rationalizing oxytocin usage in third stage of labour	Dr Divya Khurana
CF2	Antenatal estimation of placental weight and its relationship with adverse fetal outcome	Dr Isha Yogi
CF3	Accuracy of modified cardiovascular sequential organ failure assessment (m-CV SOFA) score for predicting the duration of critical care unit stay in maternal sepsis	Dr Megha
CF4	Efficacy of an Extended 10-Day Letrozole Regimen Compared to the 5-Day Regimen in Enhancing Ovulation in Infertile Women With Polycystic Ovary Syndrome: A Randomized Controlled Trial	Dr Bhavneet Kaur
CF5	Study of agreement between ultrasound GIRADS classification for uterine cavity or endometrial lesions and histopathology in abnormal uterine bleeding	Dr Neha
CF6	Grobman Score for Predicting Successful Trial of Labor After Cesarean in a North Indian Population	Dr Nisha Chopra
CF7	To evaluate the effect of ormeloxifene on unscheduled vaginal bleeding in women using LNG-IUS	Dr Sushma Prasad
3.15-4.15 pm	Session VI:- Quiz-Final round Quiz Masters : Dr Meenakshi Singh , DrVidhi Chaudhary	
4.15 pm onwards	Valedictory & Vote of Thanks	

Hall B - Jacaranda (14.9.25)

Time	Hall B	
8:00-9:00 am	Registration	
	Topic	
9:00am -10:00 am	Session I Game changer Guidelines in Obstetrics & Gynaecology Chairpersons: Dr Shanti Jaisheelan, Dr Gouri M Devi, Dr Vandana Gupta, Dr Manju Hotchandani	
9.00am-9.10am	Management of Intraamniotic Infection	Dr Harsha Gaikwad
9.10-9.20am	Rh iso immunisation	Dr Vandana Chaddha
9.20-9.30am	CIN2 Conservative management	Dr Prabha Lal
9.30-9.40am	AUB Classification- FIGO 2023	Dr Krishna Aggarwal
9.40-9.55am	Chairperson comments	
10.00am-10.45am	Session : II Panel Discussion Labor That Stalls – Dystocia Dilemmas in Real Time	
	Moderator- Dr Manju Puri, Dr Shilpi Nain Panelist: Dr Madhavi M Gupta, Dr Monika Gupta , Dr Mansi Kumar , Dr Meenakeshi Rana , Dr Payal Chaudhary, Dr Neha Pruthi, Dr Aruna Verma	
10.45am-11.00am	Robotic Video Session Chairpersons; Dr Anuradha Kapur, Dr Bela Makhija, Dr Sonia Naik , Dr Anita Rajorhia	
10.45am-10.55am	Robotic assisted total omentectomy as part of Cytoreductive surgery in ovarian cancer	Dr Rama Joshi
11.00am-11.45am	Session III- Obstetrics & Gynecology Conundrums – Decoding Diagnostic Dilemmas Chairpersons: Dr Kiran Guleria, Dr Uma Rai, Dr Manmeet Kaur, Brig(Dr) Sunil Takiar ,	
11.00-11.10am	Detrusor overactivity or just a nervous bladder – Decoding the unstable tracings	Dr Geeta Mediratta
11.10am-11.20am	Postmenopausal Bleeding with Thin Endometrium -	Dr AG Radhika
11.20-11.30am	Polyhydramnios with Unknown Etiology-	Dr Anjali Taneja
11.30-11.40am	Eclampsia without Hypertension-Diagnostic miss or atypical variant -	Dr Wansalan K Shullai
11.40-11.45pm	Chairperson comments & Discussion	

11.45am-12.00pm	Session IVA The Vaginal Route Reimagined – From Classical Mastery to VNOTES Innovation” Chairpersons: Dr Abha Sharma , Dr Rajesh Kumari (AIIMS) , Dr Swati Sinha , Dr Vijayata Sangwan	
11.45-12.00pm	VNOTES – Basics to advanced	Dr Swati Agrawal
12.00-12.05pm	Chairperson comments	
12.05PM-12.30pm	Session :IV B Debate -The Evidence Face-Off	
	Should Opportunistic Salpingectomy Be Routine for Ovarian Cancer Prevention	
12.05pm-12.15pm	Yes	Dr Niharika Dhiman
12.15pm-12.25pm	No	Dr Kanika B Modi
12.25pm-12.35PM	Chairperson comments	
12.35-1.00PM	Session V – Keynote Address Dr SN Basu, Dr Raksha Arora, Dr Reena Yadav, Dr Veena Ganju Malla ,Dr Sushma Sinha	
12.35-12.55pm	FGR – Prediction and Prevention	Dr Srividhya Sankaran (UK)
12.55-1.00pm	Discussion	
1.00-1.30pm	AOGD Past President Oration Dr Ashok Kumar Topic : Oral health & Pregnancy Chairpersons: Dr Maya Sood, Dr NB Vaid , Dr Achla Batra, Dr Malvika Sabharwal, Dr L Shyam Singh	
2.15-3.15pm	Session VI- Fertility, Contraception & Beyond – Clinical Priorities in 20s and 30s Chairpersons: Dr Sohani Verma, Dr Jyoti Bali, Dr Lisa Sharma, Dr Nivedita raizada	
2.15 pm-2.25pm	Fertility preservation for late motherhood and career planning	Dr Sandeep Talwar
2.25-2.35pm	Contraceptive choices: tailoring to lifestyle and comorbidities	Dr Shikha Chadda
2.35- 2.45pm	Preconception health – optimizing before the bump	Dr Anuradha Singh
2.45pm-2.55 pm	Endometriosis and fibroids in young women: fertility-friendly management	Dr Anjela Aneja
3.00pm-3.15pm	Chairperson comments & Questions	
3.15pm-4.15pm	Session VII: Debate -The Evidence Face-Off" Chairpersons : Dr Deepika Loganey , Dr Vandana Bansal, Dr Shilpa Ghosh, Dr Rinku Lodha Negi	
3.15-3.40pm	Non-invasive Prenatal Testing (NIPT) for All	
3.15-3.25pm	For	Dr Jaya Chawla
3.25-3.35pm	Against	Dr Apoorva Kulshreshtha
3.35--3.40 pm	Discussion	
3.40-4.055pm	Universal Aspirin Use in Pregnancy: Prevention or Overprescription	
3.40-3.50pm	Prevention	Dr Sruthi Bhaskaran
3.50pm-4.00pm	Over prescription	Dr Kamna Dutta
4.00pm-4.10pm	Discussion	
4.15pm onwards	Valedictory & Vote of Thanks	

Registration Fees

Category	Early Bird (Till 30th June 2025)			Regular (1st July to 15th Aug 2025)			From 16th August 2025 Onwards/On-spot		
	Amount	GST 18%	Total	Amount	GST 18%	Total	Amount	GST 18%	Total
AOGD Member	6000	1080	7080	6500	1170	7670	7000	1260	8260
Non-Member	7000	1260	8260	7500	1350	8850	8000	1440	9440
PG Students	5000	900	5900	5500	990	6490	6000	1080	7080

AOGD Member (Above 75 year): Complimentary

Kindly email duly filled Registration Form along with age proof on our official email ID mentioned below.

Pre Conference Workshop-11th September and 12th September 2025

Early Bird (Till 30th June 2025)			Regular (1st July to 15th Aug 2025)			From 16th August 2025 Onwards/On-spot		
Amount	GST 18%	Total	Amount	GST 18%	Total	Amount	GST 18%	Total
1500	270	1770	1800	324	2124	2000	360	2360

Note: The above-mentioned fees are applicable per workshop. If a participant wishes to attend 2 workshops, the fee will be charged separately for each.

Competition Paper

Code	Name	Abstract Title
CF1	Divya Khurana	Rapid cycle improvement model as an effective quality tool for rationalizing oxytocin usage in third stage of labour
CF2	Isha Yogi	Antenatal estimation of placental weight and its relationship with adverse fetal outcome
CF3	Megha	Accuracy of modified cardiovascular sequential organ failure assessment (m-CV SOFA) score for predicting the duration of critical care unit stay in maternal sepsis
CF4	Bhavneet Kaur	Efficacy of an Extended 10-Day Letrozole Regimen Compared to the 5-Day Regimen in Enhancing Ovulation in Infertile Women With Polycystic Ovary Syndrome: A Randomized Controlled Trial
CF5	Neha	Study of agreement between ultrasound GIRADS classification for uterine cavity or endometrial lesions and histopathology in abnormal uterine bleeding
CF6	Nisha Chopra	Grobman Score for Predicting Successful Trial of Labor After Cesarean in a North Indian Population
CF7	Sushma PRASAD	To evaluate the effect of ormeloxifene on unscheduled vaginal bleeding in women using LNG-IUS

Free Papers

13th September 2025		
Magnolia	9am-10am Dr Preeti Singh, Dr Kavita Aggarwal, Dr Nidhi Gupta	
H1 OP/1	Association of Placental Laterality with Uterine Artery Doppler Abnormality in the Development of Pre-eclampsia	Aachal Chaudhari
H1 OP/2	Induction of labor in previous caesarean section	Aishwarya V Yajaman
H1 OP/3	Effect of Maternal obesity on the outcome of induction of labour	Lakshita Rajput
H1 OP/4	Psychological Morbidity and Quality of Life in Women with Gynaecological Cancers and Their Family Caregivers: An Observational prospective Study	Ananya Jha
H1 OP/5	Maternal outcome in obstetrics ICU:A retrospective study from a teaching hospital in north india	Minakeshi Rana
Magnolia	10-11am Dr Sumedha Sharma, Dr Divya Gaur, Dr Geetanjali Sharma	
H1 OP/6	Diagnostic Performance of the IOTA-SR x CA-125 Model in Predicting Ovarian Malignancy in Women Undergoing Surgery for Adnexal Masses	Kritika Dhindhwal
H1 OP/7	Can urine replace the speculum? Exploring HPV DNA detection	Devanshi Agarwal
H1 OP/8	HPV Prevalence and Cervical Lesions in Women Recruited from Community and ART Centers: A Cross-Sectional Study	Kirti Garg
H1 OP/9	Phenotypic and Genotypic analysis of 5 fetal anomaly cases	Saloni Kamboj
H1 OP/10	Correlation of Cycle Threshold (Ct) Values with Histopathological Diagnosis in HPV-Positive Women: A Genotype-Specific Analysis.	Shahin Naz Jamali
H1 OP/11	A clinical study of fetomaternal outcome in pregnancies with abnormal amniotic fluid volume at a tertiary care Centre	Somya Agarwal
Magnolia	11am-12 noon Dr Renuka Malik, Dr Alpana Singh, Dr Poonam Kashyap	
H1 OP/12	Double the Anatomy Single the Pathology: Unilateral Diffuse Adenomyosis in a Uterine Didelphys	Rupambir Singh
H1 OP/13	Comparative study of hysteroscopic management versus blind dilatation and curettage in women with retained products of conception following first trimester abortion	Shubhangi Kumari
H1 OP/14	Clinical profile risk determinants and outcomes of abruptio placentae in a tertiary care hospital in north india: a retrospective observational study	Trangita Dixit
H1 OP/15	Routine haematological parameters and HbA1c as a tool for prediction of Gestational Diabetes Mellitus : A Combined Biomarker Approach	Janvi Sharma

H1 OP/16	Prediction of spontaneous preterm birth in women by transvaginal sonographic measurement of cervical length between 18-24 week gestation	Kanishka
H1 OP/17	Correlation of Respiratory Adjusted Shock Index with lactate levels in women with obstetric infection	Arti Yadav
Magnolia	2-3 pm : Dr Renu Tanwar, Dr Nishtha Jaiswal, Dr Megha Kansara	
H1 OP/18	Menstrual pattern changes in females using subdermal implants and DMPA injection in reproductive age females: A randomized control trial.	Nisha R
H1 OP/19	Novel 1 day bladder diary compared to 3 days bladder diary for evaluation of females with lower urinary tract symptoms	Manasi Deoghare
H1 OP/20	Comparison of efficacy of clomiphene citrate and tamoxifen in women with unexplained infertility: RCT	Deepika Singh
H1 OP/21	Incidence of Preterm Birth and Preterm Labour in IVF Pregnancies: Impact of Extended Progesterone Support at a Tertiary Centre in India	Radhika Garg
H1 OP/22	HIV in pregnancy: A 5 year retrospective study in a tertiary care hospital in kathua	Rajat Kumar
Magnolia	3-4pm: Dr Anita Rajorhia, Dr Vidhi Chaudhary, Dr Manmeet Kaur	
H1 OP/23	Adjunctive Azithromycin vs Standard Prophylaxis for Reducing Surgical Site Infections in Caesarean Deliveries: A Randomized Controlled Trial	Soniya Dhiman
H1 OP/24	Successful Management of Caesarean Scar Ectopic pregnancy using combined systemic and surgically administered Methotrexate	Gayatri Swetha Gunupuru
H1 OP/25	Echoes of Discomfort: A Study of Revised Morphological Ultrasonographic Assessment (MUSA) features and Quality of Life in Adenomyosis	Shivangi Singh
H1 OP/26	Oral versus Intramuscular Vitamin B12 Therapy in Pregnant Women with anaemia with B12-Deficiency: A Randomized Controlled Trial	Anjali
H1 OP/27	Pelvic floor function assessment in menopausal women using Trans perineal Ultrasonography	Sakshi Verma
H1 OP/28	Healing the Scar: Fertility Restoration Post Isthmoecele Repair	Ayushi Negi
Maple	9am-10am; Dr Deepa Gupta, Dr Nalini Bala Pandey, Dr Raina Chawla	
H2 OP/1	Not Just Cholestasis: Lessons from Four Unusual Cases of Severe Jaundice in Pregnancy	Priyanka Das
H2 OP/2	Effect of video-based counselling on pre-procedural anxiety in women undergoing colposcopy	Adiba Saman
H2 OP/3	Beta Thalassemia and Pregnancy: Insights from a Case Series	Shagun Kamboj
H2 OP/4	Muscle Fatigue and Motherhood: Myasthenia Gravis in Pregnancy	Sampada Kundal
H2 OP/5	From Pills to Embolization: Managing Enhanced Myometrial Vascularity A Case Series and Literature Review	Harshita
H2 OP/6	Outcome of women with early gestational glucose intolerance treated with medical nutrition therapy and metformin versus only medical nutrition therapy _ randomised control trial	Srilekha thupili
Maple	10-11 am; Dr Monika Kashyap Pal, Dr Shweta Balani, Dr Apoorva Kulshreshtha	
H2 OP/7	Accuracy of preoperative tumour markers, IOTA model and intraoperative frozen section in comparison with final histopathological diagnosis in ovarian tumours	Riya Gupta
H2 OP/8	Association of Platelet Count CA-125 and Leukocyte Profiles with Surgical Outcomes in Ovarian Cancer.	Alankrita Kumar Sharma
H2 OP/9	Plasma Cell-Free DNA as Diagnostic and Treatment Response Biomarkers in High-Grade Serous Ovarian Cancer	Sristy Shikha
H2 OP/10	BETA HCG trends in women following molar evacuation progressing to GTN versus those with spontaneous regression	Bhakti Ajay Agarwal
H2 OP/11	Significance of sentinel lymph node biopsy in low and intermediate risk endometrial cancer: a study at tertiary care centre India	Anjali Chandra
H2 OP/12	Colposcopy : A valuable tool for evaluation of inflammatory smears	Neeti Singhal
Maple	11am-12 noon Dr Neeti Tiwari, Dr Pakhee Aggarwal, Dr Ayesha Raza	
H2 OP/13	Efficacy of Levonorgestrel Intrauterine System in the Management of Abnormal Uterine Bleeding: A Retrospective Analysis of 30 Women	Madhu Mishra
H2 OP/14	Feasibility and Safety of Non-Descent Vaginal Hysterectomy (NDVH) in women with prior Caesarean Section (C-Section) : Our experience	Meenakshi Gupta
H2 OP/15	Effectiveness of antepartum health education on awareness and acceptance of Human Papilloma virus (HPV) Vaccine in postpartum period	Jagriti

H2 OP/16	Comparison between Intracervical prostaglandin E2 gel and Intravaginal prostaglandin E2 pessary in Induction of labour /cervical ripening	Mahika Tuteja
H2 OP/17	Benchmarking karyotype diagnosis and detection rates in Nidan Kendra	Ayushi Sinha
H2 OP/18	Mental Health Assessment of Postnatal Women Using EPDS	Prabhjot Kaur
Maple	2-3pm Dr Prabha Lal, Dr Triveni GS, Dr Payal Chaudhary	
H2 OP/19	Stillbirth and it's determinants-an observational study from Uttarakhand	Arish Khan
H2 OP/20	Cabergoline decreases serum proinflammatory markers and pain in Endometriosis	Ritu kushwah
H2 OP/21	Anti-NMDA Receptor Encephalitis with Bilateral Teratoma: A Multidisciplinary Challenge	Kamini Kumari
H2 OP/22	Comparison of Combination of Dinoprostone Vaginal Insert (DVI) and Intracervical Foley Catheter (FC) versus DVI alone for Cervical Ripening in Term Induction: A Randomized Controlled Trial	Nilufhar Parveen
H2 OP/23	Feasibility of Minilaparotomy Myomectomy as a Safe and Effective Uterus- and Fertility-Preserving Surgical Option in Patients with Large Fibroid Uterus (>10 cm)	Jyoshna Devi
Maple	3-4pm Dr Poonam Joon, Dr Deepali Garg, Dr Meenakshi Singh	
H2 OP/24	Comparison of induction-abortion interval in mid trimester termination of pregnancies with and without intra-amniotic digoxin: a ranomised controlled trial	Manisha
H2 OP/25	Decoding Stillbirth: An Analysis of Patterns and Causes in a Tertiary Care Centre	Jyotsna Sharma
H2 OP/26	Comparison of unexplained stillbirths by ReCoDe and ICD-PM classifications	Aakanksha
H2 OP/27	What Happens to Contraceptive Use After the Introduction of Subdermal Implant: A Retrospective Study	Shweta
14th September 2025		
Magnolia	9am-10am; Dr Neha Varun, Dr Anju Singh, Dr Wansalan K Shullai	
H1 OP/29	Role of Ulipristal Acetate in treatment of fibroid- A Prospective Study	Ojasvi Shankar
H1 OP/30	Role of serum progesterone in early pregnancy as a predictor of viable pregnancy	Maney Nagpal
H1 OP/31	Healing Beyond Loss: Insights from a Pilot Study on Bereavement Care Experiences	Bhavya Kejriwal
H1 OP/32	Effect of pregnancy on sexuality of women	Shanta Narayan
H1 OP/33	Epidemiology and Genetic Spectrum of Hemoglobinopathies in the Antenatal Population of Mewat District Haryana	Aakanksha Siwach
H1 OP/34	Association of prenatal ultrasound diagnosed anomalies with fetal autopsy findings in medical termination of pregnancy	Rajguru Meena
Magnolia	10-11 am; Dr Manjusha, Dr Divya Pandey, Dr Anamika Das	
H1 OP/35	Beyond Insulin-TyG Index as a Cost-Effective Marker of Insulin Resistance in PCOS	Sowmiya Rajendran
H1 OP/36	Influence of body mass index on post- ovulation trigger LH progesterone and HCG levels and their impact on oocyte retrieval in IVF cycles	Kilpauk
H1 OP/37	Effect of Platelet rich plasma therapy on menstrual restoration in uterine causes of secondary amenorrhoea	Kaveri Gupta
H1 OP/38	To Evaluate the Effect of Hypothyroidism on Obstetric and Perinatal Outcomes: A Hospital-Based Retrospective Study	Shivani Sharma
H1 OP/39	Congenital Tuberculosis: The Unrecognized Sepsis Mimicker in Newborns	Vini Nangwade
H1 OP/40	Comparison of Intravenous Fentanyl Patient-Controlled Analgesia and Multimodal Parenteral Analgesia for Pain Relief During Second Trimester Medical Termination of Pregnancy: A Randomized Controlled Study.	Deepali Garg
Maple	9am-10am; Dr Sujata Aggarwal, Dr Shakuntala Kumar, Dr Juhi Bharti	
H2 OP/29	Role of vasopressin to control blood loss in Total laparoscopic Hysterectomy	Keerti Mishra
H2 OP/30	Association of vasomotor symptoms with cardiovascular risks in perimenopausal and menopausal women	Dimple Yadav
H2 OP/31	Effects of birth preparedness sessions on anxiety level in antenatal women: A pre and post-interventional study	Harsha Rathiya
H2 OP/32	A Prospective Study on Predictors and Outcomes of Surgical Site Infections Following Elective Caesarean Section	Srishti
H2 OP/33	Empowering Choices: Implants Reshaping the Future of LARC	Ayushi Hada
H2 OP/34	Association of Cesarean scar defect with abnormal menstrual patterns in women with secondary infertility	Anmol Shivhare

Poster Presentation

13th September 2025; Saturday		
9am-10 am	SCREEN 1-Judges: Dr Reena R Punia , Dr Puja Sharma	PRESENTER
S1/P1	Conservative management of Caesarean Scar pregnancy	Deeksha Ramola
S1/P2	Successful Conservative Management of Morbidly Adherent Placenta Using Methotrexate: A Case Report	Megha Balwant Patil
S1/P3	When life halts and so does the bowel: twisted tale of intrauterine fetal demise	Tarini Singh
S1/P4	Pregnancy with Complete Heart Block : Management Dilemmas	Gargi Sharma
S1/P5	Dual Burden in early pregnancy: a case of Schizophrenia and Hyperemesis Gravidarum	Aditi Verma
S1/P6	Cerebral Tuberculosis mimicking Toxemia of Pregnancy: A case report and Review of Literature	Rashmi Chahar
S1/P7	Beyond the womb:a life that refused to end- secondary abdominal pregnancy	Mansi R
S1/P8	Colonic Bleed- A Grave and Life-Threatening Complication Due To Unopposed Antibiotic Usage After Cesarean Section	Priyanka Shah
S1/P9	Saving one heart: Radiofrequency ablation in monochorionic twin pregnancy with anomalous Co-Twin	Rubal Garg
10am -11 am	SCREEN 1-Judges: Dr Neha Sharma, Dr Namrata Hazarika	
S1/P10	Medical Management of Cesarean Scar Ectopic Pregnancy with Transvaginal Potassium Chloride and Methotrexate Injection under ultrasound guidance.	Juggal Sunilbhai Fatnani
S1/P11	Torsion complicating hyperreactio luteinalis in a spontaneous singleton gestation.	Sweetie Sinha
S1/P12	Ebstein anomaly in pregnancy : A Rare Case	Kalpna Pandey
S1/P13	Raynaud's Phenomenon of the Nipple Triggered by Labetalol: An Unusual Side Effect	Shifa Qureshi
S1/P14	Triple Theatre in a Twin Pregnancy- Successful pregnancy outcome in a monochorionic twin pregnancy with torsion and TTTS	Himakshi Garg
S1/P15	Navigating Pregnancy with Klippel-Feil Syndrome: Clinical Challenges and Outcomes	Sai Priya Mandem
S1/P16	Navigating Pregnancy in Wermer Syndrome: A Multidisciplinary Triumph Over Endocrine and Obstetric Complexities	Subha Sonam
S1/P17	Paraparesis secondary to Hyperemesis Gravidarum	Yogita
S1/P18	A Second chance at life from perimortem caesarean to viable second pregnancy: a rare case report	Shruti Pandey
S1/P19	When One of the Two Twists: Bilateral dermoid Cysts with Unilateral Torsion in Pregnancy:A case report and review of literature	Soundharia R
11am-12 noon	SCREEN 1-Judges: Dr Gargi Aggarwal, Dr Neha Mishra	
S1/P20	Gestational trophoblastic disease with uterine perforation	Anishwara Kumari
S1/P21	Management Dilemma in a Rare Case of Vaginal Sarcomatoid Squamous Cell Carcinoma in Chronic Uterovaginal Prolapse.	Komal Yadav
S1/P22	Chronic Uterine Inversion Complicating a Myomatous Polyp :Diagnostic & Management Dilemmas.	Drishti Chola
S1/P23	Against All Odds: Successful Pregnancy Outcome in a Young Woman with High-grade Epithelial Ovarian Cancer	Vatsala
S1/P24	Vulvar Elephantiasis: A Rare Clinical Entity	Oishi Debnath
S1/P25	Hysteroscopic Management of Symptomatic Isthmocele in a patient with post-cesarean Abnormal Uterine Bleeding: A Case Report	Priyanka Jaisinghani
S1/P26	Total laparoscopic hysterectomy in large cervical fibroid in obese patient - An operative challenge	Vinika Nimodia
S1/P27	The Scar That Kept Growing: Laparoscopic Excision of Caesarean Scar Endometriosis	Aparajita Soni
S1/P28	The Perplexity of a Dual Pregnancy: A Silent Ruptured Noncommunicating Rudimentary Horn Pregnancy with Retained fetus and a Viable Intrauterine Gestation in Communicating Horn	Aditi Garg

S1/P29	A Rare Beat: Spontaneous Conception in Turner Syndrome with Reduced LVEF	Manaswi Dutta
	BREAK	
2pm-3pm	SCREEN 1-Judges: Dr Minakeshi Rana, Dr Sunita Seth	
S1/P30	Undiagnosed primary hypothyroidism as a cause of spontaneous Ovarian Hyperstimulation Syndrome	Maria Fazal
S1/P31	A study to access the gynaecological problems among the adolescent girls attending outpatient department in a tertiary care hospital in North India	Kashaifa Majeed
S1/P32	A rare case report on OEIS complex diagnosed by USG	Neetu Mandia
S1/P33	Abdominopelvic mass with multiple rare congenital malformations- a diagnostic dilemma	Anushree CM
S1/P34	Transverse vaginal septum with secondary endometriosis and hydrosalpinx: importance of early diagnosis and surgical management	Pratiksha Daivkant Mathdevru
S1/P35	Role of Risk Factors in the Causation of Gestational Diabetes Mellitus and Fetomaternal Outcome: A Prospective Observational Study	Prarthana Priya
S1/P36	Incidental Detection of a large degenerating subserosal fibroid during pregnancy managed by interval myomectomy	Neha Kumari
S1/P37	Unusual Complication of Transobturator Midurethral Sling: Necrotising Granulomatous Inflammation and Chronic Pain-A Case Report	Ashita Aggarwal
S1/P38	When Hormone Told Two Stories: Granulosa Cell Tumour in a woman with polycystic ovarian syndrome	Kshitij Kaushal
S1/P39	A Tale Of Two FGR	Aayush Jain
3pm-4pm	SCREEN 1: Judges: Dr Bidisha Singha, Dr Sakshi Nayar	
S1/P40	Sex Cord-Stromal Tumour Masquerading as Ovarian Torsion	Inderpreet Kaur
S1/P41	Bladder as an Unintended Destination: A Case Report of Intra-vesical Copper T	Arzoo Sana
S1/P42	Incidental Ectopic Pregnancy Diagnosed During Interval Tubal Ligation Following Unsupervised Medical Abortion	Nikitha Kataru
S1/P43	Postpartum Pubic Bone Diastasis : A Rare Complication of Difficult Labour.	Afsheen Fatima
S1/P44	A Benign Masquerade of Malignancy: Diffuse Peritoneal Leiomyomatosis Case Report	Garima Wadhwa
S1/P45	Villars Nodule Without Surgical Scar: A rare case report	Ritu Kushwah
S1/P46	Double uterus single kidney: Difficult Laparoscopic Hysterectomy for complex mullerian anomaly in a young renal transplant recipient woman with previous four laparotomies	Naimisha Singupuram Priya
S1/P47	Diagnostic Challenge: Ovarian Fibroma Masquerading as Broad Ligament Fibroid	Yamini Sokhal
S1/P48	Accessory Cavitory Uterine Malformation(ACUM)	Harshita Kori
S1/P49	Antenatal diagnosis of 22q11 deletion syndrom: A case report with autopsy correlation	Deachen Angmo
13th September 2025; Saturday		
9am-10am	SCREEN 2 - Judges: Dr Sharmishtha Garg, Dr Aruna Verma	
S2/P1	Stress cardiomyopathy	Ananta
S2/P2	Heart block in pregnancy	Shulia Lydia
S2/P3	Postpartum Cardiomyopathy on Postoperative Day 1 Following Emergency Cesarean Section: A Case Report	Ravisha
S2/P4	A Large Ovarian Cyst detected in second trimester and its management	Sunakshi Malhotra
S2/P5	Early Detection of Cesarean Scar Ectopic: A Case Report and Clinical Insight	Vignatha Maram
S2/P6	First trimester uterine rupture-A rare and baleful event	Reshma Parveen Firdousi
S2/P7	Successful outcome of pregnancy in eisenmenger syndrome	Nancy Aggarwal
S2/P8	Peripartum Cardiomyopathy	Sonal Suman
S2/P9	A rare case of decidual cast expulsion following uterine compression sutures	Shreya

S2/P10	The Eye Does Not See What The Mind Does Not Know: A Rare Case Of Fetal Umbilical-Portal-Systemic Venous Shunt	Nishita Purohit	Nirmalendu
10am -11am	SCREEN 2-Judges: Dr Nidhi Jha, Dr Sonia Chawla		
S2/P11	From Crisis to Cradle: A Remarkable Pregnancy Journey Through Hyperhemolytic Crisis in Thalassemia Intermedia	Krutika Dave	
S2/P12	When Aorta Lens and Womb Collide: A Multidisciplinary Triumph in Marfan Syndrome Pregnancy and Successful Outcome	Mamta Chaudhary	
S2/P13	Corrosive injury with burst abdomen in pregnancy: a rare co-incidence	Pragya Shukla	
S2/P14	Navigating the Dual Challenge of Evans syndrome and Pregnancy	Tanya Chaudhary	
S2/P15	Recurrent Vulvar Aggressive Angiomyxoma with Hormonal Receptor Shift following Treatment Interruption- A Rare Case Report	Monika Jain	
S2/P16	A Case Report on Aggressive Angiomyxoma of the Vulva	Isha Yadav	
S2/P17	Adnexal High-Grade Endometrial Stromal Sarcoma Arising from Ovarian Endometriosis : A Rare Case Report in a Nulliparous Female	Vidushi Aggarwal	
S2/P18	Zoomed Zoned verified: The diagnostic leap from conventional to three ring vulvoscopy .	Parul Kargwal	
S2/P19	Rarity Meets Reality: Ovarian Adenosarcoma presenting with gross ascites in perimenopausal women- A case report	Neha kumari	
S2/P20	Mosaic Turner syndrome presenting as secondary amenorrhea: A rare case report	Divya Khurana	
11am-12 noon	SCREEN 2 Judges: Dr Pragati Aggarwal, Dr Shivangini Sinha		
S2/P21	Puberty Menorrhagia Unmasking Myxedema crisis	Dipansha Maroo	
S2/P22	A case of maternal near miss in IVF conceived pregnancy with multiple comorbidities-time to introspect	Divya Aggarwal	
S2/P23	Clitoral Abscesses in Young Females: An Overlooked Diagnosis	Aditi Singh	
S2/P24	A Rare Case of Recurrent Large Hematometra due to Transverse Vaginal Septum with Previous 3LSCS	Shami Aara	
S2/P25	Hope Within the Scar: A Successful Fertility-Sparing Approach to Viable CSEP	Srishti	
S2/P26	Caesarean section scar endometriosis with sinus	Yakkala Lakshmi Chaitanya	
S2/P27	Ruptured Rudimentary Horn Pregnancy at 18 Weeks: A Rare but Life-Threatening Emergency	Darshan Bhadana	
S2/P28	Case Report of Isthmocele in Pregnancy: Antenatal Challenges and Outcomes	Shadia Bano	
S2/P29	Pregnancy outcomes in women with Ebstein Anomaly: A case series	Pooja Yadav	
BREAK			
2pm-3pm	SCREEN 2-Judges: Dr Muntaha, Dr Mansi Kumar		
S2/P30	Hemihysterectomy for unicornuate uterus with non communicating rudimentary horn with functional endometrium	Annu Kumari	
S2/P31	Uterocutaneous fistula	Adeeba Naaz	
S2/P32	Umbilical Vein Varix: A Rare Entity Antenatal Diagnosis and Management	Kirti Garg	
S2/P33	Non-Communicating Functional Rudimentary Horn of the Uterus in an Adolescent Female	Shilpa Verma	
S2/P34	Arterio-Venous Malformations of Uterus- A Management dilemma	Ishika Goyal	
S2/P35	The Unexpected Cardiac Guest: An interesting case of Intravascular Leiomyomatosis with Cardiac Extension	Mehak Arora	
S2/P36	Fibroepithelial stromal polyp in vagina- a rare incidental finding	Gaurika Gupta	
S2/P37	Postnatal Day 6 Uterine Inversion Resistant to Repositioning: A Case Report and Review	Tamnna	
S2/P38	Malignant Brenner Tumor	Rahul Yadav	

Write ups

Cesarean on Demand- A Woman's Right or Medical Malpractice

Manju Khemani

Principal Director Dept of Obst and Gynae, Max Smart Super Specialty Hospital New Delhi

Cesarean section is a surgical procedure performed to ensure the safety of both the mother and child when a vaginal delivery is not feasible. (emergency CS) Or it's also performed when danger to mother and baby outweighs risks of caesarean section.

There is no consensus on what the ideal caesarean section (CS) rate should be. However, the World Health Organization (WHO) indicates that rates below 5% may suggest inadequate obstetric care, potentially putting mothers and their newborns at risk for poor health outcomes. Conversely, rates above 15% do not seem to lead to better maternal or infant health.

The incidence of CDMR varied from 6 to 8% in the UK and Northern Europe, 11.2% in the USA, and 17.2% in Austria. In the majority of countries incidence of caesarean on demand is around 3%.

Fear of pain, fear for the baby, bad history of previous experiences, family pressure, fear for the mother, fear about the pelvic floor, and fatigue were some indications for demanding caesarean section in a study done by Hossam H. El-Kattatny et al in Iran. This study included patients from both public and private hospitals.

In a study conducted by Hossam H. El-Kattatny et al. in Iran, 15% of patients were illiterate, and 35% had a university education. 42.5% were from rural areas and the rest from urban areas. This shows that even illiterate women from rural areas are aware that they can demand a caesarean section and want to avoid Vaginal delivery.

Birtherights, is a UK charity protecting human rights during pregnancy and maternity care. In one of the blogs written by Birtherights, it is mentioned that women and birthing people have the right to request a caesarean birth even if healthcare professionals think there is no need for one. Many trusts and hospitals in the UK were refusing caesarean section on demand in 2017 and 2018, where the Birtherights organization persuaded these trusts to change their policy. In February 2021, after nearly four years, Birtherights were delighted to share that Oxford University Hospitals NHS Foundation Trust (OUH) would offer maternal request caesareans at the John Radcliffe Hospital going forward. When human rights organizations demand that women have the right to choose their method of delivery, it cannot simply be considered medical malpractice.

Are there any drawbacks to elective caesarean section on demand?

No comprehensive study has demonstrated an increase in

maternal mortality with recourse to cesarean section on demand. With the use of prophylactic antibiotic therapy, prophylactic heparin therapy, and sequential support hose, the risk of maternal morbidity in a planned cesarean is equivalent to that of a planned vaginal delivery.

One significant advantage of having a cesarean section on demand is that it helps reduce the risk of maternal hemorrhage related to uterine atony. This risk increases with vaginal deliveries, regardless of whether labor is induced, as well as with retained placenta and emergency cesarean sections. By opting for a planned cesarean, these risks can be effectively avoided.

One of the significant advantages of elective cesarean sections is the preservation of pelvic floor integrity, which is crucial for active women. They want to be able to exercise without restrictions and maintain their sexual function. Planned cesarean deliveries provide this reassurance.

The absence of labor would lead to a reduction in complications associated with vaginal delivery for baby. This includes lowering the risks of intracerebral hemorrhage, shoulder dystocia, brachial plexus injury, fractures of the arm or clavicle, central nervous system depression, and asphyxia.

Risk of in utero death increases substantially at 40 weeks. So, by planned caesarean between 39 to 40 weeks, this risk of in utero death during labour would be reduced to zero. Because the incidence of meconium aspiration occurs after 41 weeks the rate of meconium aspiration would also reduce by planned caesarean on demand.

Only 12% of caesareans on demand were done for obstetricians' pressure in a study done by Hossam H. El-Kattatny et al in Iran. So one cannot say that caesarean on Demand is a Malpractice.

Cesarean sections on demand provide greater control over the environment, allowing for better planning both at work and home.

A study has yet to demonstrate that a cesarean is more painful than a vaginal delivery with regard to postpartum pain. It's a very traumatic experience to undergo an emergency caesarean section after being in labour for some hours. This kind of bad experience motivates a woman to undergo a caesarean on demand. With emergency caesarean section, there is more risk of postpartum depression and posttraumatic stress disorder.

The costs incurred for a cesarean section on demand are the same as those incurred for a vaginal delivery with



oxytocin in many private hospitals.

Additionally, fear of legal consequences and litigation related to VD adverse outcomes are significant factors influencing clinicians' decisions to perform cesarean sections as a protective measure, which in turn increases the number of cesarean deliveries.

One must not forget that the adverse consequences of CDMR may be manifested only in future pregnancies. Repeated cesarean deliveries have higher rates of operative complications, placental abnormalities such as placenta previa and accreta, and consequent gravid hysterectomy.

The medical field now recognizes a patient's right to

participate actively in her choice of medical treatments, including the method of delivery. We acknowledge that a patient is entitled to undergo cosmetic surgery, as long as she provides informed consent. We should follow the same principle for cesarean section on demand, explaining all the pros and cons to the patient.

So caesarean section on Demand is not a medical malpractice it is due to change in lifestyle, increased awareness created by social media, changes in society and family structure, nuclear families and less family support, more awareness about their rights which has created a piquant situation for Doctors to do as their patients demand.

Pharmacotherapy in GDM – Metformin Versus Insulin

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Gestational diabetes mellitus (GDM) is defined as glucose intolerance first recognised during pregnancy, regardless of whether the condition persists postpartum. Its prevalence is increasing globally, affecting approximately **one in six pregnancies worldwide**. Regional prevalence varies, with rates ranging from about **5–14%** in many developed countries to **up to 25%** or higher in South-East Asia and certain high-risk populations. This rise is largely attributed to increasing maternal age, obesity, and lifestyle changes(1).

Uncontrolled GDM has significant maternal consequences, including preeclampsia, polyhydramnios, increased rates of caesarean section, and progression to type 2 diabetes mellitus (T2DM) (2).

Table 1: Maternal Complications in GDM (Study-wise Overview)

Complication	Prevalence / Risk in GDM	Reference
Preeclampsia	6.1% in GDM vs 2.8% in non-GDM (aOR 1.61)	Barden et al., 2004; Swedish Medical Birth (3).
Caesarean Delivery	40.3% in GDM vs 29.7% in normoglycemia (aOR 1.25)	Ye W et al., 2022; large U.S. cohort(4).
Emergency Caesarean	31.6% in GDM vs 19.4% in controls	Yuen et al., 2016 (5).
Polyhydramnios	~15% of polyhydramnios cases are associated with GDM	Dashe et al., 2002 (6).
Urinary Tract Infection (UTI)	Increased risk reported in GDM;	Yefet E et al., 2023 (7).
Obstructed Labor	More frequent in GDM due to macrosomia;	HAPO Study, 2008 (8).

FOETAL COMPLICATIONS

Foetal complications include macrosomia, shoulder dystocia, neonatal hypoglycaemia, respiratory distress syndrome (RDS), and increased risk of obesity and metabolic syndrome later in life.

Table 2: Foetal complications associated with Gestational Diabetes Mellitus (GDM)

Complication	Prevalence (%)	Reference
Hypoglycaemia	4.5	Karkia et al., 2023 (9)
Hypocalcaemia	1	Al-Nemri et al., 2018 (10)
Phototherapy Required	12	Capobianco et al., 2020(11)

Neonatal Respiratory Distress Syndrome (RDS)	6.5	Karkia et al., 2023 (9)
Birth Trauma	29	Al-Nemri et al., 2018(10)
Jaundice	12	Capobianco et al., 2020(11)
Congenital Anomalies	6	Al-Nemri et al., 2018 (10)
NICU Admission	25.8	Karkia et al., 2023(9)

Long-term risks associated with gestational diabetes mellitus (GDM)

Table 3: Long-term Risks Associated with Gestational Diabetes Mellitus (GDM)

Risk Category	Specific Risk	Prevalence / Evidence	Reference
Maternal Risks	Progression to Type 2 Diabetes Mellitus (T2DM)	Approximately 26.2 per 1,000 person-years	Li Z, et al. Diabetes Res Clin Pract. 2020; ¹²
	Cardiovascular Disease	Increased risk; exact prevalence varies by study	Lee SM, et al. Cardiovasc Diabetol. 2022; ¹³
	Ophthalmic Diseases	Higher incidence of diabetic retinopathy and cataracts	Auger N, et al. Diabetes Care. 2017;40 ¹⁴
Offspring Risks	Obesity and Metabolic Syndrome	2–4 times higher risk of obesity and metabolic syndrome	Clausen TD, et al. Diabetes Care. 2009;32(15)
	Impaired Neurodevelopment	Increased risk of autism (+25%), ADHD (+30%), intellectual disabilities (+32%)	Chen K, et al. BMJ. 2023; 380:l6398. ¹⁶
	Glucose Intolerance & Diabetes	5-fold increased risk of impaired glucose tolerance and diabetes in adolescence/adulthood	Clausen TD, et al. Diabetes Care. 2009;(15)

	Cardiovascular Morbidity	Increased risk of cardiovascular hospitalisations	Leybovitz-Haleluya N, et al. Diabetes Care. 2018;(17)
	Neuropsychiatric Morbidity	Higher incidence and earlier onset of neuropsychiatric disorders	Liu X, et al. Front Endocrinol (Lausanne). 2025;(18)

DIAGNOSIS OF GDM

Guideline / Organization	Screening Approach	Test & Timing	Glucose Thresholds	Diagnostic Requirement
IADPSG / WHO 2013 / ADA 2025	One-step	75 g OGTT, 24–28 weeks	Fasting ≥ 92 mg/dL (5.1 mmol/L) 1h ≥ 180 mg/dL (10.0 mmol/L) 2h ≥ 153 mg/dL (8.5 mmol/L)	Any one value equal to or above the threshold
ACOG / Carpenter & Coustan (US)	Two-step	Step 1: 50 g GCT, 24–28 weeks (non-fasting) Step 2: 100 g OGTT (fasting)	Fasting ≥ 95 mg/dL (5.3 mmol/L) 1h ≥ 180 mg/dL (10.0 mmol/L) 2h ≥ 155 mg/dL (8.6 mmol/L) 3h ≥ 140 mg/dL (7.8 mmol/L)	Two or more values above thresholds
NDDG (older US standard)	Two-step	Same as Carpenter & Coustan	Fasting ≥ 105 mg/dL (5.8 mmol/L) 1h ≥ 190 mg/dL (10.6 mmol/L) 2h ≥ 165 mg/dL (9.2 mmol/L) 3h ≥ 145 mg/dL (8.0 mmol/L)	Two or more values above thresholds

DIPSI (India)	Single-step	75 g OGTT, any time of day (non-fasting), 24–28 weeks	2h plasma glucose ≥ 140 mg/dL (7.8 mmol/L)	Single 2h value equal to or above threshold
Indian National Guidelines (ICMR / FOGSI / NICE India adaptation)	One-step	75 g OGTT, fasting preferred, 24–28 weeks	Fasting ≥ 92 mg/dL (5.1 mmol/L) 2h ≥ 153 mg/dL (8.5 mmol/L)	Any one value equal to or above the threshold

DIPSI is widely used in India for field settings due to simplicity; non-fasting OGTT is allowed.

DIPSI test is endorsed by y MOHFW, FOGSI, API, WHO, FIGO, IDF

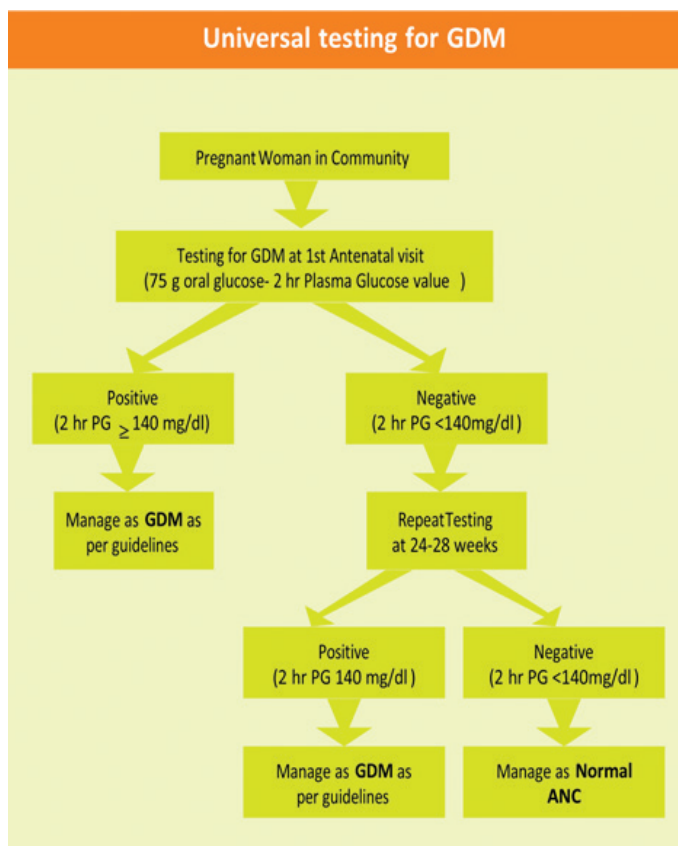


Figure 1: Management of GDM

Target glucose values in pregnancy-

- Fasting - 90mg/dl;
- 2 hours post meal- 120mg/dl

First-line therapy: Lifestyle modification (diet + exercise).

MEDICAL NUTRITION THERAPY

- Lifestyle modification and medical nutrition therapy (MNT) form the cornerstone of GDM management. However, 20–40% of women fail to achieve target glucose levels with MNT alone, necessitating pharmacological intervention.
- In the 2nd trimester, MNT trial is given for 2 weeks, whereas in the 3rd trimester, it is given for 1 week. If target glucose levels are not reached, pharmacotherapy is initiated.

PHARMACOLOGIC THERAPY :

Insulin

It acts by facilitating glucose uptake into muscle and adipose tissue and suppressing hepatic glucose production.

Regular insulin and intermediate-acting NPH are commonly used, though rapid-acting analogues are also considered safe during pregnancy.

It is the gold standard for GDM treatment, as it does not cross the placenta.

No single regimen has been proven superior; choice is individualised.

Rapid-acting analogues (aspart, lispro) mimic physiologic insulin and reduce the risks of hyper- and hypoglycaemia.

Insulin requirements rise across pregnancy (0.8 U/kg/day in 1st trimester, 1.0 U/Kg/day in 2nd, 1.2 U/Kg/Day in 3rd trimester).

In GDM, insulin is typically administered as a pre-meal combination (rapid/short-acting insulin + intermediate insulin) in the morning and at bedtime. Morning and evening doses may follow a 2:1 and 1:1 ratio, respectively, of short-acting and intermediate/long-acting insulin.

Early initiation of insulin without waiting for MNT is considered in cases with complications (e.g., hypertensive disorders, FGR, macrosomia, polyhydramnios) or very high glucose levels (FPG >126 mg/dL, 2-h PPG >200 mg/dL), during labour, during antenatal corticosteroid administration, and when GDM is diagnosed in the 1st or 3rd trimester.

Self-monitoring of blood glucose (SMBG):

7-point glucose monitoring is done initially.

After glycaemic control is achieved,

3–4 times/day (fasting and postprandial) is recommended for GDM patients.

If glycaemic control is achieved fasting and post prandial sugar is measured by staggered approach

TABLE 4: Action Profile of Commonly Used Insulin Agents (20).

Type of Insulin	Onset of Action	Peak of Action	Duration of Action
Insulin lispro (rapid-acting)	1–15 min	1–2 h	4–5 h
Insulin aspart (rapid-acting)	1–15 min	1–2 h	4–5 h
Regular insulin (short-acting)	30–60 min	2–4 h	6–8 h
Isophane insulin suspension (NPH insulin) (intermediate-acting)	1–3 h	5–7 h	13–18 h
Insulin glargine (long-acting)	1–2 h	No peak	24 h
Insulin detemir (long-acting)	1–3 h	Minimal peak at 8–10 h	18–26 h

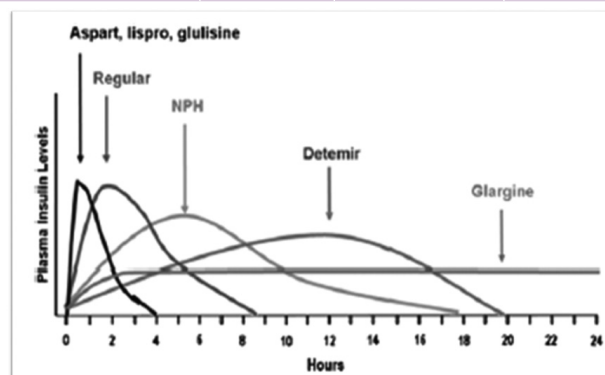


Figure 2: Action profile of Insulin

Advantages:

- Does not cross the placenta in clinically significant amounts.
- Flexible dosing allows individualised glycaemic control.
- Extensive safety data over decades of use.

Limitations:

- Requires multiple daily subcutaneous injections.
- Increased maternal weight gain.
- Risk of maternal hypoglycaemia.
- Costlier and less acceptable to patients compared to oral therapy.

Metformin

Metformin is a biguanide that reduces hepatic gluconeogenesis, improves peripheral insulin sensitivity, and enhances glucose uptake in skeletal muscle. During pregnancy, its pharmacokinetics are altered due to increased renal clearance, yet therapeutic levels are maintained. Importantly, metformin crosses the placenta freely, with cord blood concentrations approximating maternal plasma levels.

DIPSI, NICE, FIGO, and National Technical Guidelines of Ministry of Health and Family Welfare for GDM have recommended its use as an alternative to insulin.

It is preferred in women with obesity or requiring high insulin doses, due to improved insulin sensitivity and reduced maternal weight gain.

Initial dose: 500 mg OD for 1 week, followed by 500 mg BD, titrated to a maximum of 2 g/day. Sustained-release forms reduce gastrointestinal side effects.

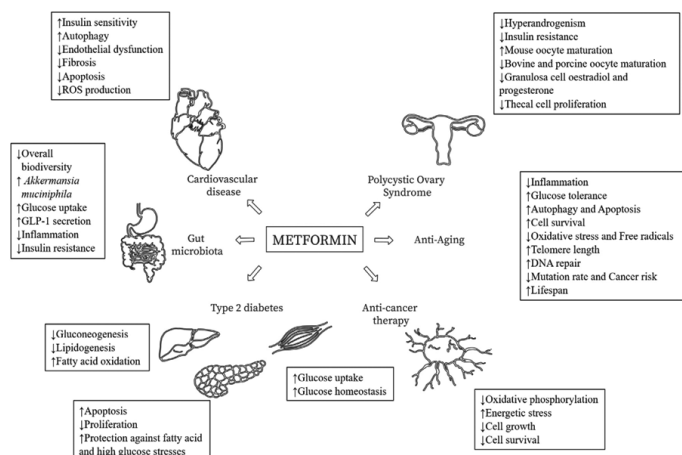


Figure 3: Various effects of Metformin

Advantages:

Oral administration improves compliance and acceptability.

- Lower risk of maternal hypoglycaemia compared to insulin.
- Associated with less maternal weight gain.
- Cost-effective, particularly in low-resource settings.

Limitations: 26–50% of women may eventually need insulin supplementation.

Associated with an increased incidence of preterm labour.

Contraindicated in significant organ dysfunction, hypertensive disorders, foetal growth restriction, or risk factors for preterm birth or previous stillbirth.

Gastrointestinal side effects such as nausea, vomiting, and diarrhoea may occur with metformin therapy.

This review evaluates the comparative role of metformin and insulin in the management of GDM, highlighting pharmacological profiles, maternal and foetal outcomes, evidence from clinical trials and meta-analyses, and current guideline recommendations.

Table 5. Summary of Maternal and Neonatal Outcomes: Metformin vs Insulin in GDM

Outcome	Evidence (Key Studies/Meta-analyses)	Effect / Risk Reduction	Favoured Treatment
Maternal Outcomes			

Preeclampsia	Wu 2024 (meta), Bodier 2025 (review), Riaz 2012 (21),(22),(23)	~39% lower risk (RR 0.61)	Metformin
Caesarean Delivery	Wu 2024, Shah 2022 (meta), Riaz 2012 (21),(23),(24)	8–9% lower risk; Riaz: 8% vs 28%	Metformin
Maternal Weight Gain	Wu 2024, Bodier 2025, Riaz 2012, MevIP RCT 2025 (21),(22),(25)	Significantly less gestational weight gain	Metformin
Induction of Labour	Wu 2024, Shah 2022, Riaz 2012 (21),(24)	10% reduced risk (RR 0.90)	Metformin
Foetal/ Neonatal Outcomes			
Macrosomia	Wu 2024, Shah 2022, Eid 2018, Riaz 2012 (21),(24),(26)	33% lower risk (RR 0.67)	Metformin
Neonatal Hypoglycaemia	Wu 2024, Shah 2022, IJOGR 2025, Riaz 2017(21), (24), (26),(27)	45% lower risk (RR 0.55)	Metformin
NICU Admission	Wu 2024, Shah 2022, Bodier 2025(21), (22)(24)	25% lower risk overall	Metformin
Birth Weight	Shah 2022, IJOGR 2025, Riaz 2012 (24),(27),(28)	Lower mean BW; more AGA infants	Metformin
Additional Outcomes			
Feto-maternal Disproportion	Riaz 2012 (27)	More common in insulin group	Metformin
Glycaemic Control (FPG & HbA1c)	Arshad 2017, MetIP RCT 2025 (29),(25)	Comparable or better with metformin	Metformin
Compliance & Satisfaction	Arshad 2017 (29)	Higher adherence and satisfaction	Metformin
Long-term Offspring Outcomes	MiG TOFU follow-up (Rowan 2018, 2020)(30)	No major adverse effects; similar adiposity; slightly larger size at 9 yrs	Comparable

EVIDENCE FROM STUDIES AND METAANALYSES

Table 6. Key Studies Comparing Metformin vs Insulin in GDM

Authors (Year)	Design	Population	Sample Size (n1=Metformin, n2=Insulin, n3=Diet, n4=Met+Ins)	Outcomes Measured	Comment
Rowan et al., MiG Trial (2008, NEJM) (30)	Multicentre RCT	GDM requiring pharmacologic therapy	n1=363, n2=368	Composite neonatal morbidity, maternal glycaemic control, satisfaction	No difference in neonatal composite; 46% metformin group required insulin; higher maternal satisfaction
Niromanesh et al. 2012 (Tehran)(32)	RCT	GDM uncontrolled with diet	n1=80, n2=80	Birthweight, LGA, maternal weight gain	Similar control; fewer LGA and less maternal weight gain in metformin; 14% required insulin
Niromanesh et al. 2013(33)	RCT	GDM not controlled with diet/exercise	n1=47, n2=47	Glycaemic control, neonatal hypoglycaemia	Lower maternal weight gain and neonatal hypoglycaemia; 26% required insulin
Ijas et al. 2011(34)	RCT	GDM diagnosed by OGTT	n1=51, n2=50	Maternal weight gain, neonatal outcomes	Comparable outcomes; weight gain lower in metformin
Tertti et al. 2013(35)	RCT	GDM requiring medication	n1=96, n2=96	Maternal control, caesarean rate, neonatal morbidity	Equivalent outcomes; ~27% metformin group required insulin
Ainuddin et al. 2015 (Pakistan) (36)	RCT	GDM, mostly multiparous	n1=150, n2=150	Birthweight, morbidity, preeclampsia, caesarean	Neonatal outcomes comparable; maternal outcomes (preeclampsia, caesarean) lower in metformin
Nachum et al. 2017 (Israel)(37)	RCT	GDM requiring therapy	n1=110, n2=107	Neonatal hypoglycaemia, macrosomia	No difference in neonatal outcomes; 45% required insulin
Rowan et al., MiG-TOFU (2011–2022)(38)	Cohort follow- up	Offspring 2–9 yrs	~100–200 per follow-up	Offspring body composition, metabolic markers	Similar body fat %, slightly larger body size at 9 yrs
Rademaker et al. 2025(39)	Systematic review/meta	Pooled RCTs & cohorts	–	Maternal/neonatal outcomes, insulin supplementation, long-term offspring	Metformin non-inferior; 40–50% still need insulin
Berti et al. 2024 (40)	Systematic review	RCTs	–	Maternal weight gain, neonatal morbidity	Confirms efficacy; long- term data limited
Large registry studies (2024–25) (41)	Observational	Thousands	–	Preterm, LGA/ SGA, maternal complications	Some show lower adverse outcomes with metformin, but possible confounding

Guideline Recommendations

- ACOG (2018): Insulin is the preferred pharmacological agent. Metformin may be considered as 2nd line when insulin is not feasible or is declined.
- NICE (UK, 2015): Recommends metformin as first-line pharmacological therapy if lifestyle modification fails, with insulin added as needed.
- WHO (2013): Endorses insulin as first-line, but allows metformin where resources or patient acceptability limit insulin use.
- DIPSI/FIGO (India, 2023): Support use of metformin, especially in resource-limited settings, as an effective and safe alternative (27)

Table 7:Guideline Recommendations

Authority	Insulin	Metformin
MoHFW 2018 / DCGI Nov 2024 (42),(43)	Recommended	Recommended
DIPSI 2023 (44)	Recommended	Recommended
ACOG 2018 (45)	Recommended	Metformin should not be used as first-line agents as it crosses the placenta & long-term safety not established. Glyburide not recommended.
ADA 2024 (46)	Recommended	Metformin should not be used as first-line agents as it crosses the placenta & long-term safety not established.
NICE 2015 / European Union 2022 (47),(48)	Recommended	Recommended

Summary

- Metformin has emerged as a viable alternative to insulin in the treatment of GDM. Its maternal benefits include reduced weight gain, lower hypoglycaemia risk, greater acceptability, and cost-effectiveness. Neonatal outcomes are broadly similar between the two drugs, with some studies favouring metformin due to reduced neonatal hypoglycaemia.
- However, the need for supplemental insulin in 20–46% of women underscores that metformin may not be sufficient for all patients. Importantly, while short-term neonatal outcomes are reassuring, data on long-term offspring health remain limited. Existing follow-up studies suggest no adverse effects on growth or neurodevelopment, but subtle metabolic differences require ongoing monitoring.
- Therefore, individualized treatment remains essential. In high-resource settings, insulin remains the gold standard, while in low-resource settings, metformin offers an effective and accessible option.

Conclusion

- Metformin is an effective and increasingly accepted alternative to insulin for the management of GDM, offering comparable glycaemic control with added maternal benefits. While short-term outcomes are reassuring, long-term safety data on offspring remain limited, necessitating further research. Clinical decision-making should be individualized, considering maternal preference, glycaemic control, and healthcare context.

References

1. Magliano DJ, Boyko EJ; IDF Diabetes Atlas 10th edition scientific committee. IDF DIABETES ATLAS [Internet]. 10th edition. Brussels: International Diabetes Federation; 2021. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK581934/>
2. Nakshine VS, Jogdand SD. A Comprehensive Review of Gestational Diabetes Mellitus: Impacts on Maternal Health, foetal Development, Childhood Outcomes, and Long-Term Treatment Strategies. *Cureus*. 2023 Oct 23;15(10):e47500. doi: 10.7759/cureus.47500. PMID: 38021940; PMCID: PMC10663705.[pmc.ncbi.nlm.nih+](https://pubmed.ncbi.nlm.nih/)1
3. Barden TP, Eriksson U, Persson B, et al. Gestational diabetes and later maternal health: a population-based study from the Swedish Medical Birth Register. *Diabetes Care*. 2004 Mar;27(3):693–7. PMID: 15036703.
4. Ye W, Luo C, Huang J, Li C, Liu Z, Liu F, et al. Association of Gestational Diabetes Mellitus with Maternal and Perinatal Outcomes in the United States. *BMJ*. 2022 Oct 6;378:e071454. PMID: 36202395.
5. Yuen L, Wong VW, Simmons D. Ethnic disparities in gestational diabetes. *Diabet Med*. 2016 May;33(5):649–56. PMID: 26927251.
6. Dashe JS, Nathan L, McIntire DD, Leveno KJ. Correlation between amniotic fluid volume and perinatal outcome. *Am J Obstet Gynecol*. 2002 Mar;186(4):781–6. PMC: 3616801.
7. Yefet E, Nachum Z. Urinary tract infections in pregnant women with diabetes mellitus and gestational diabetes mellitus. *J Matern Fetal Neonatal Med*. 2023 Jan;36(1):215–221. PMID: 35235452.
8. HAPO Study Cooperative Research Group, Metzger BE, Lowe LP, Dyer AR, Trimble ER, Chavern U, et al. Hyperglycemia and adverse pregnancy outcomes. *N Engl J Med*. 2008 May 8;358(19):1991–2002. PMID: 18463375.
9. Karkia B, Papadopoulou A, Antoniou M, et al. Gestational diabetes mellitus: association with maternal and neonatal outcomes. *J Clin Endocrinol Metab*. 2023;108(2):e381–e389. doi:10.1210/clinem/dgac736. PMID: 38138200; PMCID: PMC10744613.
10. Al-Nemri AM, Al-Mulhim AS, Al-Qahtani AA, et al. Perinatal and neonatal morbidity among infants of diabetic mothers. *Saudi Med J*. 2018;39(8):800–805. doi:10.15537/smj.2018.8.22276. PMID: 30077999; PMCID: PMC6058745.
11. Capobianco G, Lazzaro C, Rossi F, et al. Materno-foetal and neonatal complications of diabetes in pregnancy: a retrospective cohort study. *Diabetes Metab Syndr Clin Res Rev*. 2020;14(6):1903–1909. doi:10.1016/j.dsx.2020.09.020. PMID: 32825775; PMCID: PMC7564828

12. Li Z, Zhang L, Jiang Y, et al. Incidence rate of type 2 diabetes mellitus after gestational diabetes mellitus: a systematic review and meta-analysis. *Diabetes Res Clin Pract.* 2020;164:108214. doi:10.1016/j.diabres.2020.108214. PMID: 32739080; PMCID: PMC7204113.
13. Lee SM, Kim YJ, Park JH, et al. Long-term cardiovascular outcomes of gestational diabetes mellitus: a systematic review and meta-analysis. *Cardiovasc Diabetol.* 2022;21(1):1. doi:10.1186/s12933-022-01663-w. PMID: 35835210.
14. Auger N, Luo ZC, Daniel M. Gestational diabetes mellitus and risk of cataract: a population-based cohort study. *Diabetes Care.* 2017;40(11):e147–e148. doi:10.2337/dc17-1322. PMID: 28852063.
15. Clausen TD, Mathiesen ER, Hansen T, et al. Overweight and the metabolic syndrome in adult offspring of women with gestational diabetes mellitus. *Diabetes Care.* 2009;32(4):554–556. doi:10.2337/dc08-1716. PMID: 19417040.
16. Chen K, Zhao W, Liu L, et al. Childhood neurodevelopmental disorders and maternal diabetes: a population-based cohort study. *BMJ.* 2023;380:l6398. doi:10.1136/bmj.l6398. PMID: 36541040.
17. Leybovitz-Haleluya N, Goldberg M, Hod M, et al. Association between gestational diabetes mellitus and offspring cardiovascular morbidity: a population-based cohort study. *Diabetes Care.* 2018;41(11):e149–e151. doi:10.2337/dc18-0953. PMID: 29936651.
18. Liu X, Wang J, Zhang Y, et al. Association between gestational diabetes mellitus and risk of neurodevelopmental disorders in offspring: a systematic review and meta-analysis. *Front Endocrinol (Lausanne).* 2025;16:1000132. doi:10.3389/fendo.2025.1000132.
19. van Leeuwen M, Louwerse MD, Opmeer BC, Limpens J, Serlie MJ, Reitsma JB, et al. Glucose challenge test for detecting gestational diabetes mellitus: a systematic review. *BJOG.* 2012 Mar;119(4):393–401. doi: 10.1111/j.1471-0528.2011.03254.x. PMID: 22260369.
20. Gabbe SG, Graves CR. Management of diabetes mellitus complicating pregnancy. *Obstet Gynecol.* 2003;102:857–68.
21. Wu Y, Yang H, Zhang Y, et al. Metformin versus insulin for gestational diabetes: a systematic review and meta-analysis of randomized controlled trials. *Diabetes Obes Metab.* 2024;26(2):317–29.
22. Bodier C, Lelong N, Khoshnood B, et al. Metformin in gestational diabetes: an updated systematic review. *Curr Diab Rep.* 2025;25(1):45–56.
23. Riaz M, Basit A, Fawwad A, et al. Effectiveness of metformin compared to insulin in gestational diabetes mellitus: a randomized clinical trial. *Diabet Med.* 2012;29(12):1501–7.
24. Shah BR, Retnakaran R. Comparing metformin with insulin in the treatment of gestational diabetes: systematic review and meta-analysis. *BMJ.* 2022;377:e070366.
25. [MevIP Trial Group]. Metformin versus insulin in pregnancy (MevIP): randomized controlled trial. *Lancet Diabetes Endocrinol.* 2025;13(1):45–56.
26. Eid J, Tita ATN, Landon MB, et al. Neonatal outcomes with metformin versus insulin therapy in gestational diabetes: secondary analysis of RCTs. *Am J Obstet Gynecol.* 2018;219(5):S626–35.
27. Riaz M, Afzal S, Basit A, et al. Neonatal outcomes with metformin versus insulin therapy in gestational diabetes: a prospective cohort. *J Matern Fetal Neonatal Med.* 2017;30(23):2796–801.
28. [IJOGR Trialists]. Metformin compared with insulin in women with gestational diabetes: randomized trial. *Int J Gynaecol Obstet.* 2025;161(2):255–63.
29. Arshad R, Karim N, Ara Hasan J, et al. Metformin vs insulin for gestational diabetes in Pakistani women: glycaemic control, adherence, and satisfaction. *J Coll Physicians Surg Pak.* 2017;27(11):693–9.
30. Rowan JA, Rush EC, Obolonkin V, Battin M, Woudes T, Hague WM. Metformin in gestational diabetes: offspring body composition at 7 and 9 years of age. *Diabetologia.* 2018;61(5):1012–20.
31. Rowan JA, Hague WM, Gao W, Battin MR, Moore MP; MiG Trial Investigators. Metformin versus insulin for the treatment of gestational diabetes. *N Engl J Med.* 2008;358(19):2003–15.
32. Niromanesh S, Alavi A, Sharbaf FR, Karimi A, Mafi A, Moosavi S. Metformin compared with insulin in the management of gestational diabetes mellitus: a randomized clinical trial. *Diabetes Res Clin Pract.* 2012;98(3):422–9.
33. Niromanesh S, Alavi A, Sharbaf FR, et al. Metformin versus insulin in gestational diabetes: maternal glycaemic control, weight gain and neonatal outcomes. *Diabetes Res Clin Pract.* 2013;100(3):316–21.
34. Ijas H, Vääräsmäki M, Morin-Papunen L, Keravuo R, Ebeling T, Saarela T, et al. Metformin should be considered in the treatment of gestational diabetes: a prospective randomised study. *BJOG.* 2011;118(7):880–5.
35. Tertti K, Ekblad U, Vahlberg T, Rönnemaa T. Comparison of metformin and insulin in the treatment of gestational diabetes: a retrospective, case-control study. *Diabetes Care.* 2013;36(3):557–61.
36. Ainuddin JA, Karim N, Hasan AA, Naqvi SA. Metformin versus insulin treatment in gestational diabetes in pregnancy in a developing country: a randomized control trial. *Diabetes Res Clin Pract.* 2015;107(2):290–9.
37. Nachum Z, Zafran N, Salim R, Hissin N, Hasanein J, Gam Ze Levtova Y, et al. Glyburide versus metformin and their combination for the treatment of gestational diabetes mellitus: a randomized controlled study. *Diabetes Care.* 2017;40(3):332–7.
38. Rowan JA, Rush EC, Obolonkin V, Battin M, Woudes T, Hague WM. Metformin in gestational diabetes: the offspring follow-up (MiG TOFU) body composition at 2 years of age. *Diabetes Care.* 2011;34(10):2279–84.
39. Rademaker D, et al. Metformin compared with insulin for

- gestational diabetes: systematic review and meta-analysis of randomized controlled trials and cohorts. *JAMA Netw Open*. 2025;8(2):e245678.
40. Berti L, et al. Metformin for the treatment of gestational diabetes: updated evidence from randomized controlled trials. *Rev Bras Ginecol Obstet*. 2024;46(1):34–45.
 41. [Large registry cohort studies]. National registry data (Nordic, UK, US cohorts). Metformin use in pregnancy and risk of adverse maternal and neonatal outcomes. *Lancet Diabetes Endocrinol*. 2024;12(6):425–36.
 42. Ministry of Health and Family Welfare, Government of India. *National guidelines for diagnosis & management of gestational diabetes mellitus*. New Delhi: MoHFW; 2018.
 43. Drug Controller General of India (DCGI). *Approval for metformin use in gestational diabetes mellitus*. New Delhi: DCGI; Nov 2024.
 44. Seshiah V, Balaji V, Chawla R, et al. Diagnosis and management of gestational diabetes mellitus: guidelines by DIPSI (Revised 2023). *Int J Diabetes Dev Ctries*. 2023;43:485–501.
 45. American College of Obstetricians and Gynecologists. ACOG Practice Bulletin No. 190: Gestational diabetes mellitus. *Obstet Gynecol*. 2018;131(2):e49–64.
 46. American Diabetes Association. Standards of medical care in diabetes—2024. *Diabetes Care*. 2024;47(Suppl 1):S1–S167.
 47. National Institute for Health and Care Excellence (NICE). *Diabetes in pregnancy: management from preconception to the postnatal period* (NG3). London: NICE; 2015.
 48. Hod M, Kapur A, McIntyre HD, et al. The International Federation of Gynecology and Obstetrics (FIGO) and European consensus on GDM management. *Diabetes Res Clin Pract*. 2022;183:109149.

Robotic Surgery – Hype or Hope?

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The 21st century has seen a remarkable transformation in the field of surgery. Among the most talked-about developments is robotic surgery, which has captured both popular imagination and professional curiosity. With sleek machines, 3D vision, and precision movements, robotic systems appear to be the stuff of science fiction. But the question remains—is robotic surgery just hype, or is it a genuine beacon of hope for patients and surgeons alike?

Understanding Robotic Surgery

Robotic surgery is a form of minimally invasive surgery where the surgeon controls a robotic platform—typically through a console—from within the operating room. The da Vinci Surgical System, the most widely used platform globally, enables surgeons to perform complex procedures with enhanced dexterity, precision, and control.

It's important to note that robots do not perform surgery autonomously. Instead, every movement of the robotic arms is controlled in real time by a trained surgeon. The robot acts as an extension of the surgeon's hands, filtering tremors and allowing for greater range of motion than the human wrist.

The Evolution of Surgical Technology

Surgery has evolved from open procedures to laparoscopic (keyhole) techniques and now to robotic assistance. Each transition was met with skepticism, yet ultimately led to improved outcomes. Robotic surgery, introduced in the late 1990s, has matured into a trusted option in specialties like urology, gynecology, general surgery, thoracic, colorectal, and bariatric surgery.

This evolution reflects the age-old surgical pursuit: to do more, through less—less pain, less blood loss, shorter hospital stays, and quicker recovery.

Benefits of Robotic Surgery

Several potential advantages of robotic surgery stand out:

1. **Enhanced Visualization:** High-definition, 3D, magnified vision offers the surgeon superior anatomical clarity compared to traditional laparoscopic systems.
2. **Greater Precision:** The robot can perform micro-movements with stability impossible by human hand alone, especially in confined anatomical spaces.
3. **Ergonomic Comfort:** Surgeons operate from a console, reducing physical strain during long and complex procedures, which may enhance performance and decision-making.
4. **Tremor Elimination:** The system filters out natural hand

tremors, improving surgical finesse.

5. **Better Access:** Deep pelvic, thoracic, or abdominal surgeries are often more accessible and precise with robotic assistance.
6. **Cosmetic Benefits:** Smaller incisions lead to less scarring and quicker return to daily life.

The Evidence So Far

Robotic surgery has now been used in millions of procedures globally. In some fields, like prostatectomy or hysterectomy, robotic-assisted surgery has become the gold standard. Meta-analyses and comparative studies suggest benefits such as reduced blood loss, shorter hospital stays, and fewer complications in specific procedures.

However, outcomes are often similar to laparoscopic surgery when performed by experienced surgeons. What robotic surgery offers is the potential to flatten the learning curve, allowing more surgeons to perform complex minimally invasive operations safely.

Moreover, certain procedures—like robotic inguinal hernia repairs or TARM ventral hernia repairs—demonstrate clear ergonomic and precision-related benefits, particularly when suturing or performing intracorporeal mesh placements in difficult planes.

The Cost Controversy


One of the most debated aspects of robotic surgery is its cost. Robotic systems are expensive to acquire, maintain, and run. Instruments are disposable or semi-reusable, adding to recurring costs. These expenses may translate into higher costs for patients, which makes some question whether the benefits justify the expenditure.

But cost should be assessed in the broader context of value. If robotic surgery can reduce hospital stay, lower complication rates, and speed recovery, then the overall economic impact may, in fact, be favorable. Institutions that invest in robotic platforms also signal a commitment to innovation, training, and excellence.

In India, cost remains a challenge, but it is gradually being addressed through higher case volumes, domestic innovation, and improved financing models. As robotic platforms become more common and competitive, cost barriers will likely decline.

Training and Expertise: The Human Factor

While the robot is a powerful tool, outcomes still depend on the skill and judgment of the surgeon. Proper training, mentorship, and credentialing are essential. Robotic



surgery demands a deep understanding of anatomy, technology, and surgical strategy.

Surgeons must resist the temptation to use the robot as a marketing gimmick and instead focus on evidence-based practice. Robotic surgery should not be viewed as a replacement for clinical excellence but as a tool to augment it.

The Future of Robotic Surgery

The field is advancing rapidly. New platforms—some modular, compact, and cost-effective—are entering the market. Artificial intelligence (AI) is being integrated to provide real-time feedback, predictive analytics, and even autonomous actions in select tasks. Telesurgery and remote collaboration may soon become practical realities, particularly in countries with geographical healthcare disparities.

India, with its large population and growing healthcare infrastructure, is well-positioned to lead the way in robotic surgery, especially in terms of case volume, training, and innovation.

Robotic surgery will likely become the default minimally invasive modality in the coming decade, especially for complex and reconstructive procedures.

Conclusion: Hype or Hope?

Robotic surgery is more than a technological marvel. It represents the convergence of engineering, vision, and surgical skill, aiming to make surgery safer, more precise, and less invasive. While it may have been overhyped initially, the hope it represents is very real—for patients, surgeons, and the future of medicine.

The true measure of robotic surgery lies not in flashy headlines but in better patient outcomes. As technology matures and access expands, the robot will increasingly be seen not as a novelty, but as a trusted ally in the operating room.

Like every great medical advance, robotic surgery will realize its full potential only when driven by scientific rigor, ethical practice, and compassion.

Second twin in Breech or Transverse: What is the best route

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Advancing maternal age at time of conception and the use of fertility drugs has increased the incidence of multiple gestation. Worldwide, 2–3% of all live births are multiples and nearly 97% are twins. The current incidence of vaginal twin delivery (VTD) ranges around 40% to 60% of twin pregnancies across various studies and countries. As per the American College of Obstetrics and Gynaecology (ACOG) twin gestation, in general, is not an indication for a cesarean section. The Twin Birth Study, the first large randomized controlled trial evaluating twin birth outcomes, reported that there was no increased risk of neonatal morbidity or mortality in women who underwent twin vaginal delivery versus cesarean delivery (CD). The evidence supports a trial of labor in dichorionic-diamniotic or monochorionic-diamniotic twin pregnancies in which the first twin is in cephalic presentation at ≥ 32 weeks' gestation. However, the management of twin delivery is challenging for obstetricians due to issues associated with monitoring both twins during labor and the manoeuvres that may be necessary to deliver the second twin.

When deciding on the most appropriate mode of delivery in a twin pregnancy, several factors need to be considered including presentation of the first twin, gestational age, fetal wellbeing { growth restriction to twin-twin transfusion (TTTS) } and chorionicity. The plan for delivery, whether it is an elective cesarean section or a planned vaginal delivery, should be made together with the woman and her husband antenatally where possible. A cephalic presenting fetus which is smaller in weight by more than 20% of the second larger twin may pose an increased risk of complications in the second stage. Conversely, a breech presenting twin with a woman progressing well in labor may be considered to continue with a vaginal delivery. Checklists could be used when a woman with a twin pregnancy is admitted to the delivery room for determining success of VTD.

For VTD all equipment and teams should be already set up and checked in the labor ward with quick access to the theatre. Both fetuses should be actively monitored electronically. Vaginal delivery of twins involves three stages: delivery of first twin, inter delivery time interval and delivery of second twin.


Delivery of twin one should be managed in the same way as a singleton baby. It is advisable to clamp and cut the cord immediately for monochorionic twins to reduce the theoretical risk of TTTS at birth. After the delivery of first twin there is a gradual drop in umbilical cord pH of second twin with increasing inter delivery time interval. Long inter

delivery intervals have been related to an increased risk of hypoxia. As this is a critical period, ensuring that there is adequate fetal monitoring of twin two is essential. After the first fetus is delivered an assistant has to stabilize the second baby, such that it can adopt a longitudinal lie – either cephalic or breech. Confirmation of the presenting part for second twin can be done by performing vaginal examination or using a bedside ultrasound. The membranes of the second twin should not be ruptured while confirming the lie as at this point it can result in cord prolapse. It is usual for the uterine contractions to become less frequent and hypotonic after delivery of the first baby. Further actions should include optimizing contractions with oxytocin infusion and stabilizing a longitudinal lie in twin two and after the head is engaged to perform the artificial rupture of membranes (ARM). Intervention with early ARM performed too soon has an increased risk of cord prolapse, and under-intervention can lead to a long inter twin delivery interval hence there has to be a balance of the two.

If the second twin is not in a longitudinal lie, intact membranes will also aid in the manoeuvres. There are two acceptable techniques for guiding the second twin into a longitudinal lie:

1. External cephalic version (ECV) which involves using hands externally on the abdomen to encourage the baby to roll into a longitudinal position.
2. Internal podalic version (IPV) which involves grasping the feet of the baby. A per vaginal examination is performed and one or both feet are identified (with membranes intact if possible). The feet are grasped to perform a breech extraction. IPV has been shown to lower risk of cesarean section compared to ECV without an increased risk of harm.

Even when the mode of delivery planned is a vaginal birth there is a 30–40% risk of requiring an emergency CD in labor. The risk of intrapartum CD is even higher in cases with more than one of the following risk factors: nulliparity, labor induction, and birthweight discordance $>20\%$. Other common indications are fetal distress of either twin, dystocia of labor or signs of infection (the same as for singleton pregnancies). Even once the delivery of the presenting twin has been completed, there remains a risk of 4–7% to deliver the second twin by cesarean section, for indications such as persistent transverse lie of second twin, cord presentation or cord prolapse, fetal distress without imminent delivery/ safety of instrumental application. Twin vaginal delivery is not bereft of complications such



as uterine hypertonicity, head entrapment, cord accidents, nuchal arm, unengaged vertex of twin B, fetal distress, uterine atonicity and postpartum haemorrhage.

Currently there is no clear recommendation regarding the mode of delivery in very preterm birth of twins, but most studies do not demonstrate a clear benefit of CD vs trial of labor. Though the twin birth study has made few concise recommendations favouring vaginal delivery however the matter for deliberations are the impact of gestational age,

the influence of chorionicity, and the generalizability of the results for women with a previous uterine scar.

Training of healthcare professionals at the labor wards through simulation based clinical skills for vaginal twin delivery could be beneficial to prepare for all possible scenarios that may arise in real-life. Such trainings effectively complement clinical experience, helping obstetricians develop, and maintain the expertise necessary to safely manage twin vaginal deliveries.

Impacted Fetal Head in Cesarean Delivery

Shakun Tyagi

Introduction

Impacted fetal head (IFH) during cesarean delivery is a critical obstetric emergency characterized by the inability to deliver the fetal head using standard techniques, necessitating additional maneuvers or pharmacologic interventions. It is associated with significant maternal and neonatal morbidity and contributes to a substantial proportion of medicolegal claims in maternity care [1].

Epidemiology

- Occurs in 3–20% of cesarean deliveries at any cervical dilatation.²
- Incidence rises to approximately 16% at full dilatation.³
- Risk is nearly doubled following unsuccessful assisted vaginal delivery.⁴
- IFH accounts for 10% of the most expensive maternity-related medicolegal claims in the UK.⁵

Risk Factors

- Fetal malposition
- Prolonged labor
- Oxytocin augmentation
- Obstructed labor signs (e.g., caput, moulding) [6]

Pathophysiology

IFH results from deep engagement of the fetal head in the maternal pelvis, often exacerbated by uterine contractions and pelvic floor resistance. The vacuum effect between the fetal head and pelvic structures complicates extraction.⁷

Preparation and Team Coordination

- Early recognition and declaration of IFH are essential.
- Effective communication, escalation protocols, and task delegation mirror other intrapartum emergencies.⁸
- Operating table height, maternal positioning (frog or lithotomy), and head-down tilt are critical setup considerations.
- Tocolysis (e.g., glyceryl trinitrate, salbutamol, terbutaline) may aid uterine relaxation.⁹

Anaesthetic Considerations

- Multidisciplinary coordination with anesthetic teams is vital.
- Adjustments in maternal positioning and readiness for rapid intervention are essential.¹⁰

Management Techniques

Manual Disimpaction

- Anterolateral hand approach to flex and elevate the fetal head.
- Use of non-dominant hand may improve control.
- Avoid excessive pressure on uterine angles to minimize extensions.¹¹

Vaginal Disimpaction (“Push” Method)

- Assistant inserts hand vaginally to flex and elevate the fetal head.
- Often combined with abdominal maneuvers [12].

Reverse Breech Extraction

- Preferred when the head is deep and back is posterior.
- Feet are grasped and delivered first via breech extraction [13].

Patwardhan Technique

- Used when back is anterior and feet are inaccessible.
- Arms are delivered first, followed by breech and head.¹⁴

Disimpaction Devices

Device	Description	Notes
Fetal Pillow®	Vaginally inserted silicone balloon inflated to elevate fetal head	Used preoperatively or after failed assisted vaginal birth [15]
Tydeman® Tube	Hollow silicone tube with round cup inserted vaginally	Can be placed pre-op or intra-op depending on difficulty encountered [16]

Complications

Intraoperative

- Uterine incision extensions
- Hemorrhage
- Bladder and ureteric injury
- Blood transfusion requirement [17]

Long-Term

- Increased risk of spontaneous preterm birth
- Recurrent mid-trimester loss
- Higher risk if incision extends into cervix [18]

Conclusion

Multiple studies and national surveys underscore the variability in practice and training. While techniques vary based on fetal position and operator expertise, early recognition and team preparedness remain universally critical.¹⁹

Impacted fetal head during cesarean delivery is a high-stakes emergency requiring prompt, skilled intervention. Standardized training, multidisciplinary coordination, and awareness of available techniques and devices are essential to improve outcomes and reduce harm.

References

1. Royal College of Obstetricians and Gynaecologists. Management of impacted fetal head at caesarean birth. Green-top Guideline No. 56. 2023.
2. Allen VM, O'Connell CM, Baskett TF. Maternal and perinatal outcomes with increasing duration of the second stage of labor. *Obstet Gynecol*. 2009;113(6):1248–58.
3. Fitzpatrick KE, Kurinczuk JJ, Alfirevic Z, et al. Uterine rupture by intended mode of delivery in the UK: a national case–control study. *PLoS Med*. 2019;16(4):e1002774.
4. Knight M, Tuffnell D, Kenyon S, et al. Saving Lives, Improving Mothers' Care. National Perinatal Epidemiology Unit, University of Oxford. 2017.
5. NHS Resolution. Annual report and accounts 2022/23. London: NHS Resolution; 2023.
6. Leung TY, Lao TT. Timing of cesarean section and its impact on maternal and neonatal outcomes. *Best Pract Res Clin Obstet Gynaecol*. 2013;27(2):131–7.
7. Dodd JM, Anderson ER, Gates S, et al. Surgical techniques for uterine incision at caesarean section. *Cochrane Database Syst Rev*. 2014;(7):CD004732.
8. Crofts JF, Lenguerrand E, Bentham G, et al. Training for shoulder dystocia: a trial of simulation training for improving delivery outcomes. *BJOG*. 2007;114(11):1382–8.
9. Kinsella SM, Girgirah K, Scrutton MJL. Rapid sequence spinal anaesthesia for urgent caesarean section. *Anaesthesia*. 2010;65(7):698–703.
10. Yentis SM, May AE. Anaesthesia for emergency caesarean section. *Anaesthesia*. 1995;50(9):747–55.
11. Patwardhan BD, Motghare DL, Shah KR, et al. Delivery of the impacted head of the fetus at caesarean section. *J Obstet Gynaecol India*. 1982;32(3):347–51.
12. Tydeman G. The Tydeman tube: a new device for disimpaction of the fetal head. *Obstet Gynaecol*. 2021;23(2):89–93.
13. Hofmeyr GJ, Kulier R. Techniques for caesarean section. *Cochrane Database Syst Rev*. 2012;(1):CD004662.
14. Sinha P, Kuruba N. Reverse breech extraction in cesarean section for deeply engaged head. *J Obstet Gynaecol*. 2008;28(1):72–5.
15. Fetal Pillow Clinical Trials. Clinical efficacy of the Fetal Pillow in cesarean section. *Med Devices (Auckl)*. 2015;8:1–6.
16. Tydeman G. Clinical evaluation of the Tydeman tube in cesarean delivery. *Obstet Rev*. 2022;30(4):210–5.
17. Silver RM, Landon MB, Rouse DJ, et al. Maternal morbidity associated with multiple repeat cesarean deliveries. *Obstet Gynecol*. 2006;107(6):1226–32.
18. Stamilio DM, DeFranco E, Pare E, et al. Short interpregnancy interval and the risk of preterm birth and uterine rupture. *Obstet Gynecol*. 2007;110(5):1075–82.
19. Knight M, Bunch K, Tuffnell D, et al. Saving Lives, Improving Mothers' Care: Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2015–17. Oxford: National Perinatal Epidemiology Unit; 2018.

Fertility Preservation Surgery- Should it be Standard Practice for Women with Cancer?

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Fertility preservation has emerged over the past few decades as a major issue in the management of adult and paediatric cancers especially gynecologic cancers. Gynecological malignancies affect a considerable number of women in the reproductive age group with 15-20% of cases diagnosed in women less than 40 years of age¹ whereas around one in nine men and one in 12 women die from it. Lung cancer was the most frequently diagnosed cancer in 2022, responsible for almost 2.5 million new cases, or one in eight cancers worldwide (12.4% of all cancers globally). Cancer therapies, such as chemotherapy, radiation, and surgical interventions significantly impact fertility. Fertility preservation surgery (FPS) offers the possibility of retaining reproductive organs and function (either preservation of the uterus, one or both ovaries, or both) while still providing effective oncologic treatment. It encompasses procedures tailored to the cancer type and stage, aiming to balance the dual priorities of cure and future childbearing^{2,3} with testicular sperm extraction if unable to provide semen samples. Testicular tissue cryopreservation in prepubertal males is experimental and should be offered only in a clinical trial. Males should be advised of potentially higher genetic damage risks in sperm collected soon after cancer-directed therapy initiation and completion. For females, established FP methods should be offered, including embryo, oocyte, and ovarian tissue cryopreservation (OTC).

Fertility-preserving treatment in cervical cancer is an option for early-stage disease using procedures such as cervical conization, simple trachelectomy, or radical trachelectomy with pelvic lymph node assessment. Eligible patients must meet strict criteria including tumor size ≤ 2 cm, stromal invasion ≤ 10 mm, absence of LVSI, negative margins, squamous cell carcinoma or usual-type HPV-associated adenocarcinoma and no nodal or distant metastases. Recurrence rates after fertility preserving surgeries are low (3–5%) with excellent survival ($>95\%$ five year survival rates). Over 50% of women achieve pregnancy and two-thirds result in live births with obstetric risks such as preterm birth⁴ vaginal radical trachelectomy, abdominal radical trachelectomy, and laparoscopic radical trachelectomy with or without robotic assistance. A systematic review using the preferred reporting items for systematic reviews and meta-analysis (PRISMA). Fertility preservation through oocyte or embryo cryopreservation may be offered before treatments like radiotherapy or hysterectomy in patients without ovarian involvement, with transabdominal retrieval preferred.⁵

Fertility-sparing surgery (FSS) in ovarian cancer depends

on tumor type and stage, with indications in borderline ovarian tumors (BOT), malignant ovarian germ cell tumors (MOGCT), and early-stage sex cord–stromal tumors (SCST). In MOGCT, unilateral salpingo-oophorectomy (USO) with staging is recommended for all stages due to high chemosensitivity, while in SCSTs, FSS is appropriate for FIGO stage IA–IC disease. In epithelial ovarian cancer (EOC), conservative surgery may be considered for stage IA or unilateral IC disease with favorable histologies (low-grade serous, endometrioid, mucinous expansile, clear cell, and high-grade serous stage IA), but is generally contraindicated in stage II–IV, small cell carcinoma of hypercalcemic type, and high-grade SCSTs. Early-stage BOT confined to ovaries can be managed with unilateral salpingo-oophorectomy or cystectomy, the latter offering higher fertility but recurrence rates up to 30% without impacting survival. In selected bilateral disease, bilateral cystectomy may be considered. Recurrence risk after FSS is about 5-18% in early EOC and fertility outcomes are favorable with 48-79% of those attempting to conceive becoming pregnant with live birth rates of 76-96%. In nonepithelial ovarian cancers (MOGCTs and SCSTs) the pregnancy rate ranges from 50% to 93%, and live-birth rates from 65% to 95%.⁶ Uterine preservation with bilateral oophorectomy may be considered if the endometrium and serosa are disease-free for bilateral ovarian masses. Fertility preservation options include oocyte or embryo cryopreservation—preferred before gonadotoxic therapy—and, in bilateral oophorectomy cases, ovarian tissue cryopreservation or in vitro maturation of oocytes. Ovarian stimulation is generally safe, including in BOT, and aromatase inhibitor–based protocols are preferred for hormone-sensitive tumors⁽²⁾ with testicular sperm extraction if unable to provide semen samples. Testicular tissue cryopreservation in prepubertal males is experimental and should be offered only in a clinical trial. Males should be advised of potentially higher genetic damage risks in sperm collected soon after cancer-directed therapy initiation and completion. For females, established FP methods should be offered, including embryo, oocyte, and ovarian tissue cryopreservation (OTC). Completion surgery after childbearing is not routinely required for BOT or MOGCT but may be considered in EOC, SCST, or high-risk genetic carriers; hormone replacement therapy can be offered after individualized counseling based on tumor histology.^{5,7}

Fertility-sparing management in endometrial cancer is generally limited to carefully selected women with grade 1, stage IA endometrioid carcinoma without myometrial invasion, lymph node involvement, or synchronous

ovarian tumors, as confirmed by expert pathology review and MRI. Ideal candidates are those under 35 years with good ovarian reserve, no morbid obesity or metabolic syndrome and hereditary cancer syndromes such as Lynch syndrome. Management relies on continuous progestin therapy most commonly oral megestrol acetate, medroxyprogesterone acetate, or a levonorgestrel-releasing IUD alone or combined with hysteroscopic tumor resection. Median time to regression is 4–6 months, with treatment continuing up to 12 months. Hormonal therapy yields high complete response rates in up to 75% of cases but recurrence exceeds 35%, necessitating vigilant surveillance and definitive surgery after childbearing. Live birth rates are modest (~20%) but improves with assisted reproduction and early fertility specialist referral. Emerging molecular classifiers such as ProMisE and markers like ER/PR, PTEN, and β -catenin may refine selection, but are not yet standard.⁸

For early-stage sarcoma, total hysterectomy is standard; bilateral salpingo-oophorectomy may be individualized in premenopausal women, as ovarian preservation in uninvolved ovaries does not reduce survival and improves quality of life. Uterine preservation may be considered only in select low-grade cases such as low-grade endometrial stromal sarcoma (LG-ESS) confined to a polyp or low-grade adenosarcoma without sarcomatous overgrowth with thorough counseling given the significant recurrence risk of approximately 25% overall. In hormone-sensitive tumors (LG-ESS), the decision on oophorectomy should be individualized, balancing recurrence risk with the benefits of hormonal preservation, and guided by shared decision-making that incorporates oncologic safety, reproductive goals, and quality-of-life considerations.⁹

For some patients, surgical preservation of reproductive organs may not be oncologically safe, in such cases, oocyte or embryo cryopreservation, ovarian tissue cryopreservation, or ovarian transposition may offer viable alternatives. In patients undergoing pelvic radiotherapy, ovarian transposition can preserve ovarian endocrine function, though its efficacy in preserving fertility is variable. Ovarian suppression with GnRH agonists is adjunctive but not a substitute for these methods. From an oncologic perspective, long-term outcomes following FPS in selected patient populations are generally favourable and comparable to standard radical surgery. Prospective registries, collaborative multicentre studies, and long-term follow-up are required to refine selection criteria, quantify reproductive and oncologic outcomes, and guide evidence-based recommendations^{10,11} based on the best available evidence in the literature?

SUMMARY ANSWER: The ESHRE Guideline on Female Fertility Preservation makes 78 recommendations on organization of care, information provision and support, pre-FP assessment, FP interventions and after treatment care. Ongoing developments in FP are also discussed.

WHAT IS KNOWN ALREADY: The field of FP has grown hugely in the last two decades, driven by the increasing recognition of the importance of potential loss of fertility as a significant effect of the treatment of cancer

and other serious diseases, and the development of the enabling technologies of oocyte vitrification and ovarian tissue cryopreservation (OTC).

In conclusion, fertility-preserving surgery should be considered an important component of comprehensive, patient-centred oncologic care. All reproductive-age women should receive timely, specialized counselling on the impact of cancer treatment on fertility and the available preservation strategies. Such surgery should be undertaken when supported by robust oncologic safety data, with appropriate patient selection, and within the context of experienced multidisciplinary teams. Embedding this approach into standard care pathways ensures that the objectives of cancer treatment are met while safeguarding the vital quality-of-life dimension of future fertility.

References

1. Bray F, Laversanne M, Sung H, Ferlay J, Siegel RL, Soerjomataram I, et al. Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin*. 2024;74(3):229–63.
2. Su HI, Lacchetti C, Letourneau J, Partridge AH, Qamar R, Quinn GP, et al. Fertility Preservation in People With Cancer: ASCO Guideline Update. *J Clin Oncol*. 2025;43(12):1488–515.
3. Henry L, Berek JS, Diaz I, Feldberg D, Mocanu E, Niederberger CC, et al. FIGO statement: Fertility preservation. *Int J Gynaecol Obstet*. 2023;163(3):790–4.
4. Nezhat C, Roman RA, Rambhatla A, Nezhat F. Reproductive and oncologic outcomes after fertility-sparing surgery for early stage cervical cancer: a systematic review. *Fertil Steril*. 2020;113(4):685–703.
5. Morice P, Scambia G, Abu-Rustum NR, Acien M, Arena A, Brucker S, et al. Fertility-sparing treatment and follow-up in patients with cervical cancer, ovarian cancer, and borderline ovarian tumours: guidelines from ESGO, ESHRE, and ESGE. *Lancet Oncol*. 2024;25(11):e602–10.
6. Bercow A, Nitecki R, Brady PC, Rauh-Hain JA. Outcomes after Fertility-sparing Surgery for Women with Ovarian Cancer: A Systematic Review of the Literature. *J Minim Invasive Gynecol*. 2021;28(3):527–536.e1.
7. Sessa C, Schneider DT, Planchamp F, Baust K, Braicu EI, Concin N, et al. ESGO-SIOPE guidelines for the management of adolescents and young adults with non-epithelial ovarian cancers. *Lancet Oncol*. 2020;21(7):e360–8.
8. Rodolakis A, Scambia G, Planchamp F, Acien M, Di Spiezio Sardo A, Farrugia M, et al. ESGO/ESHRE/ESGE Guidelines for the fertility-sparing treatment of patients with endometrial carcinoma. *Hum Reprod Open*. 2023;2023(1):hoac057.
9. Ray-Coquard I, Casali PG, Croce S, Fennessy FM, Fischerova D, Jones R, et al. ESGO/EURACAN/GCIG guidelines for the management of patients with uterine sarcomas. *Int J Gynecol Cancer*. 2024;34(10):1499–521.
10. ESHRE Guideline Group on Female Fertility Preservation, Anderson RA, Amant F, Braat D, D'Angelo A, Chuva de Sousa Lopes SM, et al. ESHRE guideline: female fertility preservation. *Hum Reprod Open*. 2020;2020(4):hoaa052.
11. Practice Committee of the American Society for Reproductive Medicine. Electronic address: asrm@asrm.org. Fertility preservation in patients undergoing gonadotoxic therapy or gonadectomy: a committee opinion. *Fertil Steril*. 2019;112(6):1022–33.

Digital Surgery, Artificial Intelligence, and the Operating Room of the Future

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Introduction: Digital surgery is defined by international experts as "the use of technology (AI, AR, VR) to enhance preoperative planning, surgical performance, and training, aiming to improve outcomes and reduce harm."¹

Role of Artificial Intelligence (AI) in Digital Surgery: The digital operating room (OR) leverages artificial intelligence (AI), machine learning (ML), and deep learning, along with augmented reality (AR) and virtual reality (VR), to enhance surgical safety and patient outcomes. AI-based models are utilized to improve surgical preplanning, optimize clinical decisions, provide intraoperative support, assess postoperative complications, and manage data effectively.

Robotics and Digital Surgery: Robotics play a vital role in digital surgery, offering precision and accuracy for delicate surgical maneuvers, as well as providing magnified 3D vision during procedures. Research has shown that enhanced dexterity and hand maneuverability during robotic surgeries aid in the controlled manipulation of tissues and instruments, thereby enhancing surgical capabilities for complex tasks.² Robotic-assisted gynecological surgeries, such as hysterectomies, result in reduced blood loss, less pain, and faster recovery times. Although the role of robotics in obstetrics is limited, a significant achievement includes the first live birth from a robotic-transplanted uterus in 2022. The da Vinci robot is particularly noted for its precision in tumor excision, ease of intracorporeal suturing, and favorable ergonomics for surgeons, which makes it well-suited for complex laparoscopic microinvasive gynecological oncological surgeries.

Computer Vision in Digital Surgery: This AI-based technology analyzes preoperative images and videos to accurately recognize, identify, and label organs and key landmarks (such as the liver and gallbladder) during surgery. It aids in surgical navigation, optimizing the trajectories of instruments in real-time and minimizing collisions during procedures.³ By analyzing preoperative images, computer vision can delineate the operating field into "safe zones" and "no-go zones" during dissection, predicting hazardous areas with a sensitivity of 75–92% and a precision of 60%.⁴ In laparoscopic hysterectomies, computer vision identifies key surgical steps, audits efficiency, flags deviations, and provides reminders for trainees, contributing to quality assurance.

Role of Virtual Reality (VR) and Augmented Reality (AR) in Digital Surgery: VR transforms patient-specific imaging into 3D models, allowing surgeons to explore and rehearse

procedures in a risk-free simulated environment before performing actual surgeries. This enhances surgical proficiency and reduces intraoperative errors in a safe and cost-effective manner. AR overlays digital information onto the operative field, enabling users to interact with both real and 3D digital worlds through sounds and images. In minimally invasive surgery (MIS), AR improves situational awareness by allowing surgeons to "map" hidden anatomy and structures, thus preventing injuries to ureters and blood vessels. In orthopedic surgery, AR superimposes a patient's CT/MRI-based 3D model onto their actual intraoperative anatomy, guiding the precise placement of implants and screws. In obstetrics, AR overlays from preoperative MRI onto the surgical field visualize placental invasion in Placenta Accreta Syndrome, aiding in accurate surgical dissection with minimized blood loss during complex cesarean sections.

AI in the Surgical Workflow Process: Digital technologies are transforming surgical workflows, playing significant roles in preoperative planning, intraoperative execution, and postoperative analytics. **Role of AI in Preoperative Planning:** AI analyzes medical records and integrates multi-omics data (genomic, transcriptomic, and metabolomic) to provide precise diagnoses, predict surgical risks, and offer personalized surgical plans. AI-based algorithms aid in calculating safe margins and suggesting optimal resection planes during surgery. Through teleconsultation services, AI provides preoperative diagnostics across distances.⁵

Role of AI in Intraoperative Guidance: AI plays a crucial role in computer-assisted navigation during neurosurgery, utilizing cameras and infrared trackers for precise instrument alignment. Super-resolution imaging in robotics enhances precision and facilitates delicate operations, thereby improving patient safety. The synergy between robotics, AI, and AR in the OR monitors surgical procedures in real-time (e.g., suturing techniques and video feeds for signs of bleeding or tissue injury) and alerts teams to any issues.⁶ AI-based intraoperative analytics can predict warning signs in patients, adjusting anesthesia and drug delivery based on real-time vital signs—often earlier than a human would respond.⁷ Digital OR records capture sounds, images, patient vitals, and laparoscopic images, creating a valuable dataset for analysis and surgical education.⁸

AI in Postoperative Analytics: Using preoperative electronic health record data, the preoperative risk algorithm tool "My Surgery Risk" calculates probable risks of eight

postoperative complications and potential death after surgery. Additionally, AI evaluates surgeons' laparoscopic skills by analyzing average technique metrics. Digital platforms, including wearables and applications, track patient recovery and identify correlations between intraoperative events and recovery times. This facilitates data-driven improvements in surgical quality. Wearable devices enable continuous monitoring, allowing for early detection of complications and personalized recovery recommendations through AI-based remote healthcare. Additionally, AI algorithms are used to analyze presurgical data to predict the risk of postpartum hemorrhage.

Challenges in Using AI in Digital Surgeries: Despite the increasing interest in integrating AI into healthcare, several challenges hinder its broader application: Generalizability and Bias: The accuracy of AI algorithms depends on high-quality input data. Errors in this data can lead to incorrect predictions.⁹ AI models tend to be effective only within the specific populations from which they were developed, limiting their worldwide applicability. Therefore, regular updates to algorithms with diverse patient data are essential.

Cost and Training: Robotic systems are expensive to acquire and maintain, creating barriers to access.¹⁰ Additionally, bulky hardware and discomfort with augmented reality (AR) and virtual reality (VR) devices can disrupt surgical workflows.

OB/GYN Digital Surgery: Emergency obstetric surgeries, such as cesarean sections, may experience delays due to the complexity of digital systems.

Conclusion: The operating room of the future will be a highly advanced, technology-driven environment that prioritizes operational efficiency, surgical precision, and patient safety. It will feature a smart OR design integrating technology for seamless communication between devices and systems. Enhanced precision will be achieved through high-definition 3D imaging, AR, and VR. Automated systems will streamline workflows and reduce procedure times.¹¹ Furthermore, the OR of the future must incorporate AI to analyze data in real-time, providing surgeons with critical insights and decision support. Continuous patient monitoring of vital signs and other critical parameters will enable swift responses to any changes in patient condition.

References:

1. Lam K, et al. A Delphi consensus statement for digital surgery. *npj Digit. Med.* 2022;5:100. doi: 10.1038/s41746-022-00641-6.
2. Ishikawa N, Watanabe G, Hirano Y, Inaki N, Kawachi K, Oda M. Robotic dexterity: evaluation of three-dimensional monitoring system and non-dominant hand maneuverability in robotic surgery. *J Robot Surg.* 2007;1(3):231-3. doi: 10.1007/s11701-007-0037-7. Epub 2007 Sep 5. PMID: 25484969; PMCID: PMC4247448.
3. Li L, Li X, Ouyang B, Mo H, Ren H, Yang S. Three-Dimensional Collision Avoidance Method for Robot-Assisted Minimally Invasive Surgery. *Cyborg Bionic Syst.* 2023 Aug 30;4:0042. doi: 10.34133/cbsystems.0042. PMID: 37675200; PMCID: PMC10479965.
4. Khalid MU, Laplante S, Masino C et al (2023) Use of artificial intelligence for decision-support to avoid high-risk behaviors during laparoscopic cholecystectomy. *Surg Endosc* 37:9467.
5. Li H, Han Z, Wu H, Musaev ER, Lin Y, Li S, Makatsariya AD, Chekhonin VP, Ma W, Zhang C. Artificial intelligence in surgery: evolution, trends, and future directions. *Int J Surg.* 2025 Feb 1;111(2):2101-2111. doi: 10.1097/J59.0000000000002159. PMID: 39693484.
6. Moorthy K, Munz Y, Dosis A, Hernandez J, Martin S, Bello F, Rockall T, Darzi A. Dexterity enhancement with robotic surgery. *Surg Endosc.* 2004 May;18(5):790-5. doi: 10.1007/s00464-003-8922-2. Epub 2004 Apr 6. PMID: 15216862.
7. Elbiss, H.M., Abu-Zidan, F.M. Artificial intelligence in gynecologic and obstetric emergencies. *Int J Emerg Med* 18, 20 (2025). <https://doi.org/10.1186/s12245-025-00820-8>
8. Robotics and ai for teleoperation, tele-assessment, and tele-training for surgery in the era of covid-19: existing challenges, and future vision. Feizi N, Tavakoli M, Patel RV, Atashzar SF. *Front Robot AI.* 2021;8:610677. doi: 10.3389/frobt.2021.610677.
9. Alhasan A. Bias in medical artificial intelligence. *Bull Royal Coll Surg Engl.* 2021;103:302-5.
10. Artificial intelligence in medicine and the disclosure of risks. Kiener M. *AI Soc.* 2021;36:705-713. doi: 10.1007/s00146-020-01085-w.
11. Reijnen MM, Zeebregts CJ, Meijerink WJ. Future of operating rooms. *Surg Technol Int.* 2005;14:21-27.

When to suspect pituitary or adrenal pathology in menstrual disorders?

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The pituitary gland forms an important part of the Hypothalamic pituitary ovarian (HPO) axis, thus having a pivotal role

in menstrual and reproductive function. The pulsatile release of GnRH from the hypothalamus leads to release of gonadotropins (FSH, LH) from the anterior pituitary, which, in turn, stimulate the ovaries. The ovarian follicular development orchestrates the endometrial cycle. The tandem of ovarian and endometrial cycle is controlled by the hypothalamic and pituitary secretion of various hormones. Any disturbance in the central hormones in turn affects the ovarian response, leading to a change in the menstrual and reproductive physiology.

The various disorders of the pituitary which cause AUB include Hyperprolactinemia / Prolactinoma, Non-functioning Pituitary Adenoma, Sheehan's Syndrome (Postpartum pituitary necrosis), Empty Sella Syndrome, Functional Hypothalamic Amenorrhea (technically hypothalamic but involves pituitary output), Pituitary Apoplexy (Acute infarction/bleeding in pituitary), Panhypopituitarism, Cushing's Disease- ACTH-secreting pituitary adenoma, amongst the others. The pathophysiology in these conditions being affection of GnRH pulsatile secretion, directly or indirectly, leading to abnormal secretion of FSH & LH and leading excessive/deficient secretion of estradiol, eventually leading to AUB. A central pathology must be suspected in a woman presenting with AUB with galactorrhea, visual field defects or headaches, history of postpartum hemorrhage, signs of adrenal or thyroid dysfunction, rapid weight loss, intense exercise, or stress. The initial workup consists of detailed history and examination followed by estimation of serum levels of various hormones, including, FSH, LH, TSH, Free T4, Prolactin, ACTH, serum Cortisol. Depending on the results, further investigations including MRI brain with pituitary sequences and visual field analysis may be

needed. Management is best done by a multidisciplinary team consisting of experts from endocrinology, neurology, neurosurgery, gynaecologist and a fertility specialist. Treatment consists of that of the underlying condition and hormonal treatment of AUB.

Adrenal disorders can contribute under "O" – Ovulatory dysfunction and sometimes "E" – Endometrial or "I" – Iatrogenic causes of AUB. The most frequent adrenal disorders contributing to AUB include Cushing's Syndrome (Hypercortisolism), Congenital Adrenal Hyperplasia (CAH), Adrenal Tumors (Androgen-secreting or Estrogen-secreting) and Addison's Disease (Adrenal Insufficiency). The pathophysiology being excessive secretion of cortisol, aldosterone, and androgens leading to disruption of the hypothalamic-pituitary-ovarian (HPO) axis which affects menstrual cycles. The clinical clues which suggest Adrenal Involvement in AUB include Hirsutism, acne, virilization (↑ androgens), Cushingoid features: moon face, central obesity, striae, Salt-craving, hypotension (Addison's), Early-onset pubarche/precocious puberty (in CAH) and Hypertension along with AUB. The workup consists of detailed history and examination followed by targeted hormonal evaluation depending on the suspected condition. The tests include 24h urinary cortisol, dexamethasone suppression, ACTH (for Cushing's), 17-OHP, ACTH stimulation test, DHEAS, Testosterone (for CAH), DHEAS, Testosterone, Estradiol, Adrenal CT (for adrenal tumours), and, AM cortisol, ACTH, ACTH stimulation test, serum electrolytes (for Addison's). The management consists of a multidisciplinary team approach, consisting of an endocrinologist, gynaecologist and a surgical specialist.

CIN 2 Conservative Management

Prabha Lal

1. CIN2 reflects moderate dysplasia involving lower 2/3rd of cervical epithelium is often caused by high risk Papilloma virus 16 & 18. Many studies have shown that CIN 2 lesions may regress spontaneously, particularly in young, immunocompetent women. Regression rates in women under 25-30 years are estimated to be 60-71% within 2 years. Persistence rate is around 20-30% and only 5-10% progress to CIN 3 or invasive cancer if left untreated¹. Traditionally CIN 2 has been managed with excisional procedures such as LEEP or cold knife conization (CKC). However, growing awareness of risks of overtreatment, especially in young nulliparous women, has led to increasing interest in conservative – Non excisional management particularly for women under 25- 30 years those desiring fertility preservation. Favorable natural history has prompted clinicians to consider observation rather than immediate treatment especially in select populations.
2. Main reasons for conservative management include:
3. 1.High spontaneous regression rate of CIN2 , especially in young women.
4. 2.Avoidance of overtreatment associated with complications
5. 3.Protection of future reproductive health as excisional procedures are associated with increased risk of cervical incompetence, mid-trimester abortions and preterm labor.
6. 4. It has psychosocial impact of cancer preventive surgery in young patients

Eligibility for conservative management:

Women < 30 years adolescents & Nulliparous women

CIN 2 confirmed by histopathology

HPV 16 & 18 negative status

Compliance with follow-up

No suspicion of invasive disease with normal or satisfactory colposcopy examination.

Clinical scenarios where conservative management is not recommended include age >30 year, unsatisfactory or inadequate colposcopy, HPV16/18 positive, suspicion of invasive disease or glandular involvement, immunocompromised state and poor compliance with follow-Up

Special populations where conservative treatment is strongly recommended, is adolescents where regression rate is over 80%. In pregnant women also conservative

treatment is standard unless invasion is suspected. It needs postpartum evaluation.

Research Studies conducted in favor of conservative management are multiple .A critical review by oster in 1993 concluded that the likelihood of regression is 40% , persistence 20% , progression to CIN 3 20% & invasive cancer 5% .Subsequent high quality evidence came from a Meta-analysis by Tanio et al, which followed, 3160 women with histologically confirmed CIN2. The authors reported regression rate of 50%, persistence of 32% and progression rate of 18% to CIN 3 or worse. Recent Prospective studies report regression rate higher than historical data . Lee et al (2018) observed a 74% regression rate & Tjandraprawira et al. (2022) reported 77% regression, suggesting that modern diagnostic accuracy, careful patient selection and standardized follow -up enhances outcome.

Current guidelines As of 2023-2025 :ASCCP 2019 update: It has been grouped according to age.

Women <25 years with CIN 2:.

Observation with colposcopy & HPV testing every 6month intervals is preferred for a duration of 24 months if the lesion is not progressing. Excision is recommended if the lesion persists beyond 24 months or progresses to CIN3

Women 25-30 years :

Observation is acceptable with close follow-up & shared decision making is encouraged.

Women = > 30 years or with persistent HPV 16 /18:

Immediate treatment Excision /ablation is recommended.

BSCCP 2025 guidelines: Eligibility Criteria:

Colp/Exmn, adequate excluded CIN3 &invasive disease

CIN2 doesn't involve no > than 2 Quardrents

Diagnosis is confirmed histologically

Reviewed by MDT to avoid misclassification/ undercall

Must agree to:

Regular follow-up every 6 month

Cervical sampling, Colposcopy & biopsy if

Suspicion of progression arises

Surveillance period extends up to 24 months

If CIN2 persists beyond 24 months offer, treatment by LEEP

50% of untreated CIN2 regress spontaneously

In women < 30 years –regression rate 60%

Risks To Consider:

Progression <30 years---10%

Progression across all age group-20%

Long term Cancer Risk :

< 0.5% during 2 year surveillance window

Decision must be ratified by an MDT (Pathologist cytologist & Colposcopist

Local outcomes should be subject to regular Audit

WHO 2021 Guidelines:

Women of 25-35 years with CIN 2 age may be offered observation if reliable follow-up is possible with HPV testing and colposcopy be a part of surveillance program.

For women = > 35 years & those with persistent HPV 16/18,treatment is advised.

Follow-Up Protocol: A typical conservative management follow-Up plan includes:

Colposcopy & cytology every 6 months.

HPV testing every 12 months

Surveillance up to 2 years. If regression occurs return to routine screening however if progression or persistence

consider Excisional treatment.

ASCCP riskbased approach rather than result based algorithm is more flexible, personalized and aligned with natural history of HPV infections. It reduces unnecessary interventions , overtreatment while still identifying women at high risk of progression to cancer.

FOGSI Guidelines conservative treatment in young& compliant women. LEEP/CKC for persistent and progressive disease HPV based follow-Up is preferred.

Conclusions

CIN2 is a challenging category known for its limited reproducibility and biologically a dynamic lesion with substantial probability of spontaneous regression particularly in young women...Conservative management, when backed by robust diagnostic confirmation, is a safe & effective alternative to immediate excision. It avoids over treatment, preserves reproductive potential and reflects modern shift toward Individualized care. Recent studies showing 71% regression overall & more than half resolving within 6 months- extending conservative eligibility up to 40 years and suggests that early cytological clearance could guide timely discharge from follow-up reducing patient anxiety and health care burden.

AUB classification- FIGO 2023

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International Federation Of Gynecology and Obstetrics (FIGO) published two system classification for Abnormal Uterine Bleeding (AUB) in reproductive age group of women in year 2011. The purpose was to structure the symptomatology and potential causes of AUB in reproductive years so as to bring uniformity across research, education and clinical practice.

This two system classification was developed after rigorous deliberation by international experts using Delphi process. This system was later updated in 2018.

In 2022, FIGO had further classified the ovulatory disorders and given the acronym HyPO-P for the anatomic categories of ovulatory disorders causing AUB and given the acronym GAIN-FIT-PE reflecting the possible mechanisms within the given anatomic category.

FIGO System 1

This system provided well defined terminology for menstrual cycle abnormalities (Figure 1)

Parameter	Normal	Abnormal
Frequency	Absent (no bleeding) = amenorrhea	
	Infrequent (>38 days)	
	Normal (≥24 and ≤38 days)	
	Infrequent (<24 days)	
Duration	Normal (≤8 days)	
	Prolonged (>8 days)	
Regularity	Normal or "Regular" (shortest to longest cycle variation: ≤7-9 days)*	
	Irregular (shortest to longest cycle variation: ≥10 days)	
Flow Volume (patient determined)	Light	
	Normal	
	Heavy	
Intermenstrual Bleeding (IMB) Bleeding between cyclically regular onset of menses	None	
	Random	
	Cyclic (Predictable)	Early Cycle
		Late Cycle
Unscheduled Bleeding on Progestin ± Estrogen Gonadal Steroids (birth control pills, rings, patches or injections)	Not Applicable (not on gonadal steroid medication)	
	None (on gonadal steroid medication)	
	Present	

Figure 1: FIGO Abnormal Uterine Bleeding (AUB) system 1

FIGO System 2

This system categorizes the potential causes of AUB into acronym PALM-COEIN. Here PALM stands for polyps, leiomyoma and malignancy (including atypical endometrial hyperplasia).

The COEIN includes coagulopathy, ovulatory disorders, endometrial dysfunction and iatrogenic causes. N stands for Not Otherwise Specified (figure 2)

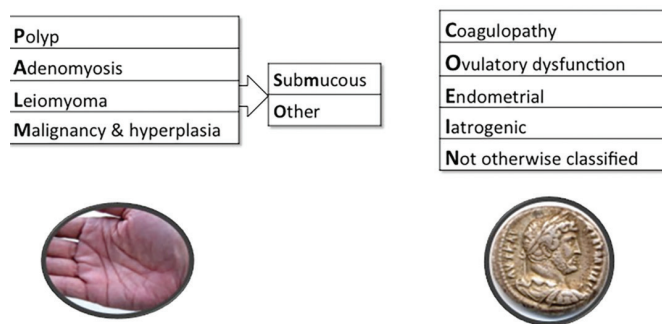


Figure 2: FIGO Abnormal Uterine Bleeding (AUB) system 2

Detailed history is required for evaluation and for assessing a category in System 1 and 2. Every woman presenting with AUB should be investigated for iron deficiency anemia.

Multiple causes may be contributing for AUB in a particular woman , so consideration should be given for that.

PALM: structural causes of AUB

Polyp

Focal endometrial outgrowths containing stroma, blood vessels and glands. It can be diagnosed on transvaginal sonography. Color Doppler and saline sonohysterography further helps in the diagnosis.

As the risk of malignancy is around 1%, polyp needs to be removed and a histopathological diagnosis to be made.

Adenomyosis (AUB-A)

It is defined as presence of endometrium like glands and stroma within the myometrium. on Transvaginal sonography, it is seen as myometrial cysts, hypoechogenic islands and trans-lesional vascularity is found on color Doppler. MRI can be used as a second line investigation.

Leiomyomas (AUB-L)

Figure 3 depicts the FIGO classification of uterine leiomyomas.

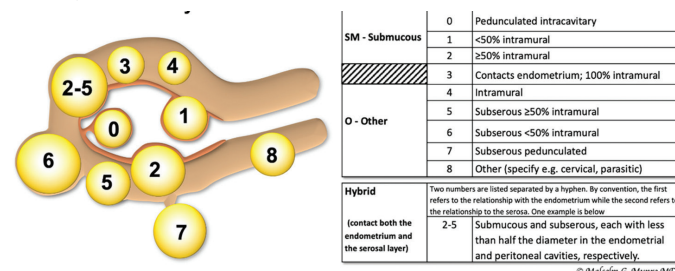


Figure 3: FIGO sub-classification system for leiomyomas

Transvaginal ultrasonography is the main imaging for diagnosis. Mostly submucous leiomyomas are linked to

heavy menstrual bleeding. MRI maybe performed for further information.

Malignancy (AUB-M)

The diagnosis is made on histopathologic examination of specimen obtained by endometrial aspiration or hysteroscope guided specimen of endometrium . This group included both cancer and endometrial intraepithelial neoplasias.

COEIN: Non structural causes of AUB

Coaguloathy (AUB-C)

FIGO has recommended tools to screen for coagulopathies and need for further investigations.

Ovulatory dysfunction (AUB-O) : HyPP-P & GAIN-FIT-PIE

FIGO described the pattern of bleeding which may occur in ovulatory AUB (Figure 4)

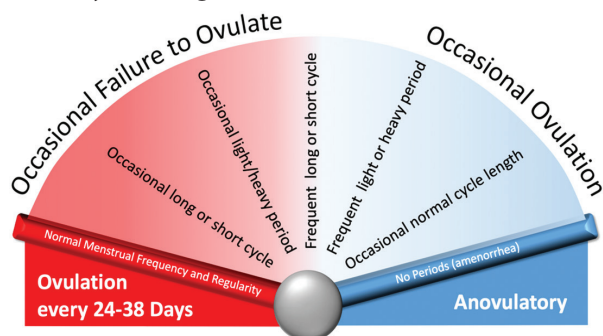


Figure 4: Types of bleeding patterns in ovulatory AUB (FIGO)

FIGO has further developed a classification for ovulatory disorders. This classification has three anatomic categories and one category for PCOS and is given the acronym "HyPP-P". Each category includes subtypes and given an acronym GAIN-FIT-PIE (figure 5).

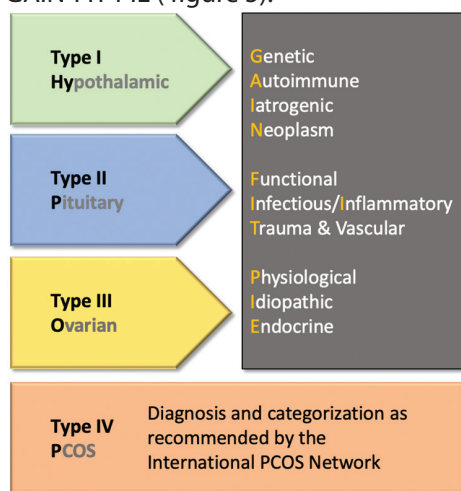


Figure 5: FIGO ovulatory disorders classification : HyPO-P and GAIN-FIT-PIE.

Endometrial Disorders (AUB-E)

This is a diagnosis of exclusion where no other cause could be assigned for AUB.

Iatrogenic (AUB-I)

Intrauterine device, drugs that hamper coagulation and drugs affecting ovulation may cause AUB.

AUB-N

Arteriovenous malformations and cesarean scar defect have been assigned this category.

Always pregnancy must be ruled out in all cases of AUB. In acute AUB, measures should be taken to stop the bleeding. In chronic AUB, a detailed history to assign a category in FIGO system 1 and further evaluation to assign a category in FIGO system 2 need to be performed. Blood tests, endometrial sampling, hysteroscopy should be performed in context of the patient.

References

1. Munro MG, Critchley HO, Broder MS, Fraser IS, FIGO Working Group on Menstrual Disorders. FIGO classification system (PALM-COEIN) for causes of abnormal uterine bleeding in nongravid women of reproductive age. Int J Gynecol Obstet. 2011;113:3-13
2. Munro MG, Critchley HOD, Fraser IS, Committee FMD. The two FIGO systems for normal and abnormal uterine bleeding symptoms and classification of causes of abnormal uterine bleeding in the reproductive years: 2018 revisions. Int J Gynaecol Obstet. 2018;143:393-408
3. Jain V, Munro MG, Critchley HOD. Contemporary evaluation of women and girls with abnormal uterine bleeding: FIGO Systems 1 and 2. Int J Gynaecol Obstet. 2023 Aug;162 Suppl 2(Suppl 2):29-42..

Idiopathic Polyhydramnios: Contemporary Perspectives and Clinical Management

Anjali Taneja

Idiopathic polyhydramnios (IPH) defined as excessive amniotic fluid without an identifiable cause remains a perplexing challenge in obstetric practice. It is a pathological condition complicating 1% of singleton pregnancies and accounts for 60-70% of cases of polyhydramnios with up to 80% classified as mild¹. Diagnosis of polyhydramnios in singleton pregnancy is established commonly in the second or third trimester by ultrasonography, with diagnostic thresholds of a single deepest vertical pocket (SDVP) more than or equal to 8 cm or an amniotic fluid index (AFI) more than or equal to 24 cm^{1,2}. Once polyhydramnios is diagnosed, grading its severity and excluding potential underlying cause is the next essential step. IPH is ultimately a diagnosis of exclusion, however underlying condition may become evident with advancing gestation or postnatally¹. Although most cases are mild and self-limiting, recent literature indicates that IPH is not entirely benign.²⁻⁶ Reported associations include increased risks of preterm birth, caesarean delivery, shoulder dystocia, placental abruption, postpartum haemorrhage, low APGAR, increased NICU admission and perinatal mortality. In addition, advances in genomic testing have demonstrated that a notable proportion of cases initially classified as idiopathic harbour underlying genetic abnormalities.⁷

Amniotic fluid volume reflects a delicate balance between fetal urine and lung fluid production, and clearance via fetal swallowing and intramembranous absorption. Disruption of this balance leads to polyhydramnios. Despite comprehensive evaluation, a significant proportion of cases remain unexplained and are thus categorized as idiopathic.

Diagnostic Evaluation

Before labelling a case as idiopathic, a systematic evaluation is mandatory to exclude potential causes:

1. Indirect Coombs test (ICT) to exclude alloimmunization.
2. Aneuploidy screening.
3. Glucose tolerance test (GTT) for gestational diabetes. Maternal diabetes leads to fetal hyperglycaemia causing fetal osmotic diuresis. The Society for Maternal-Fetal Medicine (SMFM) recommends re-screening if more than one month has elapsed since the initial GTT.
4. Targeted ultrasonography to evaluate for fetal anomalies. While anomalies are uncommon in mild cases, rates of 30-40% are reported in severe polyhydramnios. A detailed scan should assess

- fetal growth
- hydrops
- craniofacial and palate anomalies
- obstructive fetal neck masses
- congenital heart disease (TOF or Ebstein anomaly or complete heart block)
- look for stomach bubble to rule out oesophageal atresia and tracheoesophageal fistula (most common)¹
- positioning of fetal hands and feet to rule out musculoskeletal syndromes such as arthrogryposis
- fetal kidneys to look for ureteropelvic junction obstruction (paradoxical polyhydramnios)
- high-output lesions (large placental chorioangioma, sacrococcygeal teratoma),
- and neurological dysfunction by assessing for fetal movement and major central nervous system structures.

5. Maternal infection screening if indicated by history or by identification of USG markers to be done for syphilis, rubella, parvovirus B19, HIV, hepatitis, cytomegalovirus, and toxoplasmosis
6. Amniocentesis with genetic testing should be done in cases of severe polyhydramnios or where ultrasound suggests chromosomal or genetic abnormality. A recent meta-analysis demonstrated a 4.5% yield of genomic anomalies in pregnancies initially labelled as isolated hydramnios, with higher yields in moderate-to-severe cases.⁷ Amniocentesis with chromosomal microarray analysis should be made available to all pregnant women.

Classification and Prognostic Value¹

Polyhydramnios is categorized as mild, moderate, or severe, based on AFI and SDVP, which carry prognostic significance:

	AFI	SDV	Incidence	Risk of fetal abnormality %	Risk of neonatal abnormality %
Diagnosis	>23	>7	0.3-1.0%		
Mild, cm	24.0 - 29.9	8-11	65-70% of total	6-10	1

Moderate, cm	30 - 34.9	12-15	20% of total	10-15	2
Severe, cm	>= 35	>= 16	< 15% of total	20-40	10

Consider referral to fetal medicine unit if ⁸

- Suspected fetal anomaly
- Small for gestational age foetus
- Concerns with fetal movement
- Severe polyhydramnios

Therapeutic Interventions¹

Amnioreduction may be considered in severe, symptomatic cases (maternal respiratory distress, significant distress, preterm labour)

Indomethacin is not recommended solely for fluid reduction, particularly after 32 weeks, due to the risk of neonatal complications

Clinical Significance³⁻⁶

Several recent studies have consistently reported association of polyhydramnios with adverse perinatal outcomes compared with normal pregnancies. Risks included increased incidence of preterm birth, a threefold higher risk of placental abruption, increased caesarean delivery, greater postpartum haemorrhage, and a marked rise in perinatal mortality. While absolute risks in mild disease remain low, these findings emphasize the need for vigilance.

Antenatal Surveillance¹

Management should be individualized according to severity:

Mild IPH: Routine antenatal testing is not recommended (SMFM)¹. A follow-up ultrasound may be warranted if the patient develops new symptoms or to monitor growth, as 15–30% of such cases are associated with birthweight >4 kg (larger babies producing more urine output).

However, recent studies have suggested increased odds of IUFD even in pregnancies complicated by mild IPH and suggested to consider antenatal surveillance.^{3,5}

Moderate to severe IPH: Weekly testing is generally recommended from 32–34 weeks, along with serial growth assessments.

Fetal growth restriction (FGR): Polyhydramnios with FGR usually indicates an underlying pathology and requires intensified surveillance

Timing and Mode of Delivery¹

Mild IPH: Spontaneous labour at term is appropriate. Elective induction before 39 weeks is not recommended without another indication.

Moderate to severe IPH: Delivery is typically considered between 37–39 weeks, ideally in a tertiary care setting.

Mode of delivery in IPH should follow standard obstetric indications.

Intrapartum Considerations:

During labour, management should include:

1. Confirmation of fetal presentation.
2. Controlled amniotomy to reduce the risk of cord prolapse.
3. Continuous fetal monitoring, given the increased rates of non-reassuring fetal heart rate patterns, dysfunctional labour, cord prolapse, and placental abruption.
4. Preparation for complications such as shoulder dystocia and postpartum haemorrhage, as macrosomia is common even in IPH.
5. Anticipation of neonatal complications, particularly transient tachypnoea, necessitating paediatric support at delivery. neonatal team to assess the need to pass NG tube post delivery.

Prognosis and Recurrence⁹

Most pregnancies with idiopathic polyhydramnios have favourable outcomes with no increased risk of recurrence.

Conclusion

Idiopathic polyhydramnios is a relatively common but multifactorial condition that should not be regarded as uniformly benign. Advances in genomic testing have revealed hidden abnormalities in a subset of cases. Comprehensive evaluation to exclude secondary causes, risk-stratified surveillance, and avoidance of unnecessary induction remain central to management. A tailored, evidence-based approach provides the best maternal and neonatal outcomes

References

1. Society for Maternal-Fetal Medicine (SMFM). SMFM Consult Series #46: Evaluation and management of polyhydramnios. Am J Obstet Gynecol. 2018;219(4):B2–B8.
2. Hwang DS, Jenkins SM, Mahdy S. Polyhydramnios. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan.
3. Pagan M, Strebeck R, et al. Is mild idiopathic polyhydramnios associated with an increased risk for intrauterine fetal demise? A retrospective cohort study. J Matern Fetal Neonatal Med. 2017;30(14):1755–1759.
4. Khan S, Donnelly J. Outcome of pregnancy in women diagnosed with idiopathic polyhydramnios. Aust N Z J Obstet Gynaecol. 2017;57(1):57–62.

5. Kechagias KS, Triantafyllidis KK, Zouridaki G, et al. Obstetric and neonatal outcomes in pregnant women with idiopathic polyhydramnios: a systematic review and meta-analysis. *Sci Rep*. 2024;14:5296. doi:10.1038/s41598-024-54840-0.
6. Pagan M, Magann EF, et al. Idiopathic polyhydramnios and pregnancy outcome: systematic review and meta-analysis. *Ultrasound Obstet Gynecol*. 2023;61:302–309.
7. Tsakmaki E, Ververi A, et al. Genomic abnormalities in apparently isolated polyhydramnios and the role of confirmed fetal phenotype: a systematic review and meta-analysis. *Am J Obstet Gynecol MFM*. 2024;6(10):101469. doi:10.1016/j.ajogmf.2024.101469.
8. Karkhanis P, Patni S. Polyhydramnios in singleton pregnancies: perinatal outcomes and management. *The Obstetrician & Gynaecologist*. doi:10.1111/tog.12113.
9. Fetal abnormalities > amniotic fluid > polyhydramnios. Fetal Medicine Foundation. Available at: <https://fetalmedicine.org> [Accessed 2025].

vNOTES-Basics to Advanced

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Transvaginal hysterectomy is the recommended approach for benign gynecological diseases for patient safety and recovery, as per most medical associations including American College of Obstetricians and Gynecologists (ACOG) and American Association of Gynecologic Laparoscopists (AAGL). However, there is a decline in transvaginal surgery over the recent years due to lack of training and skill in vaginal surgery of young gynaecologists.

Transvaginal Natural Orifice Transluminal Endoscopic Surgery (vNOTES) is a minimally invasive surgical technique that can be called a newer advancement of endoscopic surgery. The NOTES approach uses natural orifices, such as the stomach, rectum, esophagus, and the bladder, to access the abdominal cavity. Traditionally, the vagina is utilized in gynecologic endoscopic surgery due to its lesser susceptibility to postoperative infections, enhanced visibility, ability to be closed, and improved healing after the surgery.

vNOTES has the advantage of better visualization and more operative space over traditional vaginal surgery especially in cases with narrow vagina, high apex, obesity, large size of pelvic pathology, and indicated adnexectomy. In short, it combines the advantages of vaginal and endoscopic surgery.

vNOTES surgery is a suitable choice for most procedures except certain conditions such as malignancy, severe endometriosis, obliterated cul-de-sac and pelvic abscess/active infection.

All standard laparoscopy instruments and vaginal surgery instruments are required for vNOTES. For vNOTES hysterectomy, it is preferred to use an advanced bipolar system with vessel sealing technology. Ten (10) mm

0 degrees or 30-degree telescope can be used for all procedures. Other essential instrumentation includes a wound protector, a latex surgical glove, or a premade vNOTES port.

There are essentially two parts of the vNOTES port:

1. Wound protector (Medtronic /Applied Medical /Lagis Enterprise /Veol Medical Technologies)
2. Glove port/ premade vNOTES port like GelPOINT (Applied Medical) or LAGIS port/ shield (Lagis Enterprise Co. Ltd.)

The patient is given general anesthesia followed by a dorsal lithotomy position. During the surgery, a 15-degree Trendelenburg position is provided to facilitate retraction of the bowel. The vision obtained by vNOTES is reversed to that of laparoscopic vision and therefore the anatomical orientation is also reversed. As a result, under the vNOTES view, all the right-sided anatomical structures appear on the left side of the screen and vice versa. Surgical team can gain this orientation quickly with dry lab practice.

Postoperatively, the patient is mobilized 3 hours after the surgery. Oral intake is allowed 6 hours after the surgery and discharge is usually given on Day 2.

The limitations of vNOTES include a structured and systematic learning curve as well as the limitation of space compared to laparoscopy which can be challenging in difficult cases. Therefore, the case selection for vNOTES needs to be meticulous.

Overall, the vNOTES surgical procedures are safe, reproducible, and practical in modern gynecologic surgery. vNOTES is a valuable addition to minimally invasive surgical procedures and has distinct advantages over standard laparoscopy.

Molecular and Genetic insights into Adenomyosis: Pathogenesis and Future Therapeutic Targets

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Introduction

Uterine adenomyosis is a chronic disorder commonly seen in reproductive age group women presenting with clinical symptoms varying from heavy menstrual bleeding, dysmenorrhoea, dyspareunia and infertility. Though it is highly prevalent, still the etiopathogenesis is not yet fully understood. The original definition was given by Bird et al in the year 1972 who described adenomyosis as benign invasion of endometrium (endometrial glands+stroma) into the myometrium and reactive fibrosis of the surrounding myometrium producing a diffusely enlarged uterus¹. Recently adenomyosis has been redefined as a condition that starts with the deposition of endometrial stroma and epithelium within the myometrium, with cyclical bleeding and thus repeated tissue injury and repair (TIAR), resulting in gradual and progressive smooth muscle metaplasia and fibrogenesis and these adenomyotic lesions are dynamic and progressive in nature.²

Pathogenesis

A number of dysregulated mechanisms contribute to adenomyosis development and symptoms, including sex steroid signalling, endometrial proliferation and invasiveness, and aberrant immune response. Abnormal sex steroid signalling, particularly hyperestrogenism and subsequent progesterone resistance, are known to play a pivotal role in its pathogenesis.

Original hypothesis described invagination of the endometrial basalis into the myometrium as most common underlying cause of adenomyosis, others being differentiation of embryonic Mullerian remnants and implantation and differentiation of blood-derived stem cells upon retrograde menstruation³. Subsequently the etiopathogenesis of adenomyosis has been elaborated broadly under following subheadings:

1. Invasion of endometrial basalis into the myometrium- repeated sharp endometrial curettage, cesarean delivery, and prior uterine surgery where in the endo-myometrial interface is breached, altered endometrial basalis cells invade into the myometrium by crossing an injured junctional zone. Enhanced endometrial cell migration and proliferation leads to epithelial-to-mesenchymal transition causing resistance to apoptosis, and dysregulation of extracellular matrix function.

2. Microtrauma of junctional zone-induced by tissue injury and repair is believed to result from continuous cyclic

uterine peristaltic activity and estradiol has been proposed to have actions in this process..

3. De novo metaplasia- from displaced pluripotent mullerian remnants and from differentiation of endometrial and stromal stem cells deposited after retrograde menstruation

4. Outside to inside invasion induced by the retrograde menstruation- adult endometrial cells or stem cells have potential to infiltrate uterine serosa and penetrate into outer myometrium thus leading to development of intramyometrial endometrial implants.

5. Abnormal uterine development in response to genetic and epigenetic modifications- Mutated epithelial clones localized in the eutopic endometrial glands seem to play important roles in the pathophysiology of adenomyosis. Although PIK3CA is the most commonly mutated gene in eutopic endometrial cells, mutations found in adenomyosis epithelium almost exclusively affected the KRAS gene⁴. Next Generation Sequencing showed that adenomyotic epithelium had genomic alterations including somatic mutations in several cancer-associated genes with high mutant allele frequencies and the gain of chromosome 1q. Epigenetic modifications include promoter hypermethylation of progesterone receptor-B (PRB), and silencing of PRB expression, as detected in eutopic endometrium of women with adenomyosis resulting in progesterone resistance.⁵

6. Induction of adenomyotic lesions by aberrant local steroid and pituitary hormones and inflammatory mediators- there occurs increased expression of Interleukin-1 (IL-1), Interleukin-18 (IL-18), and tumor necrosis factor- α , β and altered expression of cyclooxygenase-2 (COX-2) in the endometrium of adenomyosis uteri. The hyper-estrogenic environment promotes Interleukin-10 expression (IL-10) which may have an influence on the maintenance of host immunosuppression, augmenting the growth of adenomyotic foci. IL-1 and IL-6 mediate the inflammatory response by COX-2 and prostaglandin E₂-dependent pathways.⁶

Management

The primary management of adenomyosis include thorough history and examination with basic workup including routine blood investigations, detailed pelvic ultrasound; comprehensive endometrial evaluation should also be done in those group of patients presenting with

heavy menstrual bleeding so as to rule out malignancy if any. Management depends on the age of patient, whether her family is complete or is fertility a concern. Patients can be managed with nonsteroidal anti-inflammatory drugs and tranexamic acid for mild symptoms. The levonorgestrel-releasing intrauterine system is commonly used in adenomyosis management, causes improvement in symptoms and reduces uterine size. Fourth generation progesterone derivative Dienogest also exhibits potential benefits, but due to presence of progesterone resistance in adenomyosis, it has limited evidence. Combined oral contraceptives may be less effective than progestins but can be considered in young patients.⁷ Gonadotropin-releasing hormone (GnRH) agonists effectively manage symptoms due to their antiproliferative and hypoestrogenic effect but induce menopausal symptoms with prolonged use.⁸

Other therapeutic targets

- Aromatase inhibitors (letrozole): has a role as aromatase enzyme is locally overexpressed in adenomyotic lesion. Their use is not associated with systemic hypoestrogenic side effects but their safety necessitates exploration and limited use within trials for refractory patients.⁷
- Selective progesterone receptor modulators like mifepristone and ulipristal acetate (UPA): Mifepristone has an influence on caspase 3 expression in adenomyosis tissue, leading to cell apoptosis. It may be effective in treating dysmenorrhea caused by adenomyosis due to its anti-inflammatory properties by reducing the secretion of IL-6 and TNF- α from endometrial cells. Sporadic cases of liver injury and liver failure were reported with UPA during post-marketing experience which limited its usage^{9,10}.
- GnRH antagonists: are upcoming option, requiring further investigation with recent studies reporting efficient lesion regression and symptom alleviation. Advantages are oral administration, rapid action without the initial 1–2 weeks of the flare-up effect as seen with GnRH agonist use. There is dose-dependent and easily reversible suppression of the hypothalamic-pituitary-ovarian axis. Studies have shown role of Linzagolix and Relugolix in eliminating subjective symptoms of uterine adenomyosis and uterine volume reduction suggesting that it is an effective treatment for uterine adenomyosis^{11,12}. But efficacy of Elagolix in the treatment of adenomyosis and infertility remains uncertain¹³.
- Bromocriptine (dopaminergic agonists) may have therapeutic potential for women with adenomyosis. Studies have shown significant improvements in AUB, dysmenorrhea, and quality of life as well as a reduction in uterine size and an improvement in uterine morphology, following treatment with vaginal bromocriptine in women with adenomyosis.^{14,15}

Conclusion

Uterine adenomyosis is a debilitating condition affecting a considerable number of reproductive-age women worldwide. With recent improvements in our understanding of its pathogenesis, various drugs have emerged as potential therapeutic agents. But it remains a challenging condition to manage due to limited high-quality evidence supporting treatment decisions. Future research should aim to elucidate the optimal therapeutic strategies for adenomyosis, and expand our understanding of the disease's impact on fertility and quality of life.

References

1. Garcia-Solares J, Donnez J, Donnez O, Dolmans MM. Pathogenesis of uterine adenomyosis: invagination or metaplasia? *Fertil Steril*. 2018 Mar;109(3):371-379
2. Guo, S.W. Cracking the enigma of adenomyosis: An update on its pathogenesis and pathophysiology. *Reproduction* 2022, 164, R101–R121
3. Donnez J, Stratopoulou CA, Dolmans MM. Uterine Adenomyosis: From Disease Pathogenesis to a New Medical Approach Using GnRH Antagonists. *Int J Environ Res Public Health*. 2021 Sep 22;18(19):9941
4. Bulun SE, Yildiz S, Adli M, Wei JJ. Adenomyosis pathogenesis: insights from next-generation sequencing. *Hum Reprod Update*. 2021 Oct 18;27(6):1086-1097
5. Suda K, Takahashi K, Tamura R, Saito K, Yamaguchi M, Yachida N, Adachi S, Kase H, Okuda S, Yoshihara K, Nakaoka H. Mutation profile and chromosomal abnormality in adenomyosis. *Reproduction*. 2025 Jul 18;170(2):e250132
6. Adenomyosis: Mechanisms and Pathogenesis Junyu Zhai, MD, PhD *Semin Reprod Med* 2020;38:1–15
7. Etrusco A, Barra F, Chiantera V, Ferrero S, Bogliolo S, Evangelisti G, Oral E, Pastore M, Izzotti A, Venezia R, Ceccaroni M, Laganà AS. Current Medical Therapy for Adenomyosis: From Bench to Bedside. *Drugs*. 2023 Nov;83(17):1595-1611.
8. Vannuccini S, Luisi S, Tosti C, Sorbi F, Petraglia F. Role of medical therapy in the management of uterine adenomyosis. *Fertil Steril*. 2018 Mar;109(3):398-405
9. Dinis-Oliveira RJ, Vieira DN. Acute liver failure requiring transplantation: a possible link to ulipristal acetate treatment? *Basic Clin Pharmacol Toxicol*. 2021;129(3):278–282.
10. Yoon EL, Yuk JS. Use of ulipristal acetate and risk of liver disease: a nationwide cohort study. *J Clin Endocrinol Metab*. 2021;106(6):1773–1782.
11. Donnez O, Donnez J. Gonadotropin-releasing hormone antagonist (linzagolix): a new therapy for uterine adenomyosis. *Fertil Steril*. 2020 Sep;114(3):640-645
12. Matsushima T, Nagashima A, Harigane E, et al. Gonadotropin-releasing hormone antagonist (relugolix) for treat-

ment of uterine adenomyosis with symptomatic endometriosis. *Journal of Endometriosis and Pelvic Pain Disorders*. 2024;16(2):112-116

13. Barseghyan M, Theisen JG, Wang C, Gavrilova-Jordan L. Changes in adenomyosis following elagolix vs leuprolide treatment in a patient with pelvic pain and infertility: A case report. *Case Rep Womens Health*. 2023 Feb 2;37:e00484
14. Andersson JK, Khan Z, Weaver AL, Vaughan LE, Gemzell-Danielsson K, Stewart EA. Vaginal bromocriptine improves

pain, menstrual bleeding and quality of life in women with adenomyosis: a pilot study. *Acta Obstet Gynecol Scand*. 2019;98(10):1341–1350.

15. Andersson JK, Pozzi Mucelli R, Epstein E, Stewart EA, Gemzell-Danielsson K. Vaginal bromocriptine for treatment of adenomyosis: impact on magnetic resonance imaging and transvaginal ultrasound. *Eur J Obstet Gynecol Reprod Biol*. 2020;254:38–43

Sepsis in Obstetrics

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Sepsis in obstetrics is an emergency which should be recognized without any delay and managed promptly. It accounts for 11% of maternal deaths worldwide and is the 3rd most common direct cause of maternal death.¹ The prevalence was found to be 16.5/10,000 live births in a study done in VMMC & SJH in 2017.²

Sepsis is defined as “life threatening organ dysfunction caused by dysregulated host response to infection”.³ WHO (2018) has defined maternal sepsis as ‘a life-threatening condition defined as organ dysfunction resulting from infection during pregnancy, childbirth, post abortion or postpartum period’.⁴ Organ dysfunction is defined as an increase in the SOFA Score of 2 or more (Fig 1). The SOFA Score assesses six organ systems and has been used in the critical care units for prognostication of the patients on admission and thereafter every day. However the sepsis-3 guideline has now incorporated the SOFA Score as an integral part of the sepsis definition.

Septic shock is defined as a ‘subset of sepsis with profound circulatory, cellular and metabolic abnormalities associated with a greater risk of mortality than sepsis alone’. It is diagnosed when sepsis is associated with a vasopressor requirement to maintain a MAP of >65 mmHg and a serum lactate level >2 mmol/L. Septic shock is a continuum of sepsis and hence early recognition and management of sepsis is crucial, as sepsis is associated with a mortality of around 10% whereas septic shock has a mortality of more than 40%.

It has been strongly established that early identification and appropriate management in the initial hours improves the outcome in cases of sepsis.⁵

The pathogenesis is not completely understood till date. The host response to infection plays an important role, initial pro inflammatory pathways are activated, anti-inflammatory pathways are also activated and can down regulate corrective responses later in the course of sepsis. The four main features are endothelial dysfunction, coagulopathy, cellular dysfunction and cardiovascular dysfunction.

Risk factors for sepsis in obstetrics

There are various risk factors for sepsis in obstetrics. Some of them are unique to pregnancy as pregnancy is a state of immune compromise. These consist of prolonged rupture of membranes, prolonged labour, vaginal trauma, caesarean birth, multiple vaginal examinations and any intrauterine

procedure. The general risk factors include, low socio-economic status, poor nutrition, anemia, diabetes mellitus, obesity.

Predictor tools: There have been various predictive scores for early recognition of sepsis. The evolution of newer scores has improved the sensitivity and positive predictive value. In 2016, the Sepsis-3 task force recommended to use a much simpler score, the quick SOFA (qSOFA) score as it has to consider only three parameters. The Surviving Sepsis Campaign (SSC) in their recent guideline in 2021 has recommended against use of qSOFA as a single screening tool in sepsis or septic shock.⁵ Studies have shown that qSOFA is more specific but less sensitive than SIRS criteria for early identification of infection induced organ dysfunction.⁶⁻⁹ Another study showed 24% of infected patients had a qSOFA score 2 or 3, but these patients accounted for 70% of poor outcomes.¹⁰ However, a raised qSOFA should always alert the clinicians about the possibility of sepsis but does not necessarily imply it’s presence or absence.

The Modified Early Obstetric Warning Score (MEOWS) is implemented for early recognition of deterioration of the critically ill obstetric patients.¹¹ (Fig 2) It uses physiological variables and the score is calculated. If the score is beyond the threshold, medical review and intervention is required. If the MEOWS score is 4, any single parameter score is 3 or the patient deteriorates further or fails to respond to treatment then one should **“THINK SEPSIS”**.

Score points	1	2	3	4
Respiration				
PaO ₂ /FIO ₂	<400	<300	<200	<100
			with respiratory support	with respiratory support
Cardiovascular				
Hypotension*	MAP <70 mmHg	Dopamine ≤5 or dobutamine in any dose	Dopamine >5 or epinephrine ≤0.1 or norepinephrine ≤0.1	Dopamine >15 or epinephrine >0.1 or norepinephrine >0.1
Liver				
Bilirubin mg/dl	1.2–1.9	2.0–5.9	6.0–11.9	>12.0
Renal				
Creatinine mg/dl	1.2–1.9	2.0–3.4	3.5–4.9	5.0
or urine output			or <500ml/24h	or <200ml/24h
Coagulation				
Platelets ×10 ³ /mm ³	<150	<100	<50	<25
Central nervous system				
Glasgow Coma Scale	13–14	10–12	6–9	<6

* Adrenergic agents administered for at least 1 h (doses are given in µg/kg/min)

FIG 1: SOFA(sequential organ failure assessment) Score

Score	3	2	1	0	1	2	3
Temperature	<35 °C	35-35.9 °C	36-37.4 °C	37.5-37.9 °C	38.0-38.9 °C	>39 °C	
Systolic BP	<70	71-79	80-89	90-139	140-149	150-159	>160
Diastolic BP			≤49	50-89	90-99	100-109	>110
Pulse		<40	40-49	50-99	100-109	110-129	>130
Respiratory Rate	≤10			11-20	21-24	25-29	>30
Oxygen Saturations	≤94%			≥95%			
AVPU				Alert	Responds to Voice	Responds to Pain	Unconscious
Urine output mLs/hr	<10	<30		Not Measured			

Figure 2: Modified Early Obstetric Warning Score (MEOWS) in detecting the seriously ill and deteriorating woman

Carle et al designed another modified obstetric early warning score (Carle's OEWS).¹² A study conducted in VMCC and SJH during 2017-2019 used this score in labour wards in predicting admission to obstetric critical care unit, maternal near miss and mortality. They found it as a useful screening tool and it can be routinely used to ensure timely intervention.¹³

Management: The optimum management of sepsis lies in early recognition and prompt initiation of resuscitation. The window between the onset and identification of sepsis is often where significant delays in management occur.¹⁴ The initial resuscitation and the investigations goes hand in hand.

The “**golden hour of sepsis**” stresses the relationship between timely initiation of antibiotic treatment and outcome. Studies have found that each hour delay in treatment reduces sepsis survival by 7.6%.¹⁵ Here lies the rationale of obtaining sample for culture to diagnose the infection and initiating appropriate antimicrobial later on.

Investigations

To asses for end organ hypoperfusion

To asses infective organism

- Full blood count
Blood culture, wound swabs,
- LFT
vaginal swabs
- KFT
- Serum lactate
- ABG
- Coagulation profile

Components of the one hour bundle

1. Measure lactate level, remeasure lactate if initial lactate elevated (> 2 mmol/L)- in 2-4 hours (GRADE 1B)
2. Obtain blood cultures prior to administering antibiotics. Do not delay antibiotics in the situation where culture is not feasible
3. In pregnant or postpartum patients with septic shock

or a high likelihood of sepsis, administer empiric broad-spectrum antimicrobial therapy, ideally within 1 hour of recognition - (strong recommendation)

4. Begin rapid administration of 30mL/kg crystalloid (balanced solution) in first 3 hours- for hypotension or lactate ≥4 mmol/L (strong recommendation)
5. Apply vasopressors if hypotensive during or after fluid resuscitation to maintain a mean arterial pressure ≥ 65 mm Hg- in first hour itself (strong recommendation)

The surviving sepsis campaign (2016) has also given key recommendations about management of sepsis and septic shock. Data from a prospective cohort study from the SSC showed that compliance with SSC bundles led to a 25% relative risk reduction in mortality.¹⁶

In the recent guideline, SSC (2021) has upgraded and changed few of their recommendations regarding management of sepsis and septic shock. Salient points regarding the management is as follows-

Initial resuscitation:

- Management of sepsis and septic shock should be initiated immediately after recognition
- Those who require ICU admission should be admitted within 6 hours
- For sepsis induced hypoperfusion, intravenous crystalloids at least 30ml/kg should be given within first three hours of resuscitation
- Rather than physical examination or static parameters, dynamic tests like passive leg raising test should guide fluid resuscitation
- Serum lactate level should guide the resuscitation, aim should be lowering the elevated lactate level
- Capillary refilling time is now considered as a guiding parameter for resuscitation in adjunct to other measures of perfusion
- The target mean arterial pressure (MAP) in septic shock (on vasopressor) is 65 mmHg

Antimicrobial therapy:

- Initiation of IV antimicrobials immediately or within one hour of recognition of sepsis with or without shock is strongly recommended (Fig 2)
- Continuous re-evaluation and search for alternate diagnosis should be done in cases with suspected sepsis without confirmed infection. Empirical antibiotics should be discontinued if alternate diagnosis is established or strongly suspected
- Serum procalcitonin level is not to be used along with clinical evaluation regarding decision when to start antimicrobials

- Empiric broad-spectrum therapy with one or more antimicrobials to cover all likely pathogens (bacterial, fungal, viral) is recommended in sepsis and septic shock
- Antimicrobials with methicillin resistant staphylococcus aureus (MRSA) coverage is recommended only in those patients who are at high risk
- Source control should be done as soon as possible
- Daily assessment and de-escalation of antimicrobials is strongly recommended
- Using a shorter course of antimicrobials in cases with adequate source control is recommended

Additional therapy:

- If fluid resuscitation and vasopressor therapy are able to maintain the hemodynamic status of patients with septic shock, steroid are not to be used. It is started when ongoing requirement of norepinephrine or epinephrine ≥ 0.25 mcg/kg/min for at least 4 hours after initiation to maintain the target MAP. The dose is 200 mg/day given as 50 mg intravenously every 6 hours or as a continuous infusion
- Restrictive transfusion strategy is followed, the trigger is Hb < 7 gm/dl along with the overall clinical condition of the patient
- IV immunoglobulins, IV vitamin C are not recommended
- Stress ulcer prophylaxis is to be considered in patients with high risk for GI bleed
- Venous thromboprophylaxis is to be considered and low molecular heparin is of choice rather than unfractionated heparin
- Insulin therapy to be started if the blood sugar level is ≥ 180 mg/dL
- Sodium bicarbonate is to be considered if there is severe metabolic acidemia (pH < 7.2) or acute kidney injury
- Early initiation (within 72 hours) of enteral feeding is to be considered

Termination of pregnancy:

Sepsis is not an indication for pregnancy termination unless the source is the feto-placental unit, like in chorioamnionitis. In other situations the decision needs to be taken on case to case basis by a senior obstetrician. Maternal stabilisation is critical before planning delivery.

Care for the sepsis survivors:

- Shared decision-making regarding discharge planning, educating patient and family members about maintaining asepsis, referral to peer support groups is encouraged

- Post discharge follow up should be scheduled
- Survivors who received mechanical ventilation for > 48 hours or an ICU stay of > 72 hours, a post-hospital rehabilitation program is suggested

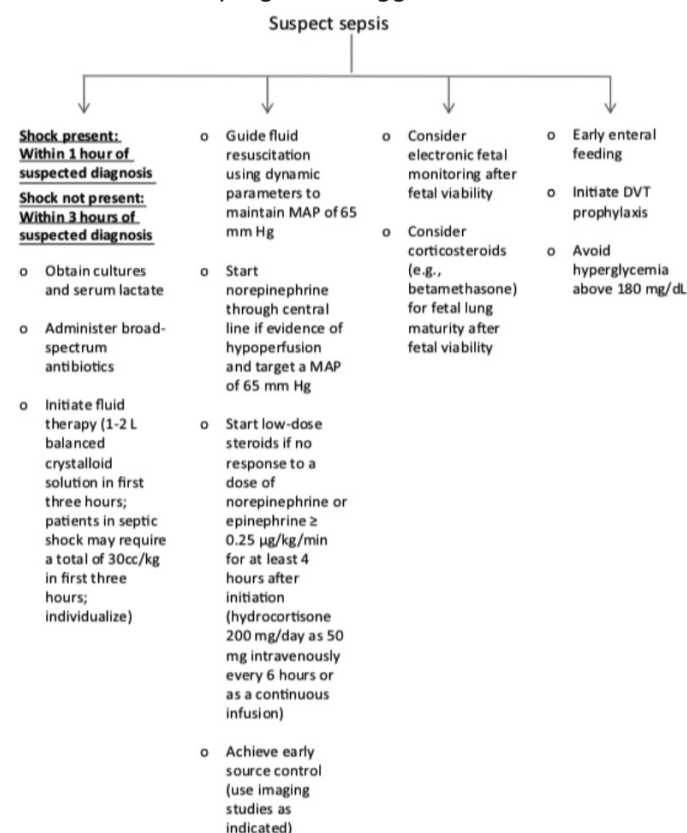


Fig 4: Summary of management of sepsis and septic shock

Conclusion

Sepsis and septic shock are medical emergency. Prompt recognition and immediate management are keys to improve outcome. The screening tools are effective and should be used judiciously. Continuous re-evaluation and search for alternate diagnosis when suspected and discontinuation of empiric antibiotics is recommended (Fig 4). Adequate source control reduces morbidity and mortality. Post discharge care is also of utmost importance, educating the patient and family members how to prevent sepsis, timely follow up and referral to peer support group should be encouraged.

References

1. Say L, Chou D, Gemmill A, et al. Global causes of maternal death: a WHO systematic analysis. Lancet Glob Health. 2014;2(6):e323-e333.
2. Kumari A, Suri J, Mittal P. (2017). Descriptive audit of maternal sepsis in a tertiary care centre of North India. International Journal of Reproduction, Contraception, Obstetrics and Gynecology. 2017.
3. Singer M, Deutschman CS, Seymour CW, et al. The Third International Consensus Definitions for Sepsis and Septic Shock

- (Sepsis-3). JAMA. 2016;315(8):801–10.
4. World Health Organisation. Statement on maternal sepsis. 2017.
 5. Evans L, Rhodes A, Alhazzani W, Antonelli M, Coopersmith Craig M, French C et al. Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock 2021. *Critical Care Med.* 2021;49(11):e1063-e1143.
 6. Fernando SM, Tran A, Taljaard M, et al: Prognostic accuracy of the quick sequential organ failure assessment for mortality in patients with suspected infection: A systematic review and meta-analysis. *Ann Intern Med.* 2018; 168:266–75.
 7. Herwanto V, Shetty A, Nalos M, et al: Accuracy of quick sequential organ failure assessment score to predict sepsis mortality in 121 studies including 1,716,017 individuals: A systematic review and meta-analysis. *Crit Care Explor.* 2019;1:e0043.
 8. Serafim R, Gomes JA, Salluh J, et al: A comparison of the quick-SOFA and systemic inflammatory response syndrome criteria for the diagnosis of sepsis and prediction of mortality: A systematic review and meta-analysis. *Chest.* 2018;153:646–55.
 9. Cinel I, Kasapoglu US, Gul F, et al: The initial resuscitation of septic shock. *J Crit Care.* 2020; 57:108–17.
 10. Seymour CW, Liu VX, Iwashyna TJ, et al: Assessment of clinical criteria for sepsis: For the third international consensus definitions for sepsis and septic shock (Sepsis-3). JAMA. 2016;315:762–74.
 11. Joint Trust Guideline for the use of the Modified Early Obstetric Warning Score (MEOWS) in Detecting the Seriously Ill and Deteriorating Woman. Available at <https://www.nnuh.nhs.uk/publication/download/modified-early-obstetric-warning-score-meows-> Last accessed on Nov 10, 2023.
 12. Carle, C., Alexander, P., Columb, M. and Johal, J. Design and internal validation of an obstetric early warning score: secondary analysis of the Intensive Care National Audit and Research Centre Case Mix Programme database. *Anaesthesia.* 2013;68: 354-67.
 13. Gupta C, Suri J, Bachani S, Bharti R, Pandey D, Mittal P. Carle's obstetric early warning score as a screening tool for critical care admission. *Indian J Med Res.* 2023; 158.
 14. Daniels R. Surviving the first hours in sepsis: getting the basics right (an intensivist's perspective). *J Antimicrob Chemother.* 2011;66(2):11–23.
 15. Kumar A, Roberts D, Wood KE, Light B, Parrillo JE, Sharma S, et al. Duration of hypotension before initiation of effective antimicrobial therapy is the critical determinant of survival in human septic shock. *Crit Care Med.* 2006;34(6):1589-96.
 16. Levy MM, Rhodes A, Phillips GS, et al. Surviving Sepsis Campaign: association between performance metrics and outcomes in a 7.5-year study. *Crit Care Med.* 2015;43:3–12.

Difficult Cesarean with Previous Scar, Techniques of Safe Delivery

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Introduction

Cesarean delivery is a common obstetric procedure and frequently helps in saving lives of both mother and baby when medically indicated. Based on the data available by systematic review done in year 2014 by WHO, cesarean section rates higher than 10% are not associated with reductions in maternal or neonatal mortality.

The global cesarean section rate is rising steadily over the past few decades and is approximately 21%. India's national C-section rate is 21.5% (2019-2021), however the repeat cesarean section rates may be substantially as high as 84% (ICMR backed data). Also disparities are reported in the cesarean section rates of urban versus rural areas and public versus private sectors with exact figures lacking due to paucity of data.

With the increasing rates of primary cesarean deliveries, the proportion of women undergoing repeat cesarean has also increased. While repeat cesarean is often considered safe, it is frequently associated with increased technical difficulties as compared to primary cesarean posing different challenges.

Challenges in Repeat Cesarean Section

1. ADHESIONS

Most commonly encountered difficulty in repeat cesarean deliveries. There may be flimsy or dense adhesions which may involve anterior abdominal wall, omentum, bladder and parietal peritoneum. Adhesions between uterus and anterior abdominal wall make abdominal entry difficult, prolong operative time and increase risk of visceral injury.

2. BLADDER RELATED DIFFICULTIES

Bladder is frequently adherent to lower uterine segment and is advanced in many cases with previous cesareans making creation of bladder technically challenging. Also if the bladder is densely adherent bladder poses greater risk of bladder injury which further contributes to increased

operative morbidity, need for repair, long hospital stay and potential urological sequelae.

3. HEMORRHAGE

Adhesions and difficult dissection increase the risk of hemorrhage and may necessitate multiple blood transfusions and need for hysterectomy. Moderate to severe hemorrhage is reported in 6-10% of repeat cesarean cases. Also in cases of fibrosis of previous scar there could be extension of uterine incision or vaginal extension leading to increased blood loss.

4. INJURY TO SURROUNDING ORGANS

In cases of severe adhesions and distorted anatomy bowel injury may be encountered in rare cases (~0.1-0.3%) during adhesiolysis.

Ureteric injury though rare but can be encountered in severe bladder adhesions during lateral approach.

5. PLACENTA ACCRETA SPECTRUM

The risk of adherent placenta in low lying placenta increases from 11% in one previous cesarean to 40% in two previous cesareans. With three or more prior cesarean with previa the risk is as high as 61-67%.

There is significant increase in maternal mortality and morbidity due to massive hemorrhage during attempted placental separation. The risk of peripartum hysterectomy is around 50-70%. High surgical expertise with anticipatory measures and multidisciplinary team approach is the key.

6. PROLONGED OPERATING TIME AND INCREASED MORBIDITY

Repeat cesareans on an average take longer operative durations than primary cesareans. Extensive adhesiolysis, increased blood loss and prolonged operative time further increases the maternal morbidity. Neonatal morbidity is also increased in cases where there is difficult extraction due to dense abdominal adhesions.

TABLE

DIFFICULTY	INCIDENCE (%)	REMARKS	REFERENCES
ADHESIONS	45-65%	Most common between uterus, bladder, omentum, anterior wall. Increases operative time	Morales KJ et al, obstet Gynaecol (2007)
DIFFICULT ABDOMINAL ENTRY	20-25%	Due to dense scarring of rectus sheath/ peritoneum	Tulandi T, Agadi M et al (2010)

BLADDER INJURY	0.3-0.7%	High in repeat cesarean vs primary	Rahman J et al (2009)
HEMORRHAGE (>1000)	6-10%	May require transfusion/hysterectomy	Silver RM et al (2006)
BOWEL INJURY	<0.1%	Rare,during adhesiolysis	Phipps MG et al.,Am J (2005)
PROLONGED OPERATIVE TIME	+10-20 mins	Adhesions are main main factors	Silver RM et al (2006)
URETERIC INJURY	<0.1%	Very rare, during dense adhesions	Rahman J et al(2009)

Cocclusion

Women with previous cesarean scar are at risk in subsequent pregnancies particularly in country like India where there is delay in seeking antenatal care and antenatal care is often neglected. The best way to reduce potential complications of repeat cesarean is to reduce the primary and repeat cesarean rates whenever possible. Women should be counselled about the possibility of interoperative complications and vaginal birth should be encouraged in women fulfilling the criteria for the vaginal birth after cesarean. However anticipation, preparedness for complications, following standard surgical principles and patience is the key for better surgical outcomes.

References

1. Morales KJ, Gordon MC, Bates GW Jr. Postcesarean delivery adhesions associated with delayed delivery of infant. Am J Obstet Gynaecol. 2007 Jun;196 (6):461.e1-6. Pubmed PMID:17466672
2. Tulandi T, Agadi M, Zarei A, Miner L, Sikirica V. Adhesion development and morbidity after repeat cesarean delivery. Am J Obstet Gynaecol. 2009 Jan;201(1):56.e1-6. Pubmed PMID19576375
3. kramer RL, et al. Bladder injury during cesarean delivery: A 10-Year Review. Obstet Gynaecol. 2016 May;127:59S.
4. Phipps MG, Watabe B, Clemons JL, Weitzen S, Myers DL. Risk factors for bladder injury during cesarean delivery. Obstet Gynaecol 2005 Jan; 105(1):156-160. Pubmed PMID:15625156
5. Elessaway M et al. Incidence of adhesions and maternal and neonatal morbidity after repeat repeat cesarean delivery. Arch Gynaecol Obstet. 2016;; 294(1):1011-1016. Pubmed PMID: 27770246
6. American College of Obstetricians and Gynaecologists (ACOG). Placenta Accreta Spectrum. Obstetric Care Consensus No.7. Obstet Gynaecol. 2018 Dec;132(6):e259-e275
7. Ahmed HA, Bu Shurbak ZS, Babarinsa IA, Hussain Salekh HA, Khenyab N, Ahmed Z, et al. small bowel injury during peritoneal entry at cesarean section: a five year case series. Cureus. 2022 Nov 3;14(11):e31072. doi:10.7759/cureus.30172. PMID: 36475206;PMCID: PMC9720057.

Detrusor over activity or just a nervous bladder? – Decoding unstable tracings

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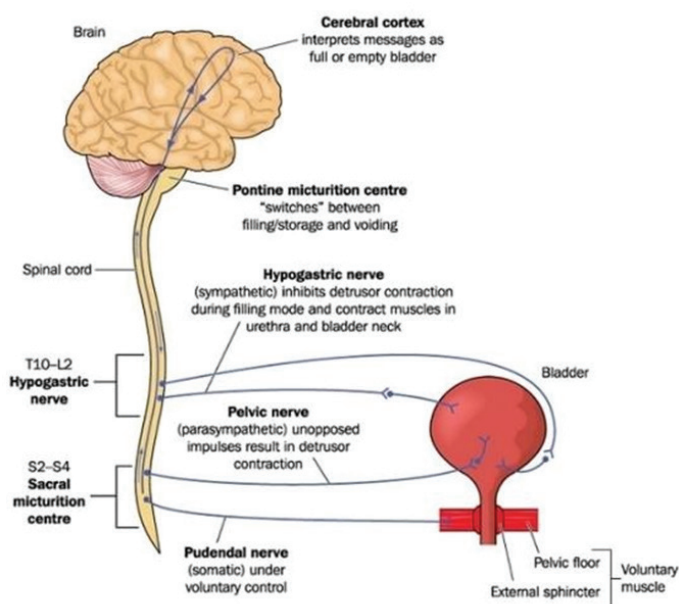
Over active bladder is defined as a woman with storage symptoms such as urgency, frequency, and nocturia, with or without urge incontinence. OAB can lead to urge incontinence (wet OAB) or simply urgency with no leakage of urine (dry OAB). This problem can be caused by any disturbances in nerves, smooth muscle, and urothelium.

Examination of the peripheral innervation and the micturition reflex in models of OAB reveals consistent changes that include patchy denervation of the bladder, enlarged sensory neurons, hypertrophic ganglion cells, and an enhanced spinal micturition reflex. These features suggest that regardless of the etiology underlying causative mechanisms are similar.

Patients with an unstable bladder are defined urodynamically as demonstrating an uninhabitable elevation in intra vesical pressure during bladder filling. Urodynamic fails to discriminate among idiopathic, myogenic and neuropathic causes. Moreover, 100%-45% of individuals with unstable bladder contraction may be asymptomatic

Diagram 1

Showing neural pathways of control of micturition



- Changes in the macroscopic structure of unstable bladder include muscle bundle denervation and smooth muscle cell hypertrophy; ultrastructural changes like protrusion junctions and unusually close abutments between the myocytes are common.

- Local anesthetics, intravesical afferent neurotoxins, and destruction of afferent nerves in the bladder neck and prostate reduce urgency, frequency, and urge incontinence, indicating an important role for afferent evoked reflexes.
- High excitability and connectivity of smooth muscle in the unstable bladder allow propagation of electrical activity that could cause an uninhibited contraction.
- Neuroplastic changes associated with OAB may result from alterations in activity in the nerves controlling the detrusor and probably involve nerve growth factor.
- OAB often occurs after spinal cord injury or bladder obstruction or inflammation, which may trigger neuroplasticity.
- People with depression, anxiety attention deficit disorder, and conditions associated with disturbed serotonin metabolism may be prescribed to OAB.

Definitions

Detrusor Over activity (DO): ICS definition: Involuntary detrusor contractions during the filling phase, which may be spontaneous or provoked.

Nervous bladder” (physiological instability): Transient, non-pathologic fluctuations in detrusor pressure due to patient apprehension, voluntary contractions, or environmental triggers.

Key Differences in Tracings

Feature	True DO	Nervous/Artifact
Reproducibility	Seen consistently in repeated fills	Often absent in repeat fills
Associated symptoms	Urgency, leakage at time of contraction	No urgency or leakage
Provocation	Occurs spontaneously or with triggers (sound of running water, standing, etc.)	Linked to talking, laughing, coughing, movement
Pressure wave characteristics	Smooth rise in detrusor pressure, often >5–10 cmH ₂ O, with bladder volume change	Abrupt, irregular, simultaneous changes in abdominal & vesical pressures
Abdominal pressure channel	Stable or slightly variable	Shows parallel changes (movement artifact)

Diagram 2

Showing tracing nervous bladder and over active bladder

DETRUSOR OVERACTIVITY OR JUST A NERVOUS BLADDER? — DECODING UNSTABLE TRACINGS

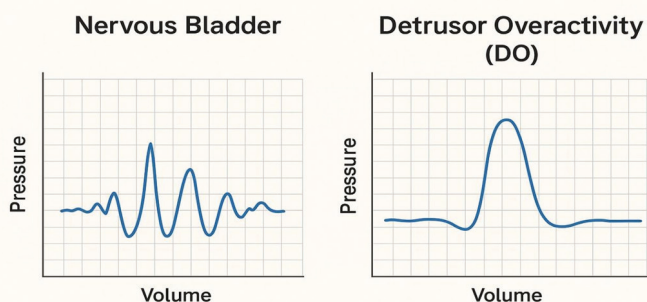


Diagram 3:

Showing voiding cystometry with neurogenic hypotonic bladder with detrusor underactivity

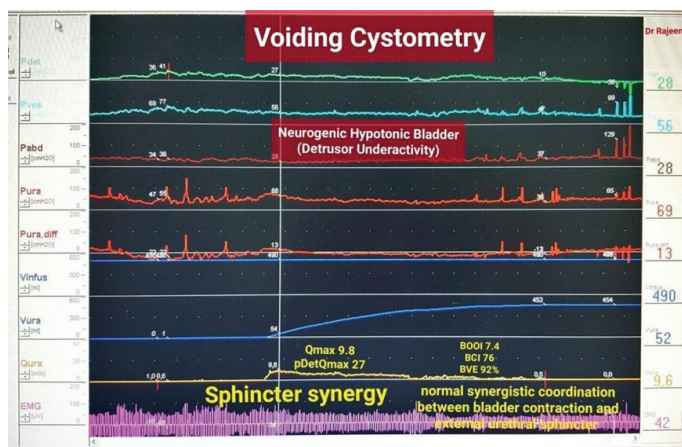
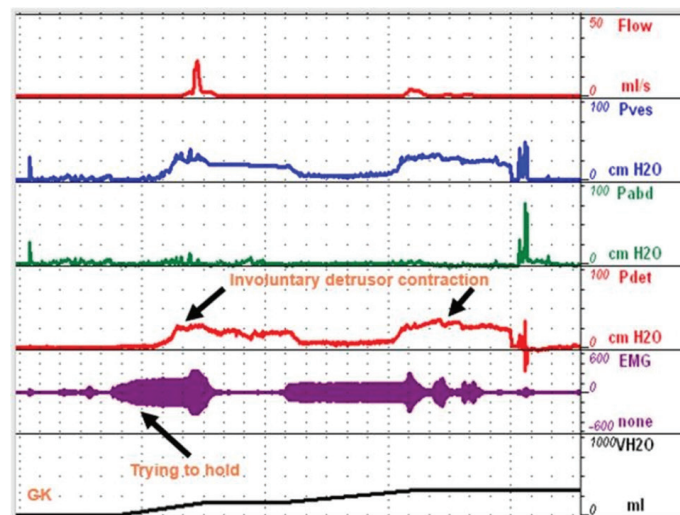


Diagram 4

Showing filling cystometry with detrusor overactivity (involuntary detrusor contraction) with leakage (Wet OAB)



References

1. Eckhardt MD, van Venrooij GE, Boon TA. Symptoms, prostate volume, and urodynamic findings in elderly male volunteers without and with LUTS and in patients with LUTS suggestive of benign prostatic hyperplasia. *Urology*. 2001; 58:966–971. doi: 10.1016/s0090-4295(01)01413-3.
2. Porreca F, Lai J, Bian D, et al. A comparison of the potential role of the tetrodotoxininsensitive channels, PN3/SNS and NaN/SNS2, in rat models of chronic pain. *Proc Natl Acad Sci U S A*. 1999; 96:7640–7644.
3. Kruse MN, Belton AL, de Groat WC. Changes in bladder and external sphincter function after spinal injury in the rat. *Am J Physiol*. 1993; 264:1157–1163. doi: 10.1152/ajp-regu.1993.264.6. R1157.
4. de Groat WC. A neurological basis for the overactive bladder. *Urology*. 1997; 50:36–52. doi: 10.1016/s0090-4295(97)00587-6.

Severe Preeclampsia and HELLP Syndrome – Early Clues, Timely Action, Better Outcomes

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What is severe preeclampsia (PE)?

Severe preeclampsia, or preeclampsia with severe features, is a serious complication of pregnancy involving dangerously high blood pressure and signs of damage to organ systems. While regular preeclampsia involves high blood pressure after 20 weeks of pregnancy, severe preeclampsia includes additional symptoms indicating more widespread and acute organ damage.

What is the likelihood of PE becoming severe?

In the study done at our center, the severe PE occurred in 100/1048 (9.5%) women (DHR -ICMR funded study)¹. In the IIS done with Roche on high-risk women, the severe adverse outcome was seen in 54/287(18.8%) cases ² (Figure1). Studies have emphasized that the socioeconomic status and the quality of antenatal care also have bearing on the incidence of complications which might overshadow the lowered risk due to race ³.

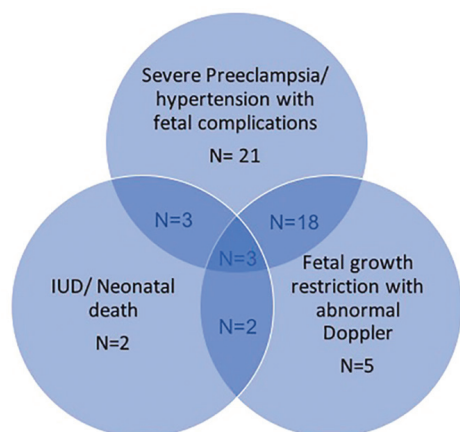


Fig. 1. Venn Diagram showing the distribution of cases with adverse outcome in the high risk study cohort. (<https://doi.org/10.1016/j.preghy.2022.10.003>)

Factors that increase the risk of severe PE are

- Advanced maternal age
- Hypertension in previous pregnancy
- Diagnosis at an earlier gestational age.
- Having a twin or multiple pregnancy.
- Having chronic hypertension that worsens (superimposed preeclampsia).

- Pre-existing conditions like diabetes, chronic kidney disease, and autoimmune disorders.
- In high peripheral vascular resistance scenario – giving labetalol worsens heart failure

Early clues

- History: Persistent severe headache, blurred vision, sensitivity to light, or seeing flashing spots, pain in the upper abdomen, often on the right side under the ribs, shortness of breath, cough, Decreased fetal movement.
- Examination: Epigastric tenderness, Gross edema, oliguria, Raised mean arterial pressure
- Biophysical: Uterine artery Doppler, Umbilical artery doppler, Placental dimensions.
- Biochemical parameters: Decreased kidney or liver function, pulmonary edema, thrombocytopenia
- Biomarkers: Papp-A, PIGF, sFLT-1

Biomarkers

1. PIGF

PIGF at 28-30 weeks proved to be a useful adjunct to clinical parameters in determining risk of PE, it would predict early onset PE in 9 out of 10 cases. Low PIGF has a modest diagnostic value for predicting adverse outcome due to PE⁴.

2. Soluble FMS like tyrosine kinase

Serial Biomarkers levels at 20 -22 w, 28-30 w, 34- 36 wk (n= 287)

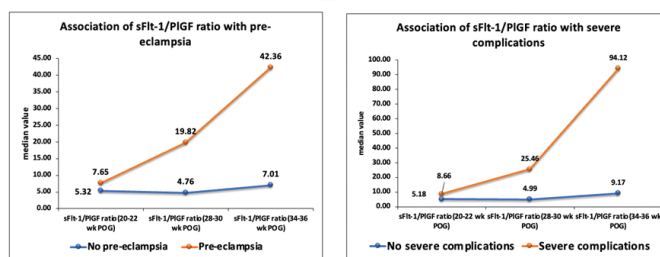


Figure 2: sFLT-1/ PIGF ratio in three time points

The sFLT-1/ PIGF ratio was higher in women who had adverse pregnancy outcome

Cut-off of sFLT-1/PIGF ratio

The figure 3 shows how sFLT-1/PIGF ratio can be used for short term prediction of PE, the lower cut- off of 38 is the same whether done in early pregnancy or later, but the

higher cut-off to rule in PE is 85 if done in early pregnancy and 110 if done later³.

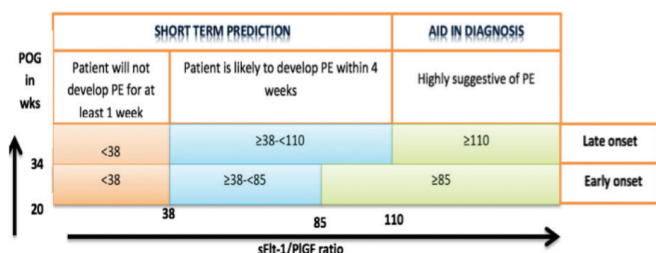


Figure 3: the Cut-off of sFlt-1/PIGF ratio

Three subgroups of women can be defined based on the sFlt-1/PIGF ratio³

1. sFlt-1/PIGF ratio < 38: these women will most likely not develop PE for at least 1 week
2. sFlt-1/PIGF ratio > 85 (early-onset PE) or > 110 (late-onset PE): these women are very likely to have PE or another form of the placenta-based disorder
3. sFlt-1/PIGF ratio 38 - 85 or 38 - 110: these women do not have a definite diagnosis of PE, but are highly likely to develop PE within 4 weeks.

New research

Placental dimensions (length, breadth, thickness and volume)⁵

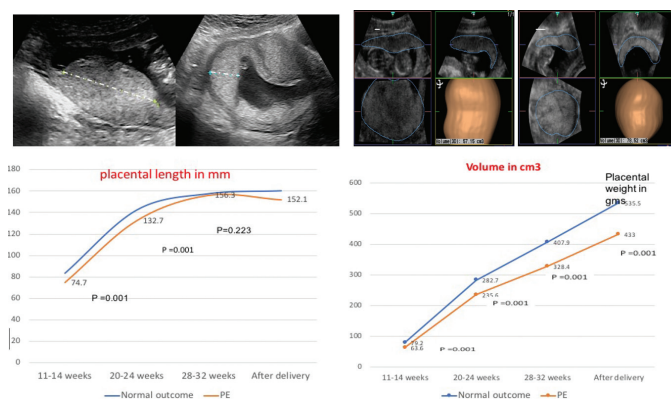


Figure 4: Placental length, breadth, thickness and volume of placenta in different trimesters in first, second and third trimesters in normal and adverse outcome

AI and placental images for adverse outcome

AI model - Deep learning⁶

This technique proved good in differentiating normal outcome and adverse pregnancy outcome

Sensitivity and Specificity for best model of trimester classification and for prediction of adverse pregnancy outcome.

Prediction	Trimester classification among controls with normal outcome			Predictive value for adverse maternofetal outcome		
	T1 & T2	T2 & T3	T1 & T3	T1	T2	T3
Sensitivity (%)	78.67	80.00	86.36	77.42	75.00	81.03
Specificity (%)	91.11	65.00	88.89	80.21	85.07	93.94
PLR	4.27	3.25	6.52	3.91	5.03	13.37
NLR	0.11	0.44	0.13	0.28	0.29	0.20
Positive Predictive Value (%)	71.93	86.67	84.21	71.64	81.82	92.16
Negative Predictive Value (%)	93.65	53.33	90.48	84.62	79.17	84.93

Key Points

- Placental growth factor (PIGF) is the most validated and studied biomarker of PE screening. PIGF levels decrease substantially 5 weeks before the onset of PE.
- All pregnant women should be screened at 11–14 weeks for preterm preeclampsia by the first-trimester combined test with maternal risk factors, mean arterial pressure, uterine artery pulsatility index, and placental growth factor as available, even if they have been already been identified as having clinical 'high-risk' factors (ISSHP 2021)
- PIGF along with MAP and uterine artery Doppler is known as triple test for PE. It has got highest sensitivity for detecting preeclampsia before 32 weeks.
- Alternative screening method i.e. contingent screening method includes assessment of PIGF levels only in women with a significant positive history or raised MAP or raised uterine artery pulsatility index.
- Given the resource constraints in low/middle-income countries, variations of the first trimester combined test should be considered but the baseline test should be maternal risk factors combined with mean arterial pressure.
- In high-risk women, defined by the first-trimester combined test, aspirin in the dose of 150 mg/night should be commenced at 11–14+6 weeks of gestation until either 36 weeks of gestation when delivery occurs, or when preeclampsia is diagnosed.
- Extremely elevated sFlt-1/PIGF values have been shown to be closely related to the need for immediate delivery. The sFlt-1/PIGF ratio allows the identification of women at high risk for imminent delivery.
- The knowledge of high-risk of PE would help in increasing surveillance in those who would be high risk, and delayed delivery in women who were low risk
- It has been found that the sFlt-1/PIGF ratio is a better predictor of EO PE compared to the late onset PE

References

1. Placenta. 2024 Sep 2;154:153-159. Kumar M, Balyan K, Debnath E, Humtsoe B, Meena B, Ravi V, Singh S. Placental biophysical model for prediction of early onset fetal growth restriction in first and second trimester of pregnancy: A prospective cohort study.
2. Kumar M, Balyan K, Debnath E, Shankar S, Apte A, Jha S. Role of sFLT-1/PIGF ratio in predicting severe adverse materno-fetal outcome in high-risk women. *Pregnancy Hypertens*. 2022 Dec; 30:154-160.
3. Poon LC, Shennan A, Hyett JA, Kapur A, Hadar E, Divakar H, McAuliffe F, da Silva Costa F, von Dadelszen P, McIntyre HD, Kihara AB, Di Renzo GC, Romero R, D'Alton M, Berghella V, Nicolaides KH, Hod M. The International Federation of Gynecology and Obstetrics (FIGO) initiative on pre-eclampsia: A pragmatic guide for first-trimester screening and prevention. *Int J Gynaecol Obstet*. 2019 May;145 Suppl 1(Suppl 1):1-33
4. Balyan K, Humtso BY, Meena B, Sapna S, Rana A, Kumar M. Materno-fetal outcome with PIGF above or below cutoff during second half of pregnancy in high-risk women. *Int J Gynaecol Obstet*. 2024 Apr;165(1):211-219.
5. Kumar M, Debnath E, Malhotra S, Yadav R, Singh S. Serial evaluation of morphological and biophysical placental attributes in women with normal outcome and preeclampsia *Int J Gynaecol Obstet*. 2024 Nov 30. doi: 10.1002/ijgo.16061. Epub ahead of print. PMID: 39614692.
6. Arora U, Vigneshwar P, Sai MK, Yadav R, Sengupta D, Kumar M. Ultrasound placental image texture analysis using artificial intelligence and deep learning models to predict hypertension in pregnancy. *Int J Gynaecol Obstet*. 2025 Jun 21. doi: 10.1002/ijgo.70306.

Preconception Health- Optimizing before the bump

Anuradha Singh

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Preconception care (PCC) is becoming a crucial part of modern gynecologic practice. It has shifted our attention from obstetric management to proactive reproductive health improvement. PCC includes various biomedical, behavioral, and social actions aimed at recognizing and changing risks that could impact future pregnancies. The WHO and CDC guidelines, supported by FIGO and FOGSI recommendations, state that PCC should be included in regular gynecologic visits, especially for women of childbearing age. The reasoning is clear: over 50% of pregnancies worldwide are unplanned, and many women begin their pregnancies with risk factors that can be changed. These include nutritional deficiencies, chronic illnesses, untreated infections, and psychosocial stressors that could harm both mother and baby.

PCC provides an opportunity to intervene early, which can lower the rates of preterm birth, congenital anomalies, maternal deaths, and neonatal problems. A thorough PCC approach involves assessing risks related to age, fertility decline, extreme BMI, diabetes, high blood pressure, thyroid disorders, epilepsy, and mental health issues. Nutritional improvement is critical; folic acid supplementation (400–800 mcg/day) should start at least one month before conception to prevent neural tube defects. Furthermore, addressing iron and vitamin D deficiencies is vital in areas with high rates of anemia and deficiency. It is important to check immunization status and update vaccines for

rubella, varicella, hepatitis B, and HPV according to national schedules. Screening for STIs, including HIV and syphilis, is crucial, especially in regions with high prevalence rates. A review of medications is also necessary for teratogenic drugs like isotretinoin, valproate, and ACE inhibitors, which may need to be stopped or replaced. Genetic counseling and carrier screening for conditions like thalassemia, cystic fibrosis, and sickle cell disease should be provided when relevant, especially for consanguineous marriages or high-risk ethnic groups.

Mental health screening, often neglected, is critical; issues like depression, anxiety, intimate partner violence, and substance use must be handled with care and proper referrals. PCC should also include guidance on lifestyle choices like quitting smoking, moderate alcohol intake, physical activity, and reducing environmental risks.

The PCC represents a continuum of care throughout reproductive life span of couples. Adolescents, women struggling with infertility, those with past negative pregnancy experiences, and individuals planning assisted reproduction can all benefit from customized PCC. Digital health tools, community outreach, and connections with primary care can help broaden the reach of PCC. It is both a clinical necessity and public health issue. It gives women and couples the power to make informed choices and reduces preventable complications.

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MBBS, DNB
OPD Timings: 9:00am to 5:00pm



Dr. Vandana Bhatia

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Competition Papers

CP1

Rapid cycle improvement model as an effective quality tool for rationalizing oxytocin usage in third stage of labour

Divya Khurana, J.Anupama, Sanjana Narula Wadhwa
Satyawadi Raja Harishchandra Hospital, GNCT Delhi

Introduction: Oxytocin is an essential life-saving drug in labour room. While its excessive use may lead to maternal side effects, shortage of the drug due to irrational use can have significant impact on maternal outcome and logistics. This was noted in our peripheral hospital.

Objective: The aim was to decrease the overuse of oxytocin from the current 78-93% to 50% in 3 months and increase the use of 10 IU oxytocin for AMTSL only from 6-21% to 50% in the same time.

Methods: A Rapid Cycle Improvement (RCI) model using Plan-Do-Study-Act (PDSA) design was created after Root Cause Analysis to achieve this goal. Three PDSA cycles were created to run simultaneously. The process measures, outcome measures and balancing measures were defined to assess the success of the RCI model. The data was collected and cross-checked with records on a daily basis by a team defined at the beginning of the quality initiative.

Results: The objectives were achieved in 3 months and were sustained over the next 9 months with intense monitoring. Rate of PPH remained unchanged at <1% after the SMART objectives were attained.

Conclusions: RCI model is an effective quality tool to bring small-scale changes and sustain them. The cyclical nature of this tool reinforces the idea that improvement is an ongoing process rather than one-time event.

CP2

Antenatal estimation of placental weight and its relationship with adverse fetal outcome

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Lady Hardinge Medical College, New Delhi

The human placenta is a specialized structure supporting fetal growth and enables the fetus to adapt to the environmental changes in utero.

The objective of the study was to estimate placental weight (EPW) in third trimester using placental biometry measured by 2D ultrasound and to evaluate its role adverse materno-fetal outcome prediction. Ratio of birth weight to placental weight after delivery is an important index to identify fetuses at risk. A cross-sectional observational study was conducted on antenatal women, between 28 to 40 weeks, expected to deliver within 72 hours. Estimation of placental parameters and fetal weight before and after delivery of the baby were done by ultrasound. It was noted

that all placental dimensions increased significantly with the advancing gestation (p value <0.001), The mean actual birth weight/actual placenta weight ratio also increased from 4.32 ± 1.09 at 28-29th weeks to 5.17 ± 0.64 at 37-40 weeks.

We formulated method of calculating placenta weight in the antenatal period using regression analysis

Estimated (PA Weight) = $-580.187 + 9.509 \text{PALength} + 5.318 \text{PABreadth} + 15.512 \text{PATHickness} + 21.864 \text{POG}$

Excellent correlation was observed between estimated vs actual placental weight. To the best of our knowledge, this is the first study to estimate placental weight during the third-trimester of pregnancy. Placental weight estimation on ultrasound plays a role in the prediction of adverse pregnancy outcomes.

CP3

Accuracy of modified cardiovascular sequential organ failure assessment (m-cv sofa) score for predicting the duration of critical care unit stay in maternal sepsis

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Introduction: Maternal sepsis remains a major contributor to maternal morbidity and mortality. Existing prognostic tools like the Sequential Organ Failure Assessment (SOFA) score often underestimate cardiovascular dysfunction. The modified cardiovascular SOFA (m-CV SOFA) score incorporates lactate levels and norepinephrine equivalents to enhance early detection of hemodynamic instability.

Objective: To compare the accuracy of the m-CV SOFA score and SOFA in predicting prolonged critical care unit stay (>72 hours) in maternal sepsis.

Methods: This prospective observational study included 40 obstetric patients (pregnant, postpartum, or post-abortion) admitted with sepsis or septic shock. Both SOFA and m-CV SOFA scores were calculated at admission, day 3, and weekly until day 28. Diagnostic accuracy, sensitivity, specificity, and area under the curve (AUC) were assessed for predicting ICU stay >72 hours.

Results: The m-CV SOFA score showed a more graded cardiovascular dysfunction profile, with statistically significant differentiation on days 1 and 3 compared to the original SOFA. The AUC for m-CV SOFA was 0.82 versus 0.869 for SOFA. SOFA demonstrated higher diagnostic accuracy at a threshold of >3 compared to m-CV SOFA at >4 (65% vs. 57.5%). However, at similar thresholds, m-CV SOFA performed better (80% vs. 65% at score 3, and 57.5% vs. 47.5% at score 4). The cardiovascular component of m-CV SOFA alone showed superior predictive ability (AUC = 0.734 vs. 0.631).

Conclusion:

The m-CV SOFA score is a promising tool for early recognition of cardiovascular compromise in maternal sepsis and may enhance ICU decision-making.

CP4

Efficacy of an extended 10-day letrozole regimen compared to the 5-day regimen in enhancing ovulation in infertile women with polycystic ovary syndrome: a randomized controlled trial

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Introduction: Letrozole is the preferred first-line agent for ovulation induction in women with PCOS. However, the 5-day regimen may result in suboptimal response in some patients. Extending the duration of letrozole may enhance follicular development without increasing adverse events, though evidence remains limited.

Objective: To compare the efficacy of a 10-day extended letrozole regimen with the 5-day regimen for ovulation induction in infertile women with PCOS.

Materials and Methods: Design: Open-label, parallel, randomized controlled trial.

Setting: Tertiary care center in North India.

Patients: Eighty infertile women aged 21–38 years with PCOS (Rotterdam criteria, 2003), normal uterine cavity and tubal patency, and partners with normal semen analysis.

Intervention: Participants were randomized into two groups (n=40 each): one received letrozole 2.5 mg daily for 10 days (day 2–11), and the other for 5 days (day 2–6). Up to three ovulation induction cycles were permitted. Monitoring included transvaginal sonography from day 9, followed by hCG trigger when a dominant follicle (≥ 16 mm) developed, and timed intercourse after 24–36 hours.

Results: A total of 147 cycles were analyzed. The extended regimen resulted in significantly higher follicular response in the first cycle (85.0% vs. 52.5%, $p=0.002$). Fewer women required dose escalation (15.0% vs. 47.5%, $p=0.002$), and none required HMG (vs. 15.8%, $p=0.025$). Pregnancy rates per patient were similar (35.0% vs. 32.5%), with no cases of OHSS.

Conclusions: The extended 10-day letrozole regimen improves follicular response without added risk, offering an effective alternative for ovulation induction in women with PCOS.

CP5

Study of agreement between ultrasound girads classification for uterine cavity or endometrial lesions and histopathology in abnormal uterine bleeding

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Introduction: Accurate ultrasound assessment help differentiate benign and malignant endometrial lesions which help in early intervention and better management.

Objective: Agreement between traditional ultrasound-GIRADS(UT-GIRADS) classification for uterine cavity or endometrial lesions and histopathology in pre- and post-menopausal women presenting with abnormal uterine bleeding (AUB).

Method: Ninety females with AUB and post-menopausal bleeding(PMB) were recruited in study. USG was done based on International Endometrial Tumour Analysis(IETA) B, M and U signs, and findings further classified by traditional UT-GIRADS classification. Endometrial biopsy sent for histopathological evaluation classified as Benign and Malignant. Additionally, tumour biomarker HE4 was done in cases of endometrial cancer(EC).

Results: The features on USG like endometrial thickness, endometrial echogenicity, endometrial midline appearance, the endo-myometrial junction, intracavitary fluid, colour score and vascular pattern were predictors of malignancy. 1) In UT-GIRADS, if category 4a was taken as the cut-off for predicting malignancy, the sensitivity, specificity, PPV, NPV and diagnostic accuracy were 78.9%, 85.9%, 60.0%, 93.80% and 84.4%, respectively. If 4b was taken as cut-off, the sensitivity, specificity, PPV, NPV and diagnostic accuracy were 73.7%, 91.5%, 70.0%, 92.9% and 87.8% respectively. The area under ROC curve for GIRADS Weighted Score for predicting Malignancy was 0.858 (95% CI: 0.754 - 0.963), thus demonstrating good diagnostic performance. It was statistically significant ($p = <0.001$). Median of HE4 Value (ng/mL) in the malignant group was 167.55 (128.25-182.24).

Conclusions: The best cutoff value for predicting malignancy was GI-RADS 4b and in combination of tumour biomarker, HE4 could improve the diagnostic efficacy for preoperative EC assessment.

Grobman score for predicting successful trial of labor after cesarean in a north indian population

Nisha Chopra

Vmmc & Safdarjung Hospital

Introduction: Rising cesarean section rates emphasize the need to promote vaginal birth after cesarean (VBAC). The Grobman score estimates VBAC success but requires local validation.

Objective: To assess the applicability and predictive performance of the Grobman score for trial of labor after cesarean in a North Indian population.

Methods: In this prospective observational study at a tertiary hospital, 311 women (18–40 years) with one prior lower segment CS, singleton term pregnancy, and no contraindications to vaginal delivery were enrolled. The Grobman score was calculated antepartum or early intrapartum, and delivery outcomes recorded. Performance metrics (sensitivity, specificity, predictive values, accuracy) were determined, and maternal–neonatal outcomes compared between VBAC and repeat CS groups.

Results: VBAC success rate was 51.1% (n=159). Successful VBAC was associated with spontaneous labor (89.3% vs 67.1%, $p<0.001$) and prior VBAC history (51.6% vs 21.7%, $p<0.001$). Mean Grobman scores (antepartum, latent, active phases) were significantly higher in the VBAC group (all $p<0.001$). At a cutoff ≥ 75 , the score showed sensitivity 61.11%, specificity 86.54%, PPV 88.71%, NPV 56.25%, and accuracy 62.02%. VBAC was linked to reduced postpartum hemorrhage (3.1% vs 9.2%, $p=0.017$), blood transfusion (1.3% vs 5.9%, $p=0.023$), NICU admissions (13.8% vs 27.6%, $p=0.002$), and no stillbirths.

Conclusion: The Grobman score reliably predicts VBAC success in North Indian women. Higher scores, younger age, lower BMI, prior VBAC, and spontaneous labor favor success. Incorporating the score into practice can optimize counseling, reduce unnecessary repeat CS, and improve maternal–neonatal outcomes.

To evaluate the effect of ormeloxifene on unscheduled vaginal bleeding in women using lng-ius

Sushma Prasad Chourasiya

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Introduction: Abnormal uterine bleeding (AUB) affects up to one-third of reproductive-aged women. The levonorgestrel-releasing intrauterine system (LNG-IUS) reduces menstrual blood loss by ~97% at 12 months but is associated with early unscheduled bleeding in 25–62% of users, leading to discontinuation. Ormeloxifene, a selective estrogen receptor modulator effective in AUB, may reduce early bleeding and improve compliance.

Objective: To evaluate the efficacy of ormeloxifene in reducing unscheduled vaginal bleeding in LNG-IUS users.

Methods: In this randomized, non-blinded trial, women with AUB eligible for LNG-IUS insertion were randomized to Group A: LNG-IUS + ormeloxifene 60 mg twice weekly for 3 months, or Group B: LNG-IUS alone. Follow-up was monthly for 3 months, then at 6 and 12 months. Primary outcomes: unscheduled bleeding days and severity (five-point scale). Secondary outcomes: PBAC score, hemoglobin, satisfaction (VAS), side effects, LNG-IUS expulsion, and contraceptive failure.

Results: Baseline characteristics were comparable. At 3 months, more women in Group A reported no unscheduled bleeding (36% vs 13%, $p=0.040$). Median bleeding days decreased from 10→5 (Group A) and 9→5 (Group B) ($p=0.50$) and remained low through 12 months. PBAC scores and hemoglobin increased similarly in both groups. Satisfaction at 12 months was high (71% vs 81%, $p=0.979$). Expulsion occurred in 4% vs 4.2%; contraceptive failure in 0% vs 4.2%. Side-effect profiles were comparable; no serious adverse events occurred.

Conclusion: Ormeloxifene with LNG-IUS reduced early unscheduled bleeding but did not affect long-term bleeding control, hemoglobin rise, or satisfaction. Both regimens were effective, safe, and well tolerated.

Oral Presentation

OP1

Association of Placental Laterality with Uterine Artery Doppler Abnormality in the Development of Pre-eclampsia

Aachal Chandrakant Chaudhari, Prabhalal, Bhawna Satija
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Introduction: Pre-eclampsia is a major cause of maternal and fetal morbidity, linked to abnormal placentation and uteroplacental blood flow. lateral placentation and elevated uterine artery pulsatility index (PI) may predict its development, enabling early risk identification.

Aim and objectives:

Aim: To assess the association between placental laterality and uterine artery doppler abnormalities in pre-eclampsia development.

Objectives:

- To evaluate the link between lateral placentation, abnormal uterine artery mean PI, and pre-eclampsia.
- To assess associations with adverse fetomaternal outcomes, including APGAR scores and NICU admissions.

Materials and Methods: A prospective observational cohort study enrolled 120 normotensive women with singleton pregnancies and lateral placentation at 18-24 weeks gestation. uterine artery doppler measured mean PI; participants were followed until delivery. pre-eclampsia was diagnosed per acog criteria. statistical analysis used chi-square tests, logistic regression, and roc curves.

Results: 51.67% developed pre-eclampsia. high mean pi correlated with 85.25% pre-eclampsia incidence vs 16.95% in normal PI group ($p < 0.0001$). logistic regression showed 28-fold increased odds with high pi. roc analysis yielded AUC 0.91, sensitivity 85.2%, specificity 83.1%. neonates from pre-eclamptic mothers had lower APGAR scores and higher NICU admissions ($p < 0.05$).

Conclusion: Elevated uterine artery mean PI in lateral placentation strongly predicts pre-eclampsia. routine doppler screening in such cases can identify high-risk pregnancies, facilitating early intervention and improved outcomes.

OP2

Induction of labor in previous caesarean section

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Introduction: Trial of labour after caesarean section

(TOLAC) offers a viable option for elected women with a history of prior caesarean delivery, aiming to reduce the risks associated with multiple repeat caesarean sections (CS). In India rate of primary CS is 21.5%. Induction of labour after caesarean section (IOLAC) is of higher risk as compared to spontaneous labour.

Objective and methods: A prospective observational study was conducted in Lok Nayak Hospital, New Delhi between March 2023 and July 2025. Randomly selected 100 pregnant women who were assessed and willing for TOLAC were induced with PGE2 gel (50), Foley's catheter (46) or oxytocin (4) according to Bishop's score and indications.

Results: Among these, 34 women (34%) successfully delivered vaginally and the rest 66 (66%) had repeat caesarean section. It was also observed that higher rates of vaginal birth a caesarean (VBAC) are associated with augmentation of labour with rupture of membranes or oxytocin or both. Among IOLAC, single most common indication was post-dated pregnancy (40) which also showed the highest rate of success (40%). Interestingly only one woman of all (1%) had a uterine rupture which is the most dreaded complication while inducing labour in women with previous CS. Fortunately, no major maternal or foetal complications were reported.

Conclusion: VBAC is associated with better recovery, reduced morbidity and hospital stay. It also increases likelihood of future vaginal birth. Although there is risk of uterine scar rupture, careful and close monitoring possibly prevents adverse events or reduce fatal complications with timely intervention.

OP3

Effect of maternal obesity on the outcome of induction of labor

Lakshita Rajput, Reena yadav
LHMC

Objectives: Maternal obesity has been linked to increasing rise in obstetric procedures and problems. The primary objective of the study was to compare rate of failure of induction of labor in obese and nonobese pregnant women as per Indian consensus guidelines.

Methods: This is a prospective cohort study conducted in our institute during may 2023 to November 2024. All women as per inclusion criteria were included in the study and induced with intracervical foleys or cerviprime gel or in sequence & further augmented by oxytocin as per modified BISHOP score and parameters like failed induction of labor, cesarean section rate, mean oxytocin dose, method of induction, birthweight and APGAR score was noted.

Results: In this study, 60 obese & 60 nonobese women underwent induction of labor. Among non-obese mothers, 16.6% women (n=10) experienced IOL failure. In contrast,

among obese mothers, 26.6% women (n=16) had IOL failure. Failed IOL rate in obese and non obese women was found to be Statistically significant (Chi-square = 11.421, P = 0.050). Other parameters like the mean time after induction with oxytocin, cesarean rate, number of gel used, was significantly more for obese mothers.

Conclusion: Maternal obesity was found to be an independent risk factor for failed induction of labor. Thus, there is a need for new labor induction protocols and definition for failed induction of labor individualized to obese women.

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OP4

Psychological Morbidity and Quality of Life in Women with Gynaecological Cancers and Their Family Caregivers: An Observational prospective Study

Ananya Jha, Sharda Patra , Prerna kukreti
Lady Hardinge Medical College

Psychological Morbidity and Quality of Life in Women with Gynaecological Cancers and Their Family Caregivers: An Observational prospective Study

Background: Women with gynaecological cancers and their caregivers often face profound psychological distress. Understanding the prevalence of anxiety, depression, and quality of life impairments, along with associated sociodemographic factors is essential for comprehensive cancer care.

Methods: This hospital-based cross-sectional observational study was conducted among 60 women with gynaecological cancers and their 60 primary family caregivers. Psychological morbidity was assessed using the DASS score, while quality of life in patients was evaluated using the FACIT tool. Associations of age, parity, and socioeconomic status with psychological outcomes were analyzed using univariate analysis.

Results: Among patients, 81.7% had anxiety, with one-third exhibiting very severe anxiety. Depression was present in 65%, and 65% had comorbid anxiety and depression. Caregivers were also significantly affected, with 40% reporting anxiety and 25% depression; all caregivers with depression also had anxiety. Severe-to-very severe anxiety was noted in 21.6% of caregivers, and severe-to-very severe depression in 11.6%. Quality of life assessment showed highest scores in the physical wellbeing domain

(mean 18.1) and lowest in social wellbeing (mean 15.3). On univariate analysis, only lower socioeconomic status was strongly correlated with higher rates of anxiety and depression ($p < 0.001$).

Conclusion: Psychological morbidity is highly prevalent among women with gynaecological cancers and their caregivers, with socioeconomic disadvantage emerging as a key risk factor. Routine screening and targeted psychosocial interventions can improve mental health and quality of life.

OP5

Maternal outcome in obstetrics ICU:A retrospective study from a teaching hospital in north india

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Introduction: Obstetric population has versatile risk profile which keeps on changing throughout pregnancy and even postpartum. This makes the management quite challenging. Contributors of maternal mortality and morbidity in developing nations are considerably different than those in developed nations. This study aims to assess leading causes of maternal ICU admission and its outcome.

Methods: analysis of 76 obstetric patients admitted to the ICU during a period of 2 years from January 2023 to December 2024. Basic demographic details, underlying condition, time of presentation, outcome, risk factors and supportive care were analysed.

Result: ICU admission rate was 0.6% of all obstetric admissions and 0.8% of total deliveries. 51.3% of cases were referred from rural centers and constituted about 4.2% of all referred cases. Higher rate was seen in the age group 21-30 years (60.5%) and in primigravida (36.8%). Hemorrhage throughout pregnancy and post partum and hypertensive disorders remained main cause of admission. LSCS and salpingectomy for ectopic pregnancy were main surgical interventions performed in these patients. Need for ventilator and blood transfusion was needed in 28.9% and 56.6% of patients, respectively. Maternal deaths were noted in 6.6 % of the patients and were more common in postpartum patients. Sepsis, anemia and hypertensive disorders were observed as the main risk factors.

Conclusion: It was observed from this study that obstetric hemorrhage was leading cause of maternal ICU admissions as well as maternal mortality. Therefore, the need of the hour is to provide and reinforce maternal care services for high-risk groups.

OP6

Diagnostic Performance of the IOTA-SR x CA-125 Model in Predicting Ovarian Malignancy in Women Undergoing Surgery for Adnexal Masses

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Introduction: The preoperative differentiation of adnexal masses is crucial for appropriate patient management. To improve accuracy, International Ovarian Tumor Analysis (IOTA) group developed standardized models like the Simple Rules Risk (SRR) assessment.

Objective:

Primary :To evaluate the diagnostic performance of the IOTA SRR model combined with serum CA-125, stratified by menopausal status (SRR-CA125), in differentiating benign from malignant or borderline ovarian neoplasms preoperatively.

Secondary :To compare SRR-CA125 with SRR alone, analyze the incidence of different adnexal mass types, and assess model performance by menopausal status

Methods: This prospective observational study included 139 women scheduled for surgery for an adnexal mass over a two-year period. All patients underwent standardized transvaginal and/or transabdominal ultrasonography and serum CA-125 analysis. Malignancy risk for each mass was calculated using the IOTA SRR and the stratified SRR-CA125 models. The final histopathological diagnosis was the gold standard.

Results: The IOTA SRR model showed excellent performance with an AUROC of 0.953, sensitivity of 94.4%, and specificity of 83.5%. The SRR-CA125 model showed improved performance when stratified:

- Pre-menopausal women: AUROC 0.936, 95.2% sensitivity, 89.2% specificity.
- Post-menopausal women: AUROC 0.907, 76.2% sensitivity, 95.0% specificity.

Conclusions: Both the IOTA SRR and SRR-CA125 models are highly effective for the preoperative risk stratification of adnexal masses. The IOTA SRR model is an excellent and sensitive first-line test. The SRR-CA125 model significantly enhances specificity, reducing false-positive results.

OP7

Can urine replace the speculum? Exploring hpv dna detection

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Introduction: In recent years, HPV-based primary screening

has gained traction as a more sensitive alternative, with a sensitivity of 94.6% and a negative predictive value of 99.5%, making it a highly effective method for cervical cancer screening. Urine-based HPV DNA testing offers a non-invasive, accessible, and potentially acceptable approach. This study assesses the effectiveness of urine samples compared to cervical samples for HPV DNA detection.

AIM:To evaluate whether urine specimens offer comparable detection rates for high-risk HPV DNA as cervical samples and their utility in screening protocols.

Materials & Methods: This cross-sectional study at Sant Parmanand Hospital included 146 women aged ≥ 30 years undergoing HPV screening. Both midstream urine and clinician-collected cervical samples were tested for HPV DNA. Concordance was analyzed using Cohen's kappa, with significance at $p < 0.05$.

Results: Among 146 matched samples, 13 cervical samples (8.9%) tested positive for HPV DNA, of which 8 (61.5%) also demonstrated concordant HPV DNA positivity in corresponding urine samples. This was statistically significant ($p < 0.001$), with a kappa value of ~ 0.75 , indicating substantial agreement.

Conclusion: The high specificity (100%) and strong concordance suggest urine-based HPV DNA detection could serve as a reliable, non-invasive tool, especially where pelvic exams are not feasible. However, lower sensitivity limits its use as a standalone method in high-risk populations. Urine testing may be ideal for initial screening or self-sampling in low-resource settings.

OP8

HPV Prevalence and Cervical Lesions in Women Recruited from Community and ART Centers: A Cross-Sectional Study

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Background: Cervical cancer is the most common cancer among women in rural India. HIV-positive women face higher risk of persistent high-risk HPV infections and precancerous lesions, yet comparative data with the general population in India are scarce. This study evaluated HPV prevalence, genotype distribution, and biopsy-confirmed lesions among women from community settings and an ART centre.

Methods: A cross-sectional study enrolled 498 women—213 from the community and 285 from an ART

centre—at a tertiary care hospital. Physician-collected cervical samples were tested using the Cobas 4800 HPV platform. Socio-demographic and clinical data were extracted from medical records.

Results: Mean age was 40.5 years. Most were married (77.1%), rural residents (51.4%), and from upper middle-class households (62.4%). Only 5.6% had undergone prior screening; none were HPV-vaccinated. HPV positivity was significantly higher in ART participants (22.8%) than community women (7.0%) ($p < 0.001$). ART women had higher prevalence of HPV 16 (9.1% vs. 2.8%), HPV 18 (4.6% vs. 0.9%), and other HR types (16.1% vs. 3.8%); multiple infections occurred only in this group. Colposcopy was done in 9 community and 49 ART women; biopsies in 8 and 46, respectively. CIN3 was found in 4 ART and 1 community participant; CIN1 in 4 ART and 3 community women; squamous cell carcinoma in 1 ART case. Chronic cervicitis was more frequent in ART participants.

Conclusion: HIV-positive women had higher HPV prevalence, multiple high-risk infections, and more severe lesions, highlighting the need for targeted screening in HIV care and improved screening/vaccination in the general population.

OP9

Phenotypic and genotypic analysis of 5 fetal anomaly cases

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Objective: To present the prenatal sonographic features and genomic spectrum of pregnancies with fetal anomalies.

Methods: This was a retrospective study of 5 fetuses with fetal anomalies diagnosed by prenatal ultrasound and confirmed by genetic testing. Clinical and laboratory data were collected and reviewed for these cases.

Results: All cases had unremarkable first trimester scans without reporting any malformations. All had second/third trimester abnormal ultrasounds (Norrie's disease, bowel atresia, isolated polyhydramnios, bilateral club foot, stippling & premature ossification in long bones). Variants were detected in 5 genes. 3 were terminated while two continued to term.

Conclusion: Differentiation between soft markers and structural anomalies is important for counselling and to decide for place and mode of delivery.

OP10

Correlation of Cycle Threshold (Ct) Values with Histopathological Diagnosis in HPV-Positive Women: A Genotype-Specific Analysis

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Background: Cycle threshold (Ct) values from HPV DNA testing reflect viral load and may correlate with cervical lesion severity. This study evaluated the association between Ct values of high-risk HPV genotypes—HPV16, HPV18, and other high-risk types—and histopathological outcomes among HPV-positive women undergoing colposcopy.

Methods: A retrospective analysis was performed on 115 HPV-positive women. Genotype-specific Ct values were obtained from the Cobas 6800 platform. Histopathology was classified as normal, CIN1, CIN2, CIN3, or cancer. One-way ANOVA with effect size estimates (eta-squared, omega-squared) assessed Ct value variation across lesion grades for each genotype.

Results: For HPV16 ($n=30$), mean Ct values decreased with increasing lesion severity (Normal: 28.78; CIN2: 28.49; CIN3: 28.27; Cancer: 25.77). ANOVA showed a trend toward significance ($F=2.287$, $p=0.075$) with a moderate effect size ($\eta^2=0.172$), suggesting a possible inverse relationship between viral load and lesion grade. For HPV18 ($n=13$), ANOVA was not significant ($p=0.590$), and post-hoc analysis was limited by small group sizes. Although η^2 was 0.183, wide confidence intervals and negative ω^2 indicated low reliability. In other high-risk HPV types ($n=77$), no significant variation was found ($F=0.497$, $p=0.738$) and effect sizes were negligible ($\eta^2=0.027$), indicating minimal correlation.

Conclusion: Only HPV16 Ct values demonstrated a notable inverse trend with lesion severity, though not statistically significant. HPV18 and other high-risk genotypes showed no meaningful association. Larger, prospective studies are needed to validate the role of genotype-specific Ct values in predicting cervical lesion severity and guiding triage decisions.

OP11

A clinical study of feto-maternal outcome in pregnancies with abnormal amniotic fluid volume at a tertiary care centre

Somya Agrawal, Vinita Agarwal

Introduction: Amniotic fluid plays a crucial role in fetal development and serves as an important indicator of fetal well-being. Oligohydramnios, defined as an amniotic fluid index (AFI) ≤ 5 cm (≤ 5 th percentile), affects 3–5% of pregnancies. Polyhydramnios, defined as AFI ≥ 25 cm (≥ 95 th percentile), affects about 1% of pregnancies.

Objective: To evaluate whether assessment of amniotic fluid volume can help identify pregnancies at risk for adverse obstetric and perinatal outcomes.

Materials And Methods: This study included 78 singleton, non-anomalous, low-risk pregnancies with AFI ≤ 5 cm (oligohydramnios) and ≥ 25 cm (polyhydramnios), between 28 weeks and term, with intact membranes. AFI was measured using Phelan's four-quadrant technique. An AFI of 5–24 cm was considered normal.

Results: Among the 78 oligohydramnios cases, 52.56% had vaginal delivery, 11.54% underwent elective LSCS, and 33.33% had emergency LSCS. In the polyhydramnios group (17 cases), 58.82% had vaginal delivery, 23.53% had elective LSCS, and 11.76% underwent emergency LSCS. Meconium-stained liquor was noted in 17.95% (oligohydramnios) and 23.53% (polyhydramnios). In oligohydramnios, 6.41% had an APGAR < 7 at 5 minutes, 19.23% had birth weight < 2.5 kg, and 6.41% required NICU admission. For polyhydramnios, 5.88% had APGAR < 7 at 5 minutes, 29.41% were < 2.5 kg, and 5.88% required NICU admission.

Conclusion: This study assessed feto-maternal outcomes in pregnancies with abnormal amniotic fluid volumes. When closely monitored in a tertiary care setting, both isolated oligohydramnios and polyhydramnios were not associated with significant adverse maternal or perinatal outcomes.

OP12

Double the Anatomy, Single the Pathology: Unilateral Diffuse Adenomyosis in a Uterine Didelphys

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Background: Uterine didelphys is a rare mullerian anomaly which is characterized by complete duplication of uterine cavities due to failure of fusion of Mullerian ducts embryologically. Adenomyosis in Mullerian anomalies is rarely reported. Here, we present surgical management of diffuse adenomyosis of one-sided uterus in a bicornuate uterus.

Case Report: A 31-year-old unmarried girl presented

with progressively worsening dysmenorrhea and heavy menstrual bleeding for last four years. Initially, the pain was relieved on oral analgesics but over the last six months, she required injectable drugs and blood transfusion for symptomatic relief. Pelvic ultrasonography revealed two uterine cavities with normal right horn and bulky left horn. MRI pelvis showed uterine bicornuate bicollis with normal right hemi-uterus and diffuse adenomyosis of left hemi-uterus along with longitudinal vaginal septum. Initially she opted for medical therapy with Dienogest 2 mg/day for 3 months but with partial relief of symptoms. After thorough counselling and detailed discussion regarding options, she underwent hysteroscopic vaginal septum excision and laparoscopic left supracervical hemihysterectomy. Post-operative recovery was smooth and she was discharged on day 3. Final histology confirmed a diagnosis of diffuse adenomyosis. She remains symptom-free at six months follow-up.

Discussion: This case highlights the importance of MRI in complex mullerian anomalies with atypical symptoms for surgical planning. Laparoscopic hemihysterectomy combined with hysteroscopic septum excision offers an effective, fertility-sparing, minimally invasive approach in such cases. Removal of one affected hemi-uterus needs careful steps to preserve the future reproductive potential.

OP13

Comparative study of hysteroscopic management versus blind dilatation and curettage in women with retained products of conception following first trimester abortion

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Introduction: Retained products of conception (RPOCs) complicate 1–5% of pregnancies and may lead to bleeding, infection, and intrauterine adhesions with adverse reproductive outcomes. Traditionally managed with blind dilatation and curettage (D&C), the procedure carries risks of incomplete evacuation and trauma. Hysteroscopic removal, by allowing direct visualization, offers safer and more precise treatment.

Objective: To compare the efficacy and safety of hysteroscopic removal versus blind D&C for the management of RPOCs following first-trimester abortions.

Methods: This open-label randomized controlled trial was conducted at Lady Hardinge Medical College between April 2024 and August 2025. Sixty women with RPOCs after first-trimester abortion were randomized into two groups: hysteroscopy (study group) and blind D&C (control group). Post-procedure follow-up at 48 hours included transvaginal ultrasound for assessment of residual RPOCs, complete blood count for hemoglobin changes, and evaluation for

complications such as fever, abdominal pain, foul-smelling discharge, or heavy bleeding.

Results: Baseline characteristics were comparable between groups. Complete evacuation rates were significantly higher in the hysteroscopy group compared to D&C (93.3% vs 53.3%; $p < 0.001$). Hemoglobin fall (>1 g/dl) occurred less frequently with hysteroscopy (3.3% vs 33.3%; $p = 0.003$). No immediate postoperative complications were observed in either group at 48 hours.

Conclusions: The findings indicate that hysteroscopic management provides a significantly higher rate of complete evacuation with no effect on patients well being and hemoglobin status. However, there is a need for more robust RCTs with larger sample size before hysteroscopy can be recommended as standard of care for women with RPOCs.

OP14

Clinical profile, risk determinants and outcomes of abruptio placentae in a tertiary care hospital in north India: a retrospective observational study

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Introduction: Placental abruption is a significant contributor to antepartum hemorrhage (APH), accounting for 20–25% of cases and complicating 0.4–1% of pregnancies. It is associated with poor maternal and fetal outcomes, including preterm birth, intrauterine fetal demise, and postpartum complications. Despite its clinical importance, there is limited data from Indian settings.

Aims and Objectives:

- To determine the incidence and prevalence of abruptio placentae and evaluate feto-maternal outcome.
- To contribute evidence for improving clinical management and perinatal care

Methods: This retrospective observational study included all pregnant women >28 weeks of gestation admitted with APH from [insert study period]. Data on demographics, clinical presentation, risk factors, delivery mode, and outcomes were collected and analyzed.

Results: Among 5,450 deliveries, 70 cases of abruption were identified (prevalence: 1.28%). Abruption was revealed in 64% and concealed in 36%. Common risk factors were preeclampsia/eclampsia (31.4%), diabetes (17.2%), PROM (17.1%), and previous cesarean (15.7%). Cesarean section was performed in 80%. Maternal complications included preterm delivery (54.2%), transfusion (47.1%), PPH (12.8%), DIC (5.7%), ICU admission (5.7%), with no maternal deaths. Fetal complications included low birth weight (71.4%),

fetal distress (40%), NICU admission (31.4%), IUD (17.1%), and stillbirth (2.8%).

Conclusion: Placental abruption remains unpredictable. Early recognition and well-equipped obstetric-neonatal care are essential to improve outcomes.

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OP15

Routine haematological parameters and HbA1c as a tool for prediction of Gestational Diabetes Mellitus : A Combined Biomarker Approach

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Introduction: Gestational Diabetes Mellitus is a leading cause of maternal and neonatal morbidity and mortality worldwide. Early detection and management of GDM is crucial to prevent complications especially in the developing countries where the diabetic epidemic is on rise. This study aimed to determine the diagnostic accuracy of routinely available haematological parameters and HbA1c as early predictors of GDM.

Objective: To determine the predictive value of haematological parameters (Haemoglobin, Haematocrit, RBC count) and glycosylated haemoglobin for GDM.

Methods: In this prospective cohort study data from 584 antenatal women was analysed to determine the predictive value of hemoglobin, haematocrit, RBC count and HbA1c in first and early second trimester for development of GDM using longitudinal multivariate approach. We used the DIPSI criteria for diagnosis of GDM at 24-28 weeks & 32-34 weeks.

Results : Among the sample, 64 women (11%) were diagnosed with GDM. In the first and early second trimester, the values of diagnostic markers including Hb, Hct, RBC count and HbA1c were significantly higher in the GDM group as compared to the non GDM group ($p < 0.001$). The combined accuracy of multiple biomarkers resulted in a sensitivity, specificity and AUC of 89.1 %, 78.3%, 89.5% respectively, for early prediction of GDM .

Conclusions: Our study showed that simultaneous use of routine hematological parameters like Hb, Hct, RBC count combined with HbA1c in first and early second trimester might be used as an acceptable tool for early prediction of GDM.

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OP16

Prediction of spontaneous preterm birth in women by transvaginal sonographic measurement of cervical length between 18 to 24 weeks of gestation

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Objective: To generate cutoff for cervical length to predict preterm birth (less than 34 weeks) in study population. The secondary objective was to compare the rate of preterm birth (less than 34 weeks) in women with cervical <25 mm and >25 mm at 18-24 weeks of gestation.

Material and Methods: This prospective interventional study included 145 pregnant women with singleton pregnancy. The exclusion criteria was previous history of preterm vaginal delivery, cervical surgery, uterine structural anomaly, fetal congenital malformations, placenta previa in present pregnancy. Cervical length was measured via TVS at 18–24 weeks as per ISUOG guidelines; delivery and neonatal outcomes were recorded.

Results: The mean cervical length was 33.64±5.96 mm, with 9.7% women having cervical length <25 mm. Women delivering <37 and <34 weeks had mean cervical lengths of 30.05±5.96 mm and 27.76±5.96 mm, respectively. Preterm birth <34 weeks occurred in 21.4%. 92.86% of women with cervical length <25 mm delivered before 34 weeks and 13.7% with cervical length ≥25 mm before 34 weeks. The estimated cutoff of 27.2 mm predicted <34-week delivery ($p < 0.001$; sensitivity 60%, specificity 96.5%, PPV 81.8%, NPV 90.2%).

Conclusions: The study estimated cutoffs of 27.2 mm for spontaneous preterm birth less than 34 weeks highlighting the need for population based cutoff generation. These findings also reinforce the utility of mid-trimester transvaginal ultrasonographic cervical length screening for predicting preterm birth, indicating its potential for early detection, risk stratification and guiding timely interventions for improved maternal and neonatal outcomes.

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OP17

Correlation of Respiratory Adjusted Shock Index with lactate levels in women with obstetric infection

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Introduction: Sepsis is defined as a life threatening organ dysfunction caused by dysregulated host response to infection. It is essential to differentiate sepsis from an uncomplicated infection because it is associated with poor outcomes and early recognition is required. Respiratory adjusted shock index integrates the use of respiratory rate along with other markers of acute physiological stress assessed in shock index and has been found to successfully identify occult sepsis in trauma patients. Serum lactate levels are found to be raised in sepsis and are considered as sensitive marker for septic shock.

Objective: To determine the correlation between rasi and lactate levels in women with obstetric infection.

Method: A prospective observational cohort study was conducted in women with suspected obstetric infection. Rasi was calculated at admission and lactate levels were obtained from sample. Primary objective was to correlate rasi with lactate levels. Participants were then followed till 72 hours to evaluate for development of sepsis. These patients were followed till discharge for the final outcome and length of hospital stay.

Result: Spearman correlation showed a moderate positive correlation between lactate levels (mmol/L) and rasi, and this correlation was statistically significant ($\rho = 0.33$, $p = < 0.001$).

Conclusion: Rasi may have utility as a bedside tool for predicting maternal outcome and can be used as a surrogate for lactate levels.

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OP18

Menstrual pattern changes in females using subdermal implants and DMPA injection in reproductive age females: A randomized control trial

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Introduction: Subdermal implants and DMPA are

progesterone based long-acting method of contraception. Implants are currently provided in contraceptive basket free of cost by GOI since May 2023. As they are highly effective and acceptable, helps provide women with satisfying method of family planning.

Objective: : To compare menstrual pattern changes, effectiveness, satisfaction, and continuation rates among females using subdermal implants versus DMPA injections

Material And Methods: The study was conducted in Family planning OPD, Lady Hardinge Medical College: Ninety reproductive-age women opting for progesterone-based LARC were randomized into two arms: Arm A (n=45) received implants, Arm B (n=45) received 3-monthly DMPA injections. Followed up at 3 months. Menstrual patterns, side effects, acceptability, and continuation rate and failure rate were recorded and analysed using SPSS v23.

Results: Overall, 84.4% of implant users and 71.1% of DMPA users experienced menstrual changes. Amenorrhea occurred in 31.1% of implant and 26.6% of DMPA users. Spotting was seen in 20% of implant and 33.3% of DMPA users. Heavy menstrual bleeding was reported by 4.4% of implant and 2.2% of DMPA users. Two implant users discontinued due to menstrual changes or partner loss. No pregnancies were reported.

Conclusion: This study concludes that females do experience menstrual pattern changes with both these progesterone-based LARCs as a major side effect, but these are safer methods of LARC with good acceptance. So, patients must be made aware of these methods for larger benefits to bridge gap of unmet contraceptive demands.

OP19

Novel 1 day bladder diary compared to 3 days bladder diary for evaluation of females with lower urinary tract symptoms

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Introduction: Bladder diary includes volume and time of each micturition, fluid intake, pad usage and incontinence episodes. Minimum 3 days bladder diary (3dBD) is recommended for evaluation of females with lower urinary tract symptoms (LUTS). Completing 3 days of bladder diary maybe cumbersome.

Objective: To compare the reliability of 1 day bladder diary (1dBD) to 3 days bladder diary (3dBD) in evaluation of females with LUTS.

Materials and Methods: It was an observational study conducted over 3 months period. 100 females with LUTS were included. In 1st week, they were asked to fill the diary for 3 days, consecutive or non-consecutive. In 2nd week, they were asked to fill the diary on any one day and were

called for review with the diaries to OPD after 2 weeks.

Results: 100 women were included. Average age of participants was 43.45 ± 15.33 years..

Mean of various parameters in 3dBD and 1dBD were calculated.

Interclass correlation coefficient (ICC) was calculated to evaluate the agreement between different parameters in 3dBD and 1dBD, with value >0.7 suggestive of good concordance. Total voids, nocturia episodes, average voided volume, maximum voided volume, total intake of liquids, episodes of severe urgency, leaks with urge and leak with activities all showed excellent concordance with ICC being 0.95, 0.87, 0.96, 0.86, 0.97, 0.98, 0.99, 0.98 respectively.

Conclusion: 1dBD may also be adequate in initial evaluation of LUTS.

OP20

Comparison of efficacy of clomiphene citrate and tamoxifen in women with unexplained infertility: RCT

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LHMC

Background: Unexplained infertility contributes to 10–30% of infertility cases. Oral ovulogens, including clomiphene citrate (CC) and tamoxifen, are commonly used for controlled ovarian stimulation (COS). CC may adversely affect the endometrium, while tamoxifen preserves receptivity.

Objective: To compare the efficacy and safety of CC versus tamoxifen for COS with intrauterine insemination (IUI) in unexplained infertility.

Methods: In this randomized controlled trial at Lady Hardinge Medical College (May 2024–April 2025), 60 women with unexplained infertility were randomized to CC (50–100 mg/day) or tamoxifen (20–40 mg/day) from day 2–6 for three cycles. Outcomes included number of dominant follicles (primary), endometrial thickness, Doppler indices, ovulation, pregnancy rates, luteal progesterone, and adverse effects.

Results: Baseline demographics were comparable. Across 180 cycles, mean dominant follicles were similar (CC: 1.07 ± 1.03 vs tamoxifen: 1.04 ± 1.11 ; $p=0.698$). Ovulation rates (54.4% vs 53.3%; $p=0.881$) and cumulative pregnancy rates (26.7% vs 16.7%; $p=0.532$) were comparable. Tamoxifen yielded greater endometrial thickness (9.53 ± 1.68 mm vs 7.97 ± 1.60 mm; $p<0.001$). CC showed a non-significant trend toward higher luteal progesterone (9.96 ± 6.77 vs 6.61 ± 6.28 ng/mL; $p=0.055$). No ovarian hyperstimulation occurred; adverse events were minor.

Conclusion: CC and tamoxifen showed similar efficacy for

follicular recruitment, ovulation, and pregnancy. Tamoxifen improved endometrial thickness, while CC tended toward stronger luteal support. Both were safe, affordable, and suitable as first-line COS agents in resource-limited settings.

Keywords: unexplained infertility, clomiphene citrate, tamoxifen, controlled ovarian stimulation, intrauterine insemination.

OP21

Incidence of Preterm Birth and Preterm Labour in IVF Pregnancies: Impact of Extended Progesterone Support at a Tertiary Centre in India

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Introduction: Preterm birth remains a leading cause of neonatal morbidity and mortality. Assisted reproductive technology (ART) pregnancies are associated with higher risk compared to spontaneous conceptions. Limited data is available regarding potential benefit of extended progesterone support, which our study aims to exploit.

Objectives: To find out the incidence of preterm labour and preterm birth in IVF conceived pregnancies at St. Stephen's hospital, and find out the role of extended progesterone support till 28 weeks in reducing the incidence of preterm labour.

Materials and method: In this retrospective observational study, 69 IVF conceived pregnancies at our hospital from 1st January 2020 to 31st December 2024 were analysed. 1st trimester abortions and ectopic pregnancies were excluded. Gestational age at onset of labour, whether labour was spontaneous or induced, and the outcome of delivery were recorded. Data analysed retrospectively and was compared with similar studies

Results: 60 pregnancies (87.6%) resulted in term deliveries and 9 (13.4%) in preterm births. The majority were singleton pregnancies (87%). Only one case of spontaneous preterm labour was noted, despite the known risk in IVF cohorts. Other causes were fetal growth restriction and preeclampsia.

Conclusion: The incidence of preterm birth in our IVF cohort (13.0%) was significantly lower than that reported in few other studies (15.5% to 50%) This could indicate possible role of extended progesterone support until 28 weeks in lowering the risk of preterm labour. Tailored luteal support and close antenatal monitoring can help in improving outcomes for IVF pregnancies.

OP22

HIV in pregnancy: A 5 year retrospective study in a tertiary care hospital in kathua

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Introduction: The HIV infection burden is increasing day by day, especially in women of reproductive age groups. This subgroup of people is the potential candidates for whom effective ART in pregnancy can prevent mother-to-child transmission and decrease the new cases of neonatal HIV infection. This study aims to observe the incidence of HIV infection in pregnancy and its effect on maternal and fetal outcomes.

Methods: This is a retrospective case record analysis of 31 HIV-positive pregnant patients during a period of five years from 2019 to 2024 in the Govt. Medical College, Kathua.

Results: 31 patients were included in the study, and the incidence was 0.14%. The mean age of patients was 25.06 years, and 45.1% of patients were aged 26-30 years. The majority of patients had at least primary school education (67.7%), while serodiscordance was seen in 25.8% of couples. About 58.1% of patients were new cases detected during pregnancy, with the highest detection rate in the third trimester (29%). Primigravida was more common (48.4%) in the study. LSCS rate was about 55%. Preterm birth and low birth weight were seen in 3.2% and 25.5% of the babies. Neonatal mortality was 6.8%. No case of mother-to-child transmission was noted.

Conclusion: HIV infection had adverse effects on pregnant women in terms of low-birth-weight newborns, prematurity, and neonatal deaths. All these contribute to neonatal morbidity, which predisposes to increased chances of mother-to-child transmission.

OP23

Adjunctive Azithromycin vs Standard Prophylaxis for Reducing Surgical Site Infections in Caesarean Deliveries: A Randomized Controlled Trial

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Introduction: Surgical site infections (SSIs) remain a significant cause of morbidity following caesarean delivery (CD). Extended-spectrum antibiotic prophylaxis, including azithromycin, has been proposed to reduce postoperative infections.

Objective: To assess whether supplementing standard single-dose perioperative cephalosporin prophylaxis with a single dose of intravenous azithromycin reduces the

incidence of SSIs in women undergoing CD.

Method: A total of 290 women undergoing CD were randomized into two groups. The intervention group (Group A) received 500 mg intravenous azithromycin along with 1 g cefotaxime; the control group (Group B) received 1 g cefotaxime alone. The primary outcome was the incidence of SSIs. Secondary outcomes included postpartum endometritis, maternal readmissions, additional antibiotic use, and sepsis-related NICU admissions. Subgroup analyses were performed for elective versus emergency caesareans and for women in labour versus not in labour.

Results: The overall SSI incidence was 10.9%, with 8.7% in Group A and 13.1% in Group B ($p = 0.24$). Secondary outcomes were not significantly different: endometritis ($p = 0.557$), readmissions ($p = 0.51$), additional antibiotic use ($p = 0.200$), and NICU admission for sepsis ($p = 0.994$). Subgroup analysis showed non-significant reductions in SSI with adjunctive azithromycin in both emergency (9.45% vs. 12.64%, $p = 0.697$) and elective caesareans (7.14% vs. 11.8%, $p = 0.624$), as well as in pre-labour (7.61% vs. 12.36%, $p = 0.413$) and labour subgroups (9.62% vs. 12.28%, $p = 0.891$).

Conclusion: Adjunctive azithromycin modestly reduced SSIs, though not significantly, across all subgroups. Larger-scale studies in the Indian context are warranted to confirm efficacy.

OP24

Successful Management of Cesarean Scar Ectopic pregnancy using combined systemic and surgically administered Methotrexate

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Background: Cesarean scar ectopic pregnancy (CSEP) is a rare but serious condition, with current guidelines recommending surgical options or medically intragastrational methotrexate, alone or in combination. The supporting evidence is limited, as only a small number of cases have been reported using combined intragastrational and systemic methotrexate, highlighting the need for systematic case documentation to establish its safety and effectiveness.

Objective: To assess the effectiveness of intragastrational methotrexate with/without KCl instillation, along with systemic methotrexate administration, in the management of CSEP.

Methodology: A five-year retrospective review conducted at a tertiary referral center.

Results: Among the ten reported CSEP cases, patient ages ranged from 24 to 42 years, with majority having a history of one or two prior cesarean sections. The predominant

presenting symptom was vaginal bleeding (80%), occasionally accompanied by pain. Gestational age at diagnosis varied between 5–11 weeks, with β -hCG levels 4,800 - 117,000 IU/L, and imaging revealed both endophytic and exophytic types. Management included intragastrational methotrexate with/without KCl instillation if fetal cardiac activity was present. The time to β -hCG resolution ranged from 3 to 29 weeks. Two women opted for surgical management as they declined regular follow-up.

Conclusion: With the increasing rate of cesarean deliveries, CSEP is a significant clinical challenge, necessitating individualized management based on both patient-specific factors and surgical expertise. Considering its safety, technical simplicity, avoidance of anesthesia and major operative procedures, feasibility for outpatient follow-up, and potential benefits for future fertility, medical management can be considered the first-line approach in hemodynamically stable patients who are compliant with follow-up.

OP25

Echoes of Discomfort: A Study of Morphological Ultrasonographic Assessment (MUSA) features and Quality of Life in Adenomyosis

Shivangi Singh, Juhi Bharti, Neena Malhotra,
K Aparna Sharma

Introduction: Adenomyosis is defined as a benign uterine pathology in which there is presence of endometrium glands and stroma in the myometrium. A classical histological definition of adenomyosis is the invasion of endometrial glands and/or stroma into the myometrium, extending more than 2.5 mm beyond the endometrial-myometrial junction, along with the increased growth of adjacent smooth muscle. Clinically, adenomyosis presents with a spectrum of symptoms including dysmenorrhea, heavy menstrual bleeding, dyspareunia, chronic pelvic pain, and subfertility, imposing a substantial burden on physical, emotional, and social well-being, adversely affecting quality of life (QoL). Despite increasing recognition of adenomyosis as a distinct clinical entity, the relationship between its imaging characteristics and the extent of patient-reported QoL impairment remains underexplored.

Aim: To assess the association of MUSA features with Quality of Life (QoL) (Questionnaire based).

Objectives: To correlate type of MUSA feature, number of features, site and extent of adenomyosis with quality of life.

Materials and methods: This prospective observational study was conducted at AIIMS, New Delhi (Aug 2023–May 2025), including 107 women diagnosed with adenomyosis based on MUSA criteria. A standardized 28-item, expert-

validated Quality of Life (QoL) questionnaire was developed and administered. Correlations between ultrasound features and QoL were analyzed using appropriate statistical methods, including Spearman's correlation, Mann-Whitney U, Chi-square, and Fisher's exact tests, with significance set at $p < 0.05$.

Result: Greater number, type, and extent of MUSA features—especially myometrial cysts, subendometrial buds, and JZ abnormalities—were significantly associated with poorer QoL scores; lesion location showed no significant correlation.

Conclusion: Higher MUSA feature burden significantly worsens patient quality of life.

OP26

Oral versus Intramuscular Vitamin B12 Therapy in Pregnant Women with anaemia with B12-Deficiency: A Randomized Controlled Trial

Anjali Yadav, Soniya Dhiman, K. Aparna Sharma, Vidushi Kulshrestha, Richa Vatsa, Neena Malhotra

Introduction: Intramuscular (IM) vitamin B12 is the standard treatment for Vitamin B12 deficiency. It may cause discomfort and reduce compliance. Evidence suggests oral supplementation could be equally effective. Present study compares the efficacy of oral versus IM vitamin B12 therapy in pregnant women anaemia with B12 deficiency.

Materials and Methods: Pregnant women aged ≥ 18 years, with gestational age < 32 weeks and diagnosed with anaemia with vitamin B12 deficiency (haemoglobin < 11 g/dL, serum vitamin B12 < 200 pg/mL), were recruited following written informed consent. Participants were randomized into two treatment arms: Group A received oral methylcobalamin 1500 μ g daily for 4 weeks (Tab ME12), and Group B received IM methylcobalamin 1000 μ g (Injection Vitcofol) on alternate days for 7 doses.

Results: Results: Of the 70 antenatal women screened, 67 were enrolled and randomized to oral (Group A, $n=35$) or IM (Group B, $n=32$). Baseline characteristics were comparable between groups. Correction of vitamin B12 deficiency (> 200 pg/mL) was achieved in 93.75% (Group A) and 93.33% (Group B) ($p=1.000$). The mean increase in serum vitamin B12 was greater in Group B (300.13 ± 161.05 pg/mL) than Group A (184.87 ± 119.00 pg/mL, $p=0.002$). Adherence was 100% in both groups. Oral therapy was preferred by all in Group A and 90% in Group B. Adverse events occurred in 3.12% (Group A) and 16.67% (Group B).

Conclusion: Oral methylcobalamin was as effective as intramuscular cyanocobalamin in correcting vitamin B12 deficiency in pregnant women with anaemia, with comparable haemoglobin improvement, excellent adherence, and higher patient preference.

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OP27

Pelvic floor function assessment in menopausal women using Trans perineal Ultrasonography

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Introduction: Pelvic floor disorders affect one in three to four women. The prevalence of any UI specifically ranges from 25% to 45%. In developing countries like India, these disorders are often under reported. This is largely due to social taboos and a general reluctance among women to discuss such intimate health issues, meaning a patient's self-reported history may not accurately reflect the true severity of their condition.

Objective: To assess the pelvic floor function by transperineal ultrasonography (TPUS) and comparison with pelvic impact questionnaire-7.

Methods: This study recruited 100 postmenopausal women, dividing them into symptomatic and asymptomatic groups based on the presence of pelvic floor disorders. All participants completed the Pelvic Floor Impact Questionnaire-7 and underwent TPUS to measure alpha and beta angles at rest and during the Valsalva maneuver. The findings from the questionnaire and the ultrasound were then compared.

Results: Our findings indicate a significant difference in alpha and beta angles (at rest and with Valsalva) between the asymptomatic and symptomatic groups ($p < 0.05$). Interestingly, we found no correlation between these ultrasound measurements and the PFIQ-7 questionnaire scores in either group of patients ($p > 0.05$).

Conclusion: Given that the angles measured by TPUS showed a strong correlation with the symptomatic status of the controls, these findings suggest that TPUS provides a more direct assessment of pelvic floor function compared to the questionnaires.

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OP28

Healing the Scar: Fertility Restoration Post Isthmocele Repair

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Objective: Isthmocele, a caesarean scar defect, is an under-recognized cause of abnormal uterine bleeding, pelvic pain, and infertility. We present six cases of symptomatic isthmocele managed laparoscopically, with emphasis on clinical outcomes, myometrial healing, and fertility restoration.

Design: Case series of six women with symptomatic isthmocele undergoing hysteroscopy-guided laparoscopic repair and pregnancy outcome.

Materials and Methods: Six women aged 29–35 years, each with a history of one caesarean section, presented with prolonged post-menstrual spotting. One had a prior failed laparoscopic repair. Transvaginal ultrasound and MRI confirmed defects extending to the serosa with residual myometrial thickness <3 mm. All underwent hysteroscopy-guided laparoscopic isthmocele repair, with Foley catheter drainage for 48 hours.

Results: Surgery was successful in all cases with uneventful recovery. Four patients experienced >90% resolution of bleeding symptoms after their first menstrual cycle. Follow-up TVS at 2 months demonstrated complete restoration of the myometrium with residual thickness >6 mm. Remarkably, two women conceived spontaneously post-repair—one currently in the second trimester and the other in the first trimester—underscoring the fertility-restoring potential of this technique.

Conclusion: Isthmocele is an important but often overlooked sequela of caesarean delivery, carrying significant menstrual and reproductive consequences. Laparoscopic repair offers a definitive, fertility-preserving solution with excellent symptomatic relief and promising reproductive outcomes. These results highlight the need for greater awareness, standardized imaging-based diagnostic criteria, and wider adoption of minimally invasive surgical repair in women with isthmocele.

OP29

Not Just Cholestasis: Lessons from Four Unusual Cases of Jaundice in Pregnancy

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Introduction: Jaundice in pregnancy, can result from conditions both pregnancy-specific and unrelated to pregnancy. This case series aims to describe the clinical features, investigations, management, and outcomes in four pregnant women presenting with jaundice at a tertiary care centre.

Case Series: We report four pregnant women who presented with jaundice and were subsequently diagnosed with rare and serious underlying conditions. 1: A 22 year primigravida at 16 weeks presented with hyperbilirubinemia. Evaluation revealed unresectable cholangiocarcinoma originating from the gallbladder. Counselling, medical termination of pregnancy was performed, and the patient was initiated on systemic chemotherapy. 2: A 28 year primigravida at 33 weeks presented with hyperbilirubinemia, severe fetal growth restriction, and oligohydramnios. Further work-up revealed unresectable gallbladder carcinoma. She underwent preterm vaginal delivery, baby admitted in NICU, diagnosed with Escobar syndrome. Patient planned for palliative chemotherapy. 3: A 25 year primigravida at 34 weeks with a diamniotic dichorionic twin pregnancy presented with hyperbilirubinemia. She was diagnosed with autoimmune hepatitis type 1. Due to deteriorating maternal condition, an emergency preterm caesarean section was performed. She is planned for liver biopsy and further hepatological management. 4: A 25 year primigravida at 14 weeks presented with hyperbilirubinemia. Despite extensive evaluation, no definitive diagnosis has been reached. She remains under close monitoring with ongoing pregnancy and ongoing diagnostic work-up. Two malignancies in this series represent exceptional antenatal findings with significant implications for maternal and fetal survival.

Conclusion: This cluster of rare pathologies emphasizes the need to look beyond pregnancy-specific causes when routine workup is inconclusive.

OP30

Effect of video-based counselling on pre-procedural anxiety in women undergoing colposcopy

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Introduction: Colposcopy is an essential diagnostic procedure often associated with considerable anxiety in women. This anxiety may reduce pain tolerance, procedural compliance, and future health-seeking behaviour. Interventions like video-based counselling offer a potential low-cost solution.

Objective: To compare the effectiveness of video-based counselling versus standard verbal counselling in reducing pre-procedural anxiety among women undergoing colposcopy.

Methods: This hospital-based quasi-experimental study was conducted at Lady Hardinge Medical College from May 2023 to October 2024. A total of 84 women undergoing first-time colposcopy were recruited and randomly assigned to

either video-based or verbal counselling groups. Anxiety was assessed using the hindi version of the Amsterdam Preoperative Anxiety And Information Scale (APAIS) before and after counselling. Additional parameters included blood pressure, heart rate, VAS pain score, and PEACE-q for patient satisfaction.

Results: Baseline demographic characteristics were comparable between groups. Post-counselling APAIS scores were significantly lower in the video group (mean: 8.79 ± 3.94) compared to the control group (mean: 11.52 ± 4.20) with $p < 0.001$. A weak but positive correlation was observed between anxiety reduction and patient satisfaction. No significant differences were observed in post-procedural pain or vital parameters.

Conclusions: Video-based counselling significantly reduces pre-procedural anxiety in women undergoing colposcopy. Although it does not directly affect post-procedure pain or satisfaction scores, greater anxiety reduction correlates with improved patient satisfaction. This method is feasible, effective, and can be integrated into routine colposcopy practice.

OP31

Beta Thalassemia and Pregnancy: Insights from a Case Series

Shagun, Anupama, Swati Tomar, K Aparna Sharma, Reeta Mahey

Introduction: Beta thalassemia intermedia is a rare hemoglobinopathy associated with anaemia, transfusion dependence, iron overload, and alloimmunization. Pregnancy compounds these risks, and rare complications such as hyperhemolytic syndrome (HHS) pose life-threatening challenges.

Aim: To describe the clinical course, transfusion requirements, complications, and maternal-fetal outcomes in pregnant women with beta thalassemia intermedia.

Methods: Over two years, three pregnant women with beta thalassemia intermedia were prospectively managed at our institute. Clinical features, transfusion needs, complications, and outcomes were documented.

Results: The mean maternal age was 25.3 ± 5.1 years; two had twin gestations and one a singleton pregnancy. All were transfusion-dependent and developed severe anaemia (mean Hb 3.6 ± 1.2 g/dL), requiring multiple packed red cell transfusions. Two women developed alloimmunization with multiple antibodies.

One patient delivered a healthy neonate at 36 weeks but later developed secondary postpartum haemorrhage from retained products, requiring evacuation and transfusion. Another, with twins, developed progressive haemolysis, hypoxia, and multiple alloantibodies unresponsive to corticosteroids, necessitating caesarean at 25+2 weeks;

both neonates succumbed. The third, also with twins, developed HHS at 27 weeks but responded to IVIG, corticosteroids, and rituximab, allowing continuation until 32 weeks. Caesarean was performed for suspected fetal anaemia; of the twins, one survived and was discharged well.

Conclusion: Pregnancy in beta thalassemia intermedia carries high maternal and fetal risks, particularly alloimmunization and HHS. Early recognition, judicious transfusion, immunomodulatory therapy, and multidisciplinary care are essential. Maternal outcomes were favourable, but neonatal survival varied, highlighting the need for individualized management and close monitoring.

OP32

Muscle Fatigue and Motherhood: Myasthenia Gravis in Pregnancy

Sampada Kundal, Anju Singh, Swati Tomar, Archana Kumari, Reeta Mahey, K Aparna Sharma

AIIMS: Introduction: Myaesthesia gravis (MG) is an autoimmune condition which affects the neuromuscular junction and is predominantly characterized by fluctuating muscle weakness of the voluntary muscles. Pregnancy has variable effects on the severity of MG including worsening in almost 40% patients. Thus, management requires multidisciplinary approach as both disease and treatment can have deleterious effects on the mother and her fetus.

Method-Data of six pregnant women with MG who delivered at a tertiary care centre in North India between 2020 and 2025 was analyzed retrospectively. Sociodemographic details, treatment regimens and perinatal outcomes were recorded. Descriptive data analysis was done.

Results- Mean age at conception was 27.5 ± 2.07 years. Out of six women, five (83.3%) had Generalized MG while one (16.6%) patient had ocular MG. Two patients (33.3%) had exacerbation in pregnancy and were managed with four-weekly Intravenous Immunoglobulin. None had history of thymectomy. Five women (83.3%) were diagnosed prior to conception while one (16.6%) was diagnosed in the first trimester. All patients (100%) received multi-drug therapy for symptom control. One woman was detected with an intrauterine fetal demise at 36 weeks' gestation. Four (66.6%) women delivered vaginally, one had caesarean section (CS) for breech presentation, and one had vaginal birth after CS. There were no exacerbation or myasthenic crises during the antenatal/postnatal period.

Conclusion- Successful perinatal outcomes can be achieved in pregnancy with myasthenia gravis with multidisciplinary care and individualised approach. Early identification of exacerbations and individualized therapy are key to optimizing both obstetric and neurological outcomes.

OP33

From Pills to Embolization: Managing Enhanced Myometrial Vascularity – A Case Series and Literature Review

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Introduction: Enhanced Myometrial Vascularity (EMV), which are a form of acquired arteriovenous malformations, represents a rare (1.5-6.5%) but clinically significant vascular anomaly of uterus which can lead to potentially life-threatening and recurrent abnormal uterine bleeding (AUB). Timely diagnosis and appropriate management are essential, particularly in women desiring future fertility.

Objective: To evaluate clinical features and management options in women with EMV treated at a tertiary care centre over two years.

Methods: Retrospective analysis of 23 women who presented with EMV post abortion (medical/surgical) over last one year at a tertiary care centre was conducted. Clinical presentation, imaging, treatment modalities, complications, and follow-up outcomes were assessed.

Results: Mean age of patients was 29 ± 2.5 years. All 23 women presented with AUB and EMV was identified in 100% using ultrasound with colour doppler. Conservative management, with oral contraceptive pills or injectable progestins, was instituted in 15/23 (65.2%) patients. Of these, four required subsequent uterine artery embolization (UAE). UAE was performed in total 12/23 (52.1%) patients. No major post UAE complication was noted. Overall, efficacy of conservative treatment was 47.8%. None of the women had recurrence of symptoms post intervention underscoring the efficacy of both UAE and carefully selected conservative medical management.

Conclusion: Enhanced myometrial vascularity, though uncommon, must be considered in AUB evaluation. While UAE is an effective fertility-preserving option, conservative hormonal therapy can achieve favorable outcomes in stable patients. Obstetricians play a pivotal role in initiating medical management and carefully selecting candidates for intervention, ensuring optimal fertility preservation.

OP35

Accuracy of preoperative tumor markers, iota model, and intraoperative frozen section in comparison with final histopathological diagnosis in ovarian tumors

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Introduction: Ovarian cancer is a major contributor to gynecological cancer-related mortality in India. Both

preoperative and intraoperative diagnostic tools—such as tumor markers, scoring systems like RMI, the IOTA model, and frozen section—play a crucial role in diagnosis, decision-making, and management.

Objectives:

- To evaluate the accuracy of preoperative tumor markers, IOTA model, and frozen section against final histopathology.
- To categorize ovarian tumors as benign, borderline, or malignant using these diagnostic methods.

Materials and Methods: Prospective cross-sectional study conducted at MAMC & Lok Nayak Hospital over 1-year period in women admitted with clinico-radiologically diagnosed ovarian tumors and undergoing surgery. Patients underwent clinical evaluation, tumor marker testing, IOTA model application and intraoperative frozen section, followed by comparison with final histopathological diagnosis.

Sample Size: 80 patients.

Result: Out of 80 cases, 78.75% (63) were benign, 17.50% (14) were malignant and 3.75% (3) were borderline.

For malignancy prediction, tumor markers and IOTA Simple Rules showed the highest sensitivity (94.12%), while the IOTA ADNEX had the lowest (82.35%). In terms of specificity, frozen section achieved the highest value (90.48%), while the IOTA Simple Rules had the lowest (50.79%). Overall, frozen section showed the highest combined performance with 90% diagnostic accuracy, followed by the IOTA ADNEX model (80.00%), tumor markers (73.75%), and the IOTA Simple Rules (60.00%). All diagnostic modalities demonstrated a statistically significant association with the final histopathological diagnosis ($p < 0.001$).

Conclusion: In this study involving 80 patients, frozen section emerged as the most accurate modality, followed by the IOTA ADNEX model and tumor markers.

OP36

Association of Platelet Count, CA-125, and Leukocyte Profiles with Surgical Outcomes in

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Background: Inflammatory markers such as CA-125, platelet count, neutrophils, and lymphocytes may reflect tumor biology and predict treatment response in ovarian cancer. This study evaluated their association with tumor burden (PCI, CRS, SCS) and cytoreductive outcomes (CC score).

Methods: A retrospective analysis of 75 ovarian cancer patients was conducted. Baseline and post-treatment values of CA-125, platelet count, neutrophils, and lymphocytes were collected. Correlations with tumor burden indices and cytoreductive outcomes were assessed using Pearson correlation and ANOVA in a subgroup of 32 patients who underwent cytoreductive surgery.

Results: Median age was 54 years; 66.7% were postmenopausal. Abdominal pain (92%) and weight loss (84%) were common symptoms. Median baseline platelet count was $312 \times 10^3/\mu\text{L}$, declining to $154 \times 10^3/\mu\text{L}$ post-treatment. CA-125 dropped from 1844 U/mL to 17.1 U/mL. Median PCI and SCS were 4 and 3, respectively. Complete cytoreduction (CC = 0) was achieved in 32% of patients.

Baseline CA-125 correlated significantly with post-treatment platelet count ($r = 0.370$, $p = 0.034$), post-treatment CA-125 ($r = 0.437$, $p = 0.011$), and neutrophil count ($r = 0.357$, $p = 0.041$). No significant differences in platelet counts were observed across CC groups, though small effect sizes suggested potential trends.

Conclusion: Elevated baseline CA-125 and neutrophils, along with higher post-treatment platelet counts, are associated with greater tumor burden and reduced surgical response. Platelet count may serve as a simple, accessible biomarker to support preoperative planning in ovarian cancer.

OP37

Plasma Cell-Free DNA as Diagnostic and Treatment Response Biomarkers in High-Grade Serous Ovarian Cancer

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Introduction: High-grade serous ovarian carcinoma (HGSOC) is the most common and aggressive epithelial ovarian cancer subtype, typically diagnosed at advanced stages. Reliable, minimally invasive biomarkers are needed for early detection and treatment monitoring. Plasma cell-free DNA (cfDNA) is a promising candidate, but its diagnostic value and role in therapy assessment remain unclear.

Aims: To evaluate plasma cfDNA levels as a diagnostic and therapeutic monitoring biomarker in HGSOC

Objectives: Compare baseline cfDNA levels between HGSOC patients and benign controls

Monitor cfDNA and CA-125 dynamics across treatment phases
Assess diagnostic performance of cfDNA

Materials and Methods: In this prospective observational study, 27 untreated, newly diagnosed HGSOC patients and 47 controls with benign gynaecological conditions were enrolled. For HGSOC patients, peripheral blood was collected at baseline, post-neoadjuvant chemotherapy (NACT), post-interval debulking surgery primary debulking surgery, and post-adjuvant chemotherapy (ACT); controls provided baseline samples only. Plasma cfDNA was extracted and quantified; serum CA-125 was measured concurrently. Statistical analyses, including ROC curve evaluation, were performed using GraphPad Prism.

Results: Baseline cfDNA was significantly higher in HGSOC versus controls ($66.44 \pm 63.44 \text{ ng/mL}$ vs. $27.93 \pm 29.99 \text{ ng/mL}$; $p < 0.05$). CA-125 was also markedly elevated ($2602.17 \pm 3219 \text{ U/mL}$ vs. $51.89 \pm 91.79 \text{ U/mL}$; $p < 0.05$). cfDNA ROC analysis yielded an AUC of 0.80; at 33.6 ng/mL cutoff, sensitivity was 81.48% and specificity 74.50%. Both cfDNA and CA-125 declined significantly post-NACT ($p < 0.01$) and stabilised after surgery, mirroring clinical response.

Conclusion: Plasma cfDNA is a promising non-invasive biomarker for HGSOC diagnosis and treatment monitoring.

OP38

Beta HCG trends in women following molar evacuation progressing to GTN versus those with spontaneous regression

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Gestational trophoblastic diseases encompass placental disorders arising from abnormal trophoblastic proliferation including benign and malignant forms (GTN). Hydatidiform mole is the most common form, around 15-20% develop post-molar GTN; detected by β -HCG monitoring. Comparison of median β -HCG levels and ratios at specified time points between GTN and Regression groups and their predictive ability to develop GTN. Clinical records were reviewed, and β -HCG levels at time points: pre-evacuation, 48 hours post-evacuation, week 1, and week 2. β -HCG ratios: pre-evacuation/week 1, week 1/week 2, and pre-evacuation/week 2 were calculated and compared between two groups- GTN group and Regression group.

Results- pre-evacuation β -HCG levels were comparable, significantly higher post-evacuation β -HCG levels at 48 hours, week 1, and week 2 in GTN group. All median β -HCG ratios were significantly lower in the GTN group. The cut-offs for pre-evacuation β -HCG, and β -HCG post-evacuation at 48 hours, week 1 and week 2 were 2,68,200 mIU/mL, 81,908 mIU/mL, 19,369 mIU/mL and 5700 mIU/mL respectively. The cut-off points for β -HCG ratios pre-evacuation/week 1, week 1/week 2 and pre-evacuation/week 2 were 19.7, 2.6 and 47.9 respectively. While pre-evacuation and 48-hour post-evacuation values were not significantly associated

with GTN development, persistently elevated β -HCG levels at week 1 and week 2 post-evacuation were moderately predictive. A slower rate of decline in β -HCG- reflected by lower β -HCG ratios- was strongly associated with GTN progression. This study highlights the critical role of serial β -HCG monitoring and ratio trends in predicting the risk of progression to GTN following molar evacuation.

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OP39

Significance of sentinel lymph node biopsy in low and intermediate risk endometrial cancer: a study at tertiary care centre, India

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Introduction: With the escalating trends in endometrial cancer, accurate staging is crucial for appropriate treatment and prognosis assessment for these patients. Sentinel lymph node (SLN) mapping has emerged as an alternative approach .

Objective: To evaluate the incidence of sentinel lymph node (SLN) metastasis in patients with presumed low- and intermediate-risk endometrial cancer (EC) and change in stage and adjuvant therapy resulting from SLN analysis. Secondary objectives include assessing the rates of detection of SLN using indocyanine green (ICG) dye and complication rates.

Methods: Between March 2017 and December 2023, 210 patients were included in the study. A total of 412 SLNs were detected in 210 patients using intracervical ICG dye injections.

Results: The pathologically confirmed detection rate was >95%. A total of 25 patients (11.9%) exhibited positive sentinel metastasis with ITC in five (2.4%), micro-metastasis in six (2.9%), and macro-metastasis in 14 patients (6.7%). SLN metastasis with micro- and macro-metastases changed to stage III; therefore, adjuvant therapy was administered in the form of chemotherapy and radiation therapy. Of the 210 patients, 186 (88.5%) remained at low and intermediate risk after the final histopathological analysis. The other 24 patients exhibited SLN metastasis, high-grade EC, higher-stage detection, or high risk on molecular profiling.

Conclusion: A change in stage was observed in 11.9% of patients, of whom 16 received adjuvant therapy based solely on SLN involvement , thus preventing undertreatment. Overtreatment was reduced in six patients who were

classified as high-grade and non-endometrioid types with SLN metastases.

OP40

Colposcopy : A valuable tool for evaluation of inflammatory smears

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Background -Inflammatory smear is one of the most common report given by pathologists found by the gynaecologists even in healthy cervix. Premalignant lesions can be present even when Pap smear is negative. According to cervical screening algorithm inflammatory smears should be treated and Pap smear should be repeated after 6 months. Due to varied reasons ,it is not always possible to follow up after 6 months .Premalignant lesions can be present which are often obscured due to persistent inflammation.In this study,colposcopy was done for inflammatory smears and results were noted and analysed.

Aim-The aim of the study is to assess the colposcopic evaluation in cases of inflammatory smears.

Method-This is a prospective study which includes all the patients visiting the outpatient department of obstetrics and gynaecology at Hamdard institute of medical sciences and research with inflammatory smear.Pap smear was done in the patients with the conventional method as a part of routine screening.And then colposcopy was done in the patients with report of inflammatory smear.This study is still in the process and inflammatory smears continue to being evaluated.

Results-In this study, till date ,50 patients had inflammatory smear .Among these 22 patients (44%) had normal colposcopic findings with swedes score of zero whereas 28 patients(56%) had abnormal colposcopic findings among which swedes score were 1,2,3,4,5 of 11,8,2,6,1 patients respectively.Among abnormal colposcopic findings,6 (12%) needed cervical biopsy.

Conclusion-Patients with inflammatory pap smear need colposcopic evaluation so that premalignant lesions can be diagnosed and treated earlier.

OP41

Efficacy of Levonorgestrel Intrauterine System in the Management of Abnormal Uterine Bleeding: A Retrospective Analysis of 30 Women

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Introduction - Abnormal uterine bleeding (AUB) is a common gynecological complaint that significantly

impacts women's quality of life and poses a frequent clinical challenge. This retrospective study aims to evaluate the clinical efficacy and patient satisfaction associated with LNG-IUS in women presenting with AUB in a tertiary care setting.

Aim and objective - We aimed to study efficacy of LNG IUS IN AUB

Materials & methods - A retrospective study was carried out over a period of 6 months, total of 30 patients aged 30 years to 50 years (average age = 42.9 years) who underwent LNG-IUS insertion for abnormal uterine bleeding were studied.

Results - At the end of 6 months, 85% patients experienced decreased menstrual blood loss. Four patients underwent removal of the LNG-IUS at the end of 6 months as they experienced no relief of symptoms. 90% patients were fully satisfied with the LNG-IUS insertion.

Conclusion: The levonorgestrel intrauterine system (LNG-IUS) effectively reduces menorrhagia from benign causes and offers excellent results in conditions like endometrial polyps, adenomyosis, and endometrial hyperplasia, especially when inserted post-D&C or polypectomy. It has proven superior to many surgical and medical alternatives.

OP42

Feasibility and Safety of Non-Descent Vaginal Hysterectomy (NDVH) in women with prior Caesarean Section (C-Section) : Our experience

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Introduction: Traditionally, vaginal hysterectomy has been reserved for cases with UV prolapse, while the abdominal route was commonly used for other indications. However, NDVH— performed vaginally without uterine descent— has gained recognition for its safety, cost-effectiveness, and feasibility, even for large uterus. With increasing no. of caesarean section, a growing number of hysterectomy candidates now have a history of previous caesarean sections, which historically have been viewed as relative contraindications for NDVH.

AIM & OBJECTIVE: This retrospective study was conducted in patients operated from Feb 24 to June 25 in Deptt of Obs & Gynae, Sant Parmanand Hospital Delhi to assess the feasibility and safety of NDVH in women with prior C-Section.

Material & Method : Patients with previous C-Section for NDVH were selected after meeting the criteria. Parameters recorded uterus size, operative time, blood loss, surgical techniques, intra/ postoperative complications. Patients were followed up till 6 weeks of surgery.

Results: NDVH was successful in all the cases. Debulking was needed in 100% of patients. Mean blood loss was 100 ml, operating time averaged 58 minutes. None of the patients were converted to laprotomy.

Conclusion: NDVH is a safe and minimally invasive option for hysterectomy in women with prior C-Section with moderately enlarged, mobile uterus. With skilled technique and careful preoperative assessment, NDVH avoids the morbidity of abdominal hysterectomy and is associated with shorter hospital stay and minimal complications. It was found to be safe and feasible option for hysterectomy.

OP43

Effectiveness of antepartum health education on awareness and acceptance of human papilloma virus (hpv) vaccine in postpartum period

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Introduction: Cervical cancer, primarily caused by Human Papilloma Virus is among the most prevalent yet preventable cancers. Despite availability of vaccines, awareness and acceptance remain low in India. India's extensive antenatal coverage gives a unique and underutilized opportunity for health education and administration of HPV vaccine in postpartum period.

Aim and Objectives:

- To determine change in awareness about cervical cancer and HPV vaccine and acceptance of HPV vaccine among postpartum women following health education in antepartum period
- To determine association between demographic characteristics, education level and socioeconomic parameters on awareness and acceptance
- To determine reasons of non acceptance of HPV vaccine

Materials and Methods: 298 antenatal patients aged ≤ 26 years were enrolled in third trimester and an antepartum questionnaire was given to determine the baseline awareness followed by structured health education on HPV vaccine. The patients were followed post delivery and a postpartum awareness and acceptability of HPV vaccine were assessed using a questionnaire. Patients willing for vaccination were vaccinated before discharge and were followed up according to protocol with extra visit at 6 months in OPD for second dose.

Results: 83.2% participants had never heard of cervical cancer. Awareness about HPV Vaccine increased from 2.3% to 97.6%. 16.4% women received first dose of vaccine. 64.9% females cited cost as a factor for non acceptance. Significant correlation between median family income and

patients who accepted vaccine was noted($p<0.0001$).

Conclusion: Antepartum health education significantly improved HPV vaccine awareness; however, cost and availability remain major barrier to vaccine acceptance.

OP44

Comparison between Intracervical prostaglandin E2 gel and Intravaginal prostaglandin E2 pessary in Induction of labour /cervical ripening

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Introduction: Induction of labour is the artificial initiation of labour before the onset of spontaneous contractions, typically undertaken for maternal/fetal indications. It involves cervical ripening and stimulation of uterine activity using pharmacological agents like prostaglandins (misoprostol, dinoprostone) & oxytocin; mechanical methods like Foley catheter; surgical techniques including membrane sweeping/artificial rupture of membranes; & non-pharmacological measures like nipple stimulation. Dinoprostone may be administered as an intracervical gel or as a controlled-release vaginal pessary. Although both are established options for cervical ripening, variations in their pharmacokinetics and ease of administration warrant comparison.

Objective: To compare the efficacy and outcomes of labour induction using prostaglandin gel versus intracervical pessary

Method: A prospective observational analysis was conducted on 30 primigravida women (15 in each group) undergoing induction of labour for various maternal-fetal indications. Baseline Bishop scores, induction-labour intervals, delivery modes, & maternal-neonatal outcomes were compared.

Results: Baseline Bishop scores were comparable in the pessary and gel groups (3.07 & 2.73, respectively), and post-induction scores were similar (6.67 vs 6.73). The induction-to-delivery interval was slightly shorter in the pessary group but not statistically significant. Normal vaginal delivery occurred in 73% of gel-induced and 60% of pessary-induced cases ($p \approx 0.70$). LSCS rates were 26% with gel and 40% with pessary. Fetal distress and NICU admissions were more frequent with a pessary, but differences were not statistically significant. Maternal complications were minimal.

Conclusion: Both methods are effective for cervical ripening, though gel showed better delivery outcomes and fewer adverse events in this small cohort. However, further studies with larger sample sizes are warranted to confirm these findings.

OP45

Benchmarking karyotype diagnosis and detection rates in Nidan Kendra

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Introduction: Nidan Kendra cytogenetic lab genetic lab was established in 2022 at LHM with DBT support with the aim to bring karyotyping and FISH testing free of cost to the population coming to SSKH and KSCH hospital.

Objective: To describe sample utilization, indications, demographics and abnormality detection from the year 2022-2025 and to identify operational targets for quality improvement.

Methods: Four line-listed datasets were analyzed: 2022 ($n=115$), 2023 ($n=285$), 2024 ($n=287$) and 2025 ($n=104$ total). Variables included sample type, indication, age, sex, hospital, month, and final karyotype outcome. Sample types were standardized; indications and results were categorized. Descriptive statistics compared distributions, technical failure rates, and abnormality yields between years.

Results: Peripheral blood (PB) predominated (2025: 73.6%; 2024: 54.9%; 2023: 69.1%; 2022: 26.3%) among the sample. The 2023 surge was driven predominantly by PB submissions (197 vs 30), reflecting increased postnatal/pediatric referrals (e.g., suspected Down syndrome, short stature, amenorrhea, RPL workups) alongside stable-to-moderately increased prenatal AF/CB volumes. Technical failure rate was 48% in 2022, while was 11.5 percent in 2025. Abnormality detection was 12.2 percent in 2022, 18.9% in 2023, 18.7% in 2024 vs 10.3% in 2025; trisomy 21 was the most frequent abnormality. Common indications included suspected Down syndrome, recurrent pregnancy loss, and short stature/Turner evaluation; Down syndrome referrals showed the highest positive yield. Conclusions: Practice patterns differed between years, with 2025 showing broader invasive prenatal sampling. The consistent predominance of trisomy 21 among abnormalities validates referral pathways. Service evaluations can pinpoint where improvement is needed.

OP46

Mental Health Assessment of Postnatal Women Using EPDS

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Introduction: Screening for postpartum depression is a critical step in ensuring maternal mental health. One of the most widely used and validated tools for this purpose is the EPDS which is a 10-item self-report questionnaire designed to screen women for symptoms of emotional distress during the postpartum period.

Objective: To assess the prevalence of depression among postpartum women using the Edinburgh Postnatal Depression Scale (EPDS).

Methods: This was a cross-sectional observational study carried out in the postnatal clinic of our hospital over a period of three months (April-June 2025). A total of 250 postpartum women attending the clinic within 6-8 weeks of delivery were recruited for the study and EPDS was used to screen them for symptoms of postnatal depression and emotional distress.

Results: EPDS scores of >13 were found in 27.3% of women, indicating a probable diagnosis of postpartum depression. These women warrant further psychological evaluation and possibly referral to mental health services. Scores between 10-12 were observed in 34.5% suggesting possible depression while 38.1% scored below 10 indicating a low likelihood of significant depressive symptoms at the time of screening. The highest mean scores were observed for symptoms of anxiety without reason (1.86), followed by coping difficulties (1.48) and loss of enjoyment (1.32).

Conclusions: Routine use of EPDS should be encouraged in postnatal clinics to identify at-risk mothers early and offer timely interventions including counseling, peer support groups or pharmacotherapy where needed.

OP47

Stillbirth and it's determinants-an observational study from Uttarakhand

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Introduction: stillbirth is defined as birth of a baby with no signs of life at or after 28 weeks or >1000gm or crown heel length >35cm as per world health organization.

Review of literature: various studies are done to ascertain causes of stillbirths and to classify them according to classification systems like ReCoDe, INCODE, CODAC etc.

Aims and objectives: to determine the etiology of stillbirths, to classify causes as per ReCoDe classification system, to ascertain correlation between the variables if any and number of stillbirths.

Material and methods: my study included a sample size of 60 and used chi square test to find out association between stillbirths and sociodemographic profile, obstetric profile and material health conditions.

Results: maternal conditions emerged as the leading contributors 31.67% among which hypertensive diseases in pregnancy were among the most prevalent causes of stillbirths followed by placental factors 30% (placental insufficiency and abruption majorly) followed by fetal conditions 16.67% (fetal growth restriction majorly).

Discussion: in our institution, out of 1800 deliveries in a year, 60 were stillbirths giving rate of stillbirth as 3.19%

which is considerably lower than patterns observed in developing countries.

Conclusion: This study successfully demonstrated the efficacy of ReCoDe classification system in analyzing stillbirths, achieving 100% classification of all 60 cases examined.

OP48

Cabergoline decreases serum proinflammatory markers and pain in Endometriosis

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Endometriosis is a chronic, estrogen-dependent condition associated with pain, driven by estrogen, involves ectopic endometrial tissue implantation, causing pain and subfertility. Proinflammatory cytokines and angiogenic markers play a key role in its pathophysiology.

Objective: The study aimed to compare the effects of cabergoline and dienogest on serum pro-inflammatory markers, including VEGF, TNF- α , and hsCRP, as well as on pain levels, measured by the Visual Analogue Score, following treatment

Methods: This randomized clinical trial included 60 women diagnosed with endometriosis. Patients were randomized into two groups to receive either Cabergoline or Dienogest for 6 months. Serum VEGF, TNF- α , hsCRP levels and VAS scores were assessed at baseline, after treatment, and at 3 months post-treatment.

Results: Cabergoline showed a reduction in serum VEGF levels [477(111-1696) to 389(102-1203)pg/ml, $P=0.003$] as compared to dienogest [410(102-1161) to 360(102-1509) pg/ml, $P=0.629$].

Cabergoline and Dienogest both showed a reduction in serum hs-CRP ($P=0.02$) and TNF- α level ($P < 0.001$) however there was preservation of menstrual cycle with cabergoline. The baseline mean VAS score in both groups is similar [6.8 ± 2.2 vs 7.3 ± 1.9 , ($P=0.357$)]. The mean VAS Score after 6 months of treatment was 2.9 ± 1.6 and 2.8 ± 1.3 in Cabergoline and Dienogest group respectively ($P=0.883$).

Conclusions: Cabergoline demonstrated a significant reduction in the inflammatory processes within the body and proved to be non-inferior to Dienogest in terms of pain reduction. Cabergoline offers a viable alternative for managing endometriosis-related pain and subfertility while simultaneously addressing the underlying inflammation associated with this condition.

OP49

Anti-NMDA Receptor Encephalitis with Bilateral Teratoma: A Multidisciplinary Challenge

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Introduction: Anti-NMDA receptor encephalitis is a rare autoimmune disorder predominantly affecting young females and is frequently associated with ovarian teratomas. It presents with rapid-onset neuropsychiatric symptoms, requiring high clinical suspicion for timely diagnosis and intervention.

Objective: To present a case of severe anti-NMDA receptor encephalitis with bilateral ovarian teratomas, highlighting the multidisciplinary challenges in diagnosis and management.

Method: A detailed case report was analyzed, including clinical presentation, diagnostic evaluation (EEG, MRI, CSF antibody testing, PET-CT), management strategies (immunotherapy, surgical resection, infection control), and multidisciplinary interventions.

Results: A 21-year-old female presented with acute neuropsychiatric manifestations and rapidly deteriorating neurological status. CSF was positive for NMDA receptor antibodies, and PET-CT revealed bilateral ovarian teratomas. She required intensive care with tracheostomy and intercostal drainage for pneumothorax. IVIG (2 g/kg over 5 days) was administered, along with broad-spectrum antibiotics for sepsis. Surgical resection of teratomas was performed, and rituximab was considered as second-line therapy. Multidisciplinary management stabilized the patient and guided further recovery.

Conclusion: This case underscores the importance of early recognition of anti-NMDA receptor encephalitis and prompt identification of underlying ovarian teratomas. A multidisciplinary approach integrating neurology, gynecology, infectious disease, radiology, and psychiatry is essential for optimizing outcomes and improving prognosis.

OP50

Comparison of Combination of Dinoprostone Vaginal Insert (DVI) and Intracervical Foley Catheter (FC) versus DVI alone for Cervical Ripening in Term Induction: A Randomized Controlled Trial

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Introduction: Cervical ripening is a critical step in induction

of labour, especially in women with an unfavourable cervix. Theoretically, combination of agents will enhance induction of labour but limited information is available on the concurrent use of the same.

Aims & Objectives: To compare the effectiveness and safety of combining DVI with intracervical FC versus DVI alone for cervical ripening.

Materials & Methods: This open-label randomized controlled trial enrolled 128 term pregnant women with Bishop score ≤ 6 , randomized into: combination group (DVI + FC) and single-agent group (DVI alone). Primary outcomes were induction-to-delivery interval (IDI) and induction-to-active labour interval (IAI). Secondary outcomes included mode of delivery, oxytocin requirement, complications, and neonatal outcomes. Data were analysed using appropriate statistical tests.

Results: No significant differences were observed in mean IDI (19.8 ± 8.4 h vs. 18.1 ± 8.3 h; $p = 0.25$) or IAI (11.8 ± 6.2 h vs. 10.6 ± 5.9 h; $p = 0.29$). Vaginal delivery within 12 h (15.6% vs. 32.8%; $p = 0.02$) and within 24 h (64.1% vs. 82.8%; $p = 0.02$) were significantly higher and cesarean section rates (25% vs. 37.5%; $p = 0.14$) were lower in DVI alone group. Maternal complications were less frequent in DVI alone group. Neonatal outcomes were comparable.

Conclusions: This study supports the use of DVI alone as clinically effective and less invasive method for cervical ripening, particularly in contexts where timely vaginal delivery and efficient resource utilization are priorities.

OP51

Feasibility of Minilaparotomy Myomectomy as a Safe and Effective Uterus- and Fertility-Preserving Surgical Option in Patients with Large Fibroid Uterus (>10 cm)

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Introduction: Minilaparotomy offers a safe and effective alternative to laparoscopy and traditional laparotomy for myomectomy in selected cases.

Aim: To retrospectively assess preoperative evaluation, intraoperative details, and postoperative outcomes in women undergoing minilaparotomy myomectomy, focusing on uterine and fertility preservation.

Materials and Methods: Women with uterine fibroids desiring fertility preservation were included. Records from January 2023 to February 2025 at AIIMS Delhi were reviewed for demographics, operative parameters, postoperative recovery, and histopathology. Follow-up in 2025 assessed conception and pregnancy outcomes.

Results: Ten patients were analyzed. Median age was 25.7 years (23–35.5) and BMI 24 kg/m^2 (19.4–32.1). Six

(60%) were nulliparous, four (40%) multiparous. Spinal anaesthesia was used in 70% of cases. Myoma size ranged from 10–17 cm (mean: 12 cm). Average operative time was 70 minutes, with a median myoma weight of 1.1 kg. Abdominal incisions measured 7–10 cm; one required extension due to adhesions. Mean haemoglobin drop was 2.5 g/dl; two patients required blood transfusion. Median hospital stay was 2.5 days. No serious postoperative complications occurred.

Conclusions: Minilaparotomy myomectomy is a viable uterus- and fertility-preserving approach for large fibroids, combining the advantages of laparotomy and laparoscopy without increased perioperative risk.

OP52

Comparison of induction-abortion interval in mid trimester termination of pregnancies with and without intra-amniotic digoxin: a randomised control trial

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Introduction: Globally, 73.3 million abortions occur annually, 10–15% in the second trimester. Late second-trimester abortions pose challenges such as transient fetal survival, dilemmas over resuscitation, failed medical induction and maternal psychological distress. Inducing fetal demise before abortion helps mitigate these issues. While intracardiac KCl is effective but technically demanding, intra-amniotic digoxin provides a simpler alternative. This study evaluates the efficacy of intra-amniotic digoxin in inducing fetal demise and shortening induction-abortion interval.

Objective:

1. To compare Induction-Abortion interval of mid trimester abortion with and without intra-amniotic digoxin.
2. To study effectiveness of digoxin in inducing fetal demise after 24 hours of intra-amniotic digoxin instillation.

Methods: After ethical clearance, pregnant women with gestation between 20–24 weeks opting for MTP, were randomized into cases and controls. Cases received 1 mg intra amniotic digoxin After 24 hours, serum electrolytes, ECG and cardiac activity were repeated. MTP was performed using standard mifepristone misoprostol protocol in both the groups. Complications, if any, were documented.

Results: Mean induction abortion interval was significantly shorter in the cases (31.35 hrs vs. 57.76 hrs; $p < 0.001$). 88.2% of fetuses had no cardiac activity 24 hours after digoxin administration. Mean number of misoprostol doses required in cases was 0.88 vs. 3.94 in controls ($p = 0.003$). There were no significant side effects related to digoxin or

amniocentesis, and no post abortion side effects in both the groups.

Conclusions: Inducing feticide using intra-amniotic digoxin in mid-trimester abortions reduces induction-to-abortion interval with favourable safety profile and is technically easy procedure.

OP53

Decoding Stillbirth: An Analysis of Patterns and Causes in a Tertiary Care Centre

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Introduction: Stillbirths account for a major part of perinatal deaths, yet largely remain invisible. Stillbirth rate varies between regions depending on health care and referral facilities.

Objective: To analyse the patterns and identify potentially preventable causes of stillbirths in the last 18 months.

Methodology: Retrospective study of stillbirths at AIIMS, New Delhi, between January 2024-June 2025.

Results: Between January 2024-June 2025, there were 4137 births, 4088 live and 49 stillbirths (foetal demise ≥ 28 weeks). The stillbirth rate was 11.8 per 1000 births, however no intrapartum stillbirth. The mean age of the women was 29 years and mean gestational age was 33 weeks. There were 14 women with hypertensive disorders of pregnancy (HDP) of which 57% were unbooked pregnancies. Foetal Growth Restriction (FGR) was present in 78.5% women. Among the women with preeclampsia, 28.5% had abruptio placenta. FGR was undiagnosed in almost 50 % of unbooked cases. Ten women had unexplained IUD of which 70% had growth restricted fetuses diagnosed post-delivery. Delayed detection of lethal foetal anomalies and hydrops fetalis comprised 20% of stillbirths. Major maternal medical conditions other than HDP potentially contributing to stillbirth included maternal diabetes, jaundice, myasthenia gravis, medium vessel vasculitis, cyanotic heart diseases. There was one case of uterine scar rupture, resulting in a term fresh stillbirth. Only one woman opted for foetal autopsy.

Conclusion: This study emphasises that early detection and referral of conditions like preeclampsia and foetal growth restriction still are need of the hour to address preventable causes of stillbirth.

OP54

Comparison of unexplained stillbirths by ReCoDe and ICD-PM classifications

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Introduction: Stillbirth is a major yet under-recognized adverse pregnancy outcome, with India bearing the

highest global burden. Effective prevention requires reliable classification; however, current systems vary in complexity and often leave many cases unexplained.

Objective: To compare unexplained stillbirths when classified according to ReCoDe versus ICD-PM classifications and to identify associated maternal and fetal factors contributing to these outcomes.

Methods: This was a prospective observational study. Women who experienced stillbirths at or beyond 28 weeks of gestation or weighing at least 1000g were enrolled. Detailed clinical histories, obstetric and ultrasound findings, placental histopathology, and structured interviews assessing delays in recognition, seeking, and receipt of care were obtained. Each stillbirth was classified under both ReCoDe and ICD-PM frameworks, and concordance for unexplained cases was evaluated using Cohen's Kappa.

Results: Among 134 stillbirths, 10.4% remained unexplained by both ReCoDe and ICD-PM. ReCoDe most commonly identified fetal growth restriction (16.4%), congenital anomalies (15.7%), and hypertensive disorders (12.7%). ICD-PM classified most cases into fetal growth-related (32.8%), followed by placental and hypoxia-related causes. Maternal ICD-PM categories were dominated by hypertensive/medical disorders (37.3%) and healthy mothers (33.6%).

Conclusions: ReCoDe and ICD-PM produce identical rates of unexplained stillbirths, where ReCoDe has easy applicability makes it user friendly for implementation in periphery whereas ICD-PM being very extensive and standardised finds its place for better standardised evaluations and comparison. The predominance of fetal growth restriction, congenital anomalies, and maternal hypertensive disorders highlights key targets for intervention.

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OP55

What Happens to Contraceptive Use After the Introduction of Subdermal Implant: A

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Introduction: India's National Family Planning Program, despite being the world's first government-led initiative in 1952, continues to face challenges in meeting modern contraceptive needs. A significant portion of the population relies on permanent methods, with limited access to long-acting reversible contraceptives (LARCs). To address this,

the Government of India introduced the subdermal single-rod implant under the public health system in 2023.

Objective: This study aimed to assess the trend of contraceptive acceptance before and after the introduction of subdermal implants and analyze the demographic and clinical characteristics of implant users.

Methods: A retrospective study was conducted at Lady Hardinge Medical College, New Delhi, over two years (May 2022–April 2024). Data on contraceptive use were extracted from clinic records. The use of different methods before and after implant introduction was compared using paired t-tests. Logistic regression was used to evaluate factors associated with implant use.

Results: Out of 18,657 women attending the clinic, 67 opted for subdermal implants. The majority (67.16%) had two living children, and most insertions occurred in the post-abortion phase. Implant insertion increased 20-fold within one year. While no significant change was noted in overall use of sterilization, IUCD, or temporary methods, a statistically significant decline in postpartum IUCD insertion ($p=0.02$) was observed post-implant launch. Minor complications were reported, with a 7.4% discontinuation rate.

Conclusion: The introduction of subdermal implants in India's public sector has expanded contraceptive choices and influenced method trends. Targeted counseling, training, and awareness can further enhance its acceptability and integration into national programs.

OP56

Role of Ulipristal Acetate in treatment of fibroid- A Prospective Study

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Introduction- Uterine fibroids are the most common benign tumours in women of reproductive age group which may present with heavy menstrual bleeding, dysmenorrhea, pelvic pressure and anaemia. Its management depends on the number, size and location of the fibroids, patient's age and desire to preserve fertility. Ulipristal acetate (UPA) is a selective progesterone receptor modulator which selectively inhibits the proliferation of uterine leiomyoma cells and induces their apoptosis. Objectives – The objective of the study was to evaluate the efficacy of ulipristal acetate in reducing the size of a symptomatic fibroid, its effect on menstrual bleeding, dysmenorrhea and its side effects. Materials and methods – A total of 45 patients were included in this prospective study. Oral ulipristal acetate at a dose of 5 mg per day was

given for a period of 3 months. The PBAC Score, Visual Analogue Scale score and ultrasound findings of fibroid were noted. Results - Ulipristal acetate is an effective drug in reducing heavy menstrual bleeding, pain and fibroid size with minor side effects. Conclusion- Ulipristal acetate can be a safe, effective and economic option for treatment of symptomatic fibroids in patients.

OP57

Role of serum progesterone in early pregnancy as a predictor of viable pregnancy

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Introduction: Progesterone is key hormone in early pregnancy, essential for preparing the endometrium for implantation and maintaining gestation. It is essential for successful implantation and pregnancy maintenance. Early measurement of serum progesterone offers a reliable, cost-effective method to assess pregnancy viability.

Aim: To evaluate the role of serum progesterone as a predictor of viable pregnancy in early pregnancy and to correlate role of serum progesterone with other sonographic markers.

Materials and Methods: This prospective cohort study was conducted at the Department of Obstetrics and Gynecology, Sant Parmanand Hospital, from February 2024 to February 2025. 70 women between 4–7 weeks of gestation were enrolled. Serum progesterone levels were measured at initial visit and correlated with pregnancy outcomes up to 20 weeks. No participant received progesterone supplementation. Follow-ups included clinical assessments and ultrasound. Data were analyzed using SPSS v25.0, with $p < 0.05$ considered statistically significant.

Results: Out of 70 participants, 48 women had serum progesterone levels >15 ng/mL, of whom 44 (91.7%) had viable pregnancies. In contrast, 22 women had levels <15 ng/mL, with only 2 (9.1%) resulting in viable pregnancies. The association between serum progesterone levels and pregnancy outcome was statistically significant ($p < 0.001$), demonstrating a strong correlation.

Discussion: The results confirm that low serum progesterone in early pregnancy is significantly associated with poor pregnancy outcomes. Identifying women at risk based on progesterone levels allows for closer monitoring and timely intervention.

Conclusion: Serum progesterone is a valuable, non-invasive, and cost-effective marker for predicting pregnancy viability in early gestation.

OP58

Healing Beyond Loss: Insights from a Pilot Study on Bereavement Care Experiences

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Introduction: Stillbirth affects 2.6 million families worldwide annually, with India reporting 11.7 per 1000 births versus the global average of 9.5. Despite this burden, structured bereavement care remains poorly developed in India. Most bereaved mothers receive inadequate psychological support, limited explanations, and no memory-making opportunities, increasing risks of prolonged grief, depression, and PTSD.

Objective: To assess the need for standardized bereavement care in a tertiary care government hospital by evaluating current maternal experiences following stillbirth.

Methods: A pilot study was conducted using the Maternity Bereavement Experience Measure (MBEM), a 14-item questionnaire with five-point Likert scale responses. Thirty mothers who experienced stillbirth completed the Hindi-translated questionnaire before discharge. Participants received routine care without any specialized bereavement interventions.

Results: Mean satisfaction score was 3.48, indicating moderate overall satisfaction. Strengths included delivery environment satisfaction (mean 4.57), sensitive staff communication (mean 4.43), and staff competency confidence (mean 4.40). Critical gaps were identified in grief-specific care: only 10% received adequate time with their babies (mean 1.77), and 13.3% were offered memory-making opportunities (mean 1.70). Additionally, 53.3% reported inadequate post-discharge support information.

Conclusions: Current care demonstrates adequate clinical management but severe deficiencies in grief-specific support. These findings confirm the urgent need for standardized bereavement protocols. Targeted interventions addressing identified gaps can significantly enhance maternal satisfaction and reduce long-term psychological morbidity.

OP59

Effect of pregnancy on sexuality of women- studied using PSRI

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Background: Pregnancy is a period marked by profound biological, psychological, emotional and social changes which may influence sexual function. Understanding these changes is critical for improving maternal well being and there is dearth of studies on this issue from the developing world.

Aims & Objectives: To study the effect of pregnancy on the sexuality of Indian women.

Material and Methods: Women with a singleton pregnancy between 14-38 weeks of gestation coming to antenatal OPD and without any obstetric condition that made sexual intercourse inadvisable (e.g., placenta previa, antepartum hemorrhage, threatened preterm labor or any bad obstetrics history) were included in the study. Women were interviewed with PSRI questionnaire which is a 38-item (12 demographic and 26 sexual behavior/activity characteristics) and assesses changes in sexual desires, arousal, orgasm, satisfaction and overall sexual activity during pregnancy compared to pre-pregnancy levels. Data were analyzed to compare sexual function and correlate findings with sociodemographic and obstetric variables.

Results: Of the 100 women included in the study, decrease in the frequency of sexual intercourse and desire was reported by 76% and 64% women during pregnancy, respectively. Emotional changes, physical discomfort, fear of harming the fetus and body image concerns were commonly cited as contributing factors.

Conclusion: Pregnancy has a measurable impact on various domains of female sexual function with a general trend toward decrease sexual activity and satisfaction. These findings underscore the importance of addressing sexual health and providing couples with appropriate counselling and support.

OP60

Epidemiology and Genetic Spectrum of Hemoglobinopathies in the Antenatal Population of Mewat District, Haryana

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Introduction- Hemoglobinopathies are inherited disorders of hemoglobin synthesis, contributing significantly to the global health burden, especially in LMICs with high prevalence and limited resources. Screening in the antenatal population is vital for early diagnosis and genetic counseling to prevent transmission.

Objective: To assess the epidemiological profile, clinical features, and genetic spectrum of hemoglobinopathies among the antenatal population of Mewat district, Haryana

Methodology: All patients attending antenatal clinic at district hospital and medical college at Mewat, Haryana. Screening included complete blood count (CBC) and high-performance liquid chromatography (HPLC) for all

participants, followed by mutation analysis using multiplex amplification refractory mutation system-polymerase chain reaction (ARMS-PCR) for four common mutations: IVS1-5 (G>C), CD41/42 (-TTCT), CD8/9 (+G), and 619 bp deletion.

Results: Out of 20,000 women screened, 455 were identified as carriers of the β -thalassemia trait. Among their partners, 144 husbands were tested, and 13 were found positive for the trait. Most affected women were aged 16–23 years (45.5%), nulliparous (26.6%), and predominantly illiterate (93.8%). Genetic analysis of the β -thalassemia carriers revealed IVS-I mutation as the most common (58%), followed by CD 86 (15%).

Conclusion: The study shows that widespread nutritional deficiency anemia limits CBC based detection of hemoglobinopathies in North India, highlighting the need for targeted screening and genetic counseling to reduce thalassemia prevalence.

OP61

Association of prenatal ultrasound diagnosed anomalies with fetal autopsy findings in medical termination of pregnancy

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Introduction: Congenital anomalies (CAs) are a major cause of perinatal morbidity and mortality worldwide, with prenatal detection playing a crucial role in guiding clinical management and counselling. While prenatal ultrasound is a cornerstone for anomaly screening, its limitations necessitate complementary evaluation through fetal autopsy and advanced genetic testing.

Objectives: To assess the association between prenatal ultrasound and fetal autopsy findings in second-trimester terminations for fetal anomalies, and to evaluate the added diagnostic yield of genetic testing in refining etiologic diagnoses and recurrence risk assessment.

Methods: This prospective study included 22 singleton pregnancies terminated for major fetal anomalies, detailed ultrasonography was performed prior to termination. Fetal autopsies were conducted, and genetic testing was offered and individualised. Comparative analysis of concordance rates and diagnostic utility was performed across systems and modalities.

Results: Prenatal ultrasound correctly identified anomalies in 68.2% of cases (sensitivity), with a specificity of 94.8%. Autopsy revealed additional anomalies in 27.3% of cases. Among 17 couples offered genetic testing, 10 underwent testing; the diagnosis was modified in 6 cases (27.2%) and confirmed in 2 (9.09%). Integration of ultrasound, autopsy and genetic testing significantly improves the detection of

causative etiology and hence the counselling pertaining to recurrence risks.

Conclusion: While prenatal ultrasound remains highly specific for anomaly detection, its moderate sensitivity underscores the pivotal role of fetal autopsy and genetic testing in comprehensive diagnosis. A multidisciplinary approach including autopsy and genetic testing optimizes clinical management and counseling, highlighting the need for routine integration of ultrasound, autopsy and advanced genetic tools in perinatal care.

OP62

Beyond Insulin-TyG Index as a Cost-Effective Marker of Insulin Resistance in PCOS

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Introduction: PCOS is a multifaceted endocrine disorder. A key metabolic abnormality in PCOS is insulin resistance. Early identification of IR in PCOS patients is crucial for timely intervention to prevent metabolic complications. The most used standard method for measuring IR is HOMA-IR but require insulin assays, which are expensive & lacks standardization. Triglyceride glucose(TyG) index is a novel, simple, and reproducible surrogate marker for IR, derived from fasting triglycerides and fasting plasma glucose

Objective: To determine diagnostic accuracy of TyG index when used as a marker for prediction of insulin resistance in women with PCOS

Methods: In this cross-sectional analytical study, 90 women with PCOS & 90 healthy volunteers aged 18-35 years attending gynaecology OPD at LHMC were evaluated. HOMA-IR value >3.9 was considered indicative of insulin resistance in women with PCOS. TyG index was calculated using the formula: $\text{Ln} [\text{Triglyceride (mg/dL)} \times \text{Fasting glucose (mg/dL)} / 2]$

Results: The diagnostic accuracy of TyG index in predicting insulin resistance was found to be 85.6%. In ROC curve analysis, cut off for TyG index was found to be 4.7 with AUC 0.918, p-value = $0.0005 < 0.01$ with 95% C.I 0.861 to 0.975, which shows high statistical significance with sensitivity 90%, specificity 82.0%. The PPV is 80.0%, NPV is 91.1%, and Youden's Index is 1.7.

Conclusions: Women with PCOS frequently have atherogenic dyslipidemia & impaired glucose metabolism - both components directly contribute to TyG index. Since these metabolic alterations occur even in non-obese PCOS patients, TyG index may detect IR earlier than clinical manifestations.

OP63

Influence of body mass index on post-ovulation trigger LH, progesterone, and HCG levels and their impact on oocyte retrieval in IVF cycles

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Introduction: BMI can impact post-ovulation trigger levels of LH, progesterone, and HCG which play a pivotal role in final oocyte maturation and retrieval. However, limited data exist on how BMI influences these hormone levels and oocyte recovery rates.

Objective: To evaluate the relationship between BMI and post-trigger levels of LH, progesterone and HCG following GnRH agonist and/or HCG trigger in IVF cycles and its impact on oocyte recovery rates.

Methods: This prospective observational study was conducted at Max Hospital, New Delhi from August 2024 to July 2025. A total of 175 women undergoing IVF cycles were categorized based on the type of ovulation trigger: Group1 received GnRH agonist (Inj. Triptorelin 0.3 mg), Group2 received recombinant HCG 500 mcg and Group3 received Dual trigger (recombinant HCG 500 mcg and triptorelin 0.1 mg). Serum levels of LH, progesterone, and HCG were assessed 12 hours post-trigger. Hormonal responses were analysed in relation to BMI and oocyte recovery rates. Statistical significance was defined as $p < 0.05$.

Results: In group1, post trigger LH was significantly less in high BMI while other post trigger hormones in all groups showed lower values but not statistically significant. Oocyte recovery rate was lower in group1 with high BMI while it remained comparable in other groups.

Conclusion: BMI should be considered when determining the type and dosage of ovulation trigger since these hormonal variations have implications for oocyte maturation and retrieval. Further studies are warranted to validate these findings and to optimize individualized trigger strategies in IVF protocols.

OP64

Effect of platelet-rich plasma therapy on menstrual restoration in uterine causes of secondary amenorrhea

Kaveri Gupta, Anshuga Singla, Richa Gupta, Rachna Aggarwal

Introduction: Secondary amenorrhea, when associated with intrauterine adhesions or persistently thin endometrium, remains a therapeutic challenge. Platelet-rich plasma (PRP), rich in growth factors and cytokines,

has emerged as a potential regenerative therapy for endometrial restoration.

Objective: To evaluate the efficacy of intrauterine PRP therapy in improving endometrial thickness (ET) and restoring menstruation in women with uterine causes secondary amenorrhea.

Methods: This prospective interventional study was conducted on 35 women with secondary amenorrhea. TVS was done for endometrial thickness. PRP was prepared from autologous blood and instilled via tomcat catheter after endometrial scratch. Maximum 3 sequential cycles were given at weekly intervals if menstrual restoration did not occur. Primary outcome was menstrual restoration and secondary outcome was change in ET. Data were analysed using paired t-test and linear mixed models.

Results:

Mean ET increased significantly from 2.69 ± 0.91 mm pre-treatment to 3.81 ± 1.16 mm after the first PRP ($p < 0.001$) and 5.11 ± 1.70 mm after the second ($p < 0.001$). Progressive gain was noted between cycles ($p < 0.001$). Menstrual restoration occurred in 14.3% after the first PRP, 17.0% after the second and 60% at 3rd. Among 16 women receiving hormonal (E+P) therapy after PRP failure, 43.8% regained menses. One participant conceived spontaneously. No major adverse effects were reported.

Conclusion: PRP therapy significantly improved ET and menstrual recovery in women with secondary amenorrhea, with added benefit from sequential cycles and hormonal rescue. These findings support PRP as a safe, minimally invasive, and promising adjunct in endometrial regeneration strategies.

Keywords: Secondary amenorrhea, Menstrual restoration

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OP65

To Evaluate the Effect of Hypothyroidism on Obstetric and Perinatal Outcomes: A Hospital-Based Retrospective Study

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Introduction: Thyroid disorders are the second most common endocrine dysfunction in women of reproductive age after diabetes. Hypothyroidism, the most prevalent thyroid disorder during pregnancy, is linked to adverse maternal and fetal outcomes including infertility, miscarriage, pregnancy induced hypertension (PIH), anemia, foetal growth restriction (FGR), premature rupture of membranes (PROM), preterm labor, increased maternal

and neonatal morbidity.

Objectives

1. To determine the prevalence of thyroid disorders during pregnancy in a hospital-based population.
2. To evaluate associated obstetric and perinatal outcomes.

Methodology: This two-year retrospective study included 550 antenatal women with singleton pregnancies and no prior medical disorders. Thyroid function was assessed using thyroid stimulating hormone (TSH) (cut-off: 4.0 mIU/L), followed by FT4 and FT3 if abnormal. Participants were grouped into euthyroid, subclinical, or overt hypothyroid categories. They received appropriate treatment, and thyroid levels were monitored every 4–6 weeks until delivery.

Results: Hypothyroidism was found in 12.72% ($n=70$) of cases—subclinical in 8.9% and overt in 3.8%. Higher prevalence was seen in multigravida women. Lower segment caesarean section (LSCS) was the most common delivery mode among hypothyroid patients. Common maternal complications included anaemia, preeclampsia, miscarriage, preterm labor, preterm premature rupture of membranes (PPROM), and oligohydramnios. Fetal outcomes included FGR, LBW, and higher NICU admissions.

Conclusions: We observed a high prevalence of thyroid disorders and their relative adverse effects. Universal screening of all women in the pre-conception period or as early as pregnancy is diagnosed is recommended to reduce subsequent fetomaternal morbidity and mortality.

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OP66

Congenital Tuberculosis: The Unrecognized Sepsis Mimicker in Newborns

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Background: Congenital tuberculosis (TB) is an uncommon but severe condition, with high morbidity and mortality if not diagnosed early. Despite advancements in fetomaternal care, congenital TB remains a diagnostic challenge due to its non-specific clinical presentation. The risk is higher in pregnancies with maternal history of tuberculosis, even if treated previously.

Case Presentation: We present case of a 30-year-old primigravida, conceived through in-vitro fertilisation. She had a past history of pulmonary Koch's (2019), treated with complete course of anti-tubercular therapy (ATT) and

asymptomatic at present. She had uneventful antenatal period with diagnosed as GDM at 28 weeks of gestation and controlled sugars on medical nutrition therapy. She had spontaneous preterm delivery at 34 weeks with 2120 grams baby, with Apgar scores of 9/9 and both discharged in stable condition.

At 21 days of life, baby presented with non-specific symptoms of fever, lethargy, and respiratory distress. Investigations revealed gastric lavage positive for AFB, confirming congenital tuberculosis. Despite intensive care and ATT initiation, the baby developed multi-organ dysfunction and succumbed.

Conclusion: Congenital TB, though rare, should be suspected in neonates with sepsis-like presentation, particularly when the mother has a history of tuberculosis, even if previously treated. Rigorous antenatal screening and high clinical suspicion are essential for timely diagnosis and improved neonatal outcomes.

Comparison of Intravenous Fentanyl Patient-Controlled Analgesia and Multimodal Parenteral Analgesia for Pain Relief During Second Trimester Medical Termination of Pregnancy: A Randomized Controlled Study.

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Introduction: Pain during second trimester medical termination of pregnancy (MTP) is often severe and inadequately managed. Although non-steroidal anti-inflammatory drugs (NSAIDs) are frequently prescribed, the comparative efficacy of intravenous patient-controlled analgesia (PCA) with opioids versus multimodal parenteral analgesia (MMA) remains unclear.

Objective: To compare the efficacy, safety, and patient satisfaction of fentanyl-based PCA with MMA (paracetamol, diclofenac, tramadol) in women undergoing second trimester MTP.

Methods: In this randomized controlled trial, 140 women undergoing MTP between 13–24 weeks were allocated to receive either fentanyl PCA or MMA. Pain was measured using the visual analogue scale (VAS) at each misoprostol dose. Secondary outcomes included induction-to-abortion interval, drug consumption, need for rescue analgesia, patient satisfaction (Likert scale), and adverse effects. Analyses were performed using Stata 14.2, with $p < 0.05$ considered significant.

Results: Mean VAS scores were significantly lower in the PCA group at the first (1.05 ± 1.07 vs 1.58 ± 1.17 ; $p = 0.004$) and fifth misoprostol doses (4.76 ± 1.01 vs 6.0 ± 1.69 ; $p = 0.01$). Rescue analgesia was required less often with PCA (15.7% vs 51.4%; $p < 0.001$). Patient satisfaction was higher with PCA; however, gastrointestinal adverse effects were more frequent, with nausea (35.7% vs 11.4%; $p = 0.001$)

and vomiting (30% vs 5.7%; $p < 0.001$). No significant difference was observed in induction-to-abortion interval or misoprostol requirements.

Conclusions: Fentanyl PCA provided superior pain relief and reduced rescue analgesia needs compared to MMA during second trimester MTP but was associated with higher nausea and vomiting. MMA was better tolerated but less effective. Tailored analgesic strategies are essential for optimizing pain management in this setting.

OP68

Role of vasopressin to control blood loss in Total laparoscopic Hysterectomy

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Total Laparoscopic Hysterectomy (TLH) is increasingly preferred for benign gynaecological conditions due to its minimally invasive nature, faster recovery, and reduced postoperative morbidity. However, intraoperative blood loss remains a significant concern, especially in patients with large uteri or pelvic adhesions. This study investigates the role of vasopressin, a potent vasoconstrictor, in reducing blood loss during TLH.

Objective: To evaluate the effectiveness of vasopressin in minimizing intraoperative blood loss during TLH. Secondary objectives included comparing operative time, postoperative haemoglobin levels, hospital stay duration, and monitoring for adverse effects such as hypertension and bradycardia

Methods: A prospective observational study was conducted, involving women undergoing TLH for benign gynaecological conditions. Participants were divided into two groups: Group A, who received intramyometrial vasopressin, and Group B, who did not. Blood loss, operative time, postoperative haemoglobin levels, and complications were monitored and analysed.

Results: Group A (vasopressin) had significantly lower mean EBL (245.7 ml) compared to Group B (625.7 ml). The operative time was also shorter in Group A (2.1 hours) than in Group B (3.1 hours). Postoperative haemoglobin decline was less in the vasopressin group, indicating better blood preservation. No significant difference was noted in hospital stay duration. No major vasopressin-related complications were observed.

Conclusion: Vasopressin administration during TLH significantly reduces blood loss and operative time, with no major complications observed in the study group. These findings suggest that vasopressin could be a valuable adjunct in the management of intraoperative bleeding in TLH, particularly in challenging cases.

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OP69

Association of vasomotor symptoms with cardiovascular risks in perimenopausal and menopausal women

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Lady Hardinge Medical College

Introduction: Menopause marks the end of a women's reproductive period and is associated with various physiological and hormonal changes. Vasomotor symptoms, such as hot flushes and night sweats have been linked to metabolic and cardiovascular risks. Despite high prevalence globally, VMS remain underreported and undertreated in India, with limited data on their association with cardiovascular risks in Indian women.

Objective: To study the association between vasomotor symptoms and cardiovascular risk factors in perimenopausal and menopausal women.

Methods: A cross-sectional analytical study was conducted involving 200 menopausal women aged over 40 years. Participants were divided into two groups: 100 women with vasomotor symptoms (cases) and 100 without (controls). Data collected included demographic details, clinical examination, hormonal and biochemical parameters, and cardiovascular risk assessment using the Framingham risk score. Statistical analysis was performed.

Results: Women with vasomotor symptoms had significantly lower mean age (49.24 years) compared to those without (52.62 years). A significant association was found between vasomotor symptoms and higher waist circumference (≥ 80 cm; OR=2.875, $p=0.014$), as well as elevated LDL cholesterol (≥ 130 mg/dL; OR=2.139, $p=0.009$), higher prevalence of newly diagnosed diabetes and elevated total cholesterol levels. Late onset vasomotor symptoms was linked to higher intermediate and high cardiovascular risk categories, whereas early onset was associated with lower risk.

Conclusion: Vasomotor symptoms are associated with adverse anthropometric and metabolic parameters that increase cardiovascular risks. Central obesity and dyslipidemia appear to be significant correlates. This emphasizes the need for cardiovascular risk assessment and targeted lifestyle interventions in women experiencing vasomotor symptoms.

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OP70

Effects of birth preparedness sessions on anxiety level in antenatal women: A pre and post-interventional study

Harsha Rathiya

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Introduction: Pregnancy and childbirth are profound life events that can evoke a wide spectrum of emotions in women, ranging from joy and anticipation to anxiety and fear. Fear of childbirth, pregnancy-related anxiety, and depression are prevalent among expectant mothers. These can adversely affect maternal well-being, and birth outcomes.

Objectives: Our aim was to estimate the prevalence of pregnancy related anxiety among pregnant women and to assess the effect of Birth Preparedness sessions on reducing levels of anxiety and fear of childbirth in pregnancy.

Methods: A pre and post intervention study conducted among 100 antenatal women visited antenatal clinic in third trimester at our hospital. All participants were given PASS scoring scale and W-DEQ A questionnaire to test their level of anxiety and fear of birth. They received 2 sessions on Birth Preparedness at 2 week interval. They were evaluated again after 2nd session and 48 hours postpartum. Data was analysed.

Result: High prevalence of anxiety (68%) and fear of childbirth (81%) were noted in our population. There was significant reduction of anxiety (40%) and fear of childbirth (30%) after birth preparedness sessions. The reduced levels of anxiety and fear of childbirth sustained till delivery.

Conclusion: Birth Preparedness sessions are effective in reducing anxiety during pregnancy and fear of childbirth resulting in higher normal delivery rates.

OP71

Prospective Study on Predictors and Outcomes of Surgical Site Infections Following Elective Caesarean

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Introduction: Caesarean section (CS) is the most common obstetric surgery globally, with increasing rates, especially in developing countries. While surgical site infections (SSIs) are a known complication of emergency CS, limited data exist on SSIs and related risk factors following elective CS.

Objective: To evaluate the occurrence of surgical site infections and associated risk factors, in women undergoing elective caesarean deliveries.

Methods: This prospective observational study was conducted over 18 months (January 2024–June 2025) at a tertiary care hospital in New Delhi. Sample size of 280 was calculated. Women undergoing elective CS were enrolled. Patients with pre-existing infections were

excluded. Women received preoperative and postoperative antibiotics according to hospital protocol. All patients were followed for maternal and foetal outcomes. Main outcome measure was surgical site infections. Data were collected on demographics, surgical details, postoperative outcomes, and infections.

Results: The incidence of SSIs was 6.6%, with 2.9% partial and 3.7% deep wound infections. Significant risk factors included elevated BMI (mean 26.00 ± 4.31 vs. 23.76 ± 2.20 ; $p = 0.0301$), prior CS, presence of comorbidities, prolonged surgery (>1 hour), and need for blood transfusion. Febrile morbidity (83.3%) and endometritis (33.3%) were frequently observed among SSI cases. SSI patients had longer hospital stays, and 72.2% required escalation to higher antibiotics.

Conclusion: The study highlights a notable incidence of SSIs, febrile morbidity, and endometritis following elective caesarean sections, emphasizing the need for targeted preventive strategies and further research to improve maternal outcomes and reduce postoperative complications.

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OP72

Empowering Choices: Implants Reshaping the Future of LARC

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Introduction: Long-acting reversible contraception (LARC) methods like subdermal implants have gained prominence globally due to their high efficacy, safety, and user convenience. Since 2023, the government of India has expanded the contraceptive options under its family planning program by including contraceptive implants. Understanding the uptake, side effects, and patient acceptance of these implants in public health settings is critical to optimizing family planning services in India.

Objective: To analyze the number of women using subdermal contraceptive implants since 2023 at a government hospital in Delhi, assess reported side effects, and evaluate patient acceptance and satisfaction.

Methods: This retrospective study included patients from 2023 to mid-2025 at a tertiary government hospital in Delhi. All women opting for implant insertion as a contraceptive method were included. Demographic information, procedural details, side effects, and follow-up data on implant continuation and patient satisfaction were systematically collected and analyzed.

Results: Since introduction, the number of implant users showed a steady increase. The most commonly reported side effects included mild bruising, irregular bleeding patterns, and minor discomfort at the insertion site. No major complications or neurovascular injuries were recorded.

Conclusions: Subdermal implant usage at the government hospital in Delhi has risen steadily since 2023, reflecting increased acceptance as an effective LARC option. Side effects were predominantly minor and well tolerated. These findings underscore the importance of implant availability and training in public health settings to broaden contraceptive choices and support reproductive autonomy among women in urban India.

OP73

Association of Cesarean scar defect with abnormal menstrual patterns in women with secondary infertility

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Introduction: The rising global use of Cesarean Section (CS) has raised concerns regarding its long-term complications. A key issue is Cesarean Scar Defect (CSD), which has been linked to abnormal uterine bleeding, infertility, and adverse reproductive outcomes.

Objective: To determine the prevalence of CSD and its association with menstrual abnormalities in women with secondary infertility and previous CS.

Materials and Methods: This cross-sectional observational study was conducted over 18 months at VMMC and Safdarjung Hospital, New Delhi, and included 233 women with secondary infertility and a prior history of cesarean section. Institutional ethics approval was obtained before enrolment. Detailed sociodemographic and clinical data were collected, and all participants underwent a basic infertility work-up. Assessment for CSD was performed using transvaginal ultrasonography, supplemented by saline hysterosonography where required. Menstrual patterns were evaluated using the FIGO AUB classification system. Data were analyzed statistically using SPSS version 21, with a p-value <0.05 considered significant.

Results: Among 233 women studied, 120 (51.5%) were diagnosed with CSD, while 113 (48.5%) showed no defect. Notably, 64.2% of women with CSD reported abnormal menstrual patterns or symptoms compared to 19.5% without CSD, a highly significant difference ($p < 0.001$).

Conclusion: CSD is a frequent finding among women with secondary infertility following CS and is strongly associated with abnormal menstrual patterns. These results emphasize the clinical importance of CSD, which not only disrupts menstrual cycles but may also negatively impact fertility potential.

Poster Presentation

PP1

Conservative management of Caesarean Scar pregnancy

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With the increasing caesarean section rates a new challenging evil of Caesarean scar pregnancy has emerged. As a variant of ectopic pregnancy caesarean scar pregnancy is the rarest of all. The estimated incidence ranges from 1 in 1800 to about 1 in 2216 of all cesarean deliveries. Implantation and growth of a conceptus in the niche of a previous caesarean scar often leads scar pregnancy and is associated with significant maternal morbidity and mortality as a result of torrential obstetric haemorrhage, need for hysterectomy and massive blood transfusion.

Transvaginal ultra-sonography forms the main basis of diagnosis of scar pregnancy, with an empty uterine cavity and cervix and pregnancy sac in the niche of the caesarean scar with increased vascularity on Doppler. Calli et al. have used a "crossover sign to predict scar pregnancy and their progression to MAP.

However classical ultrasound picture may be disturbed after an attempted D/E and medical abortion.

Management rests on conservative management with precautions for haemorrhage control. Since Dilatation and evacuation ensues torrential haemorrhage, it is not advisable.

Local, systemic or combined methotrexate has been tried in the treatment of scar pregnancy with intra-uterine Foley's catheter balloon tamponade for control of bleeding.

We present a case of Caesarean scar ectopic pregnancy with, managed successfully, with intra-sac Methotrexate injection

PP2

Successful Conservative Management of Morbidly Adherent Placenta Using Methotrexate: A Case Report

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Background: Placenta accreta is a potentially life-threatening obstetric condition with increasing incidence, often due to prior uterine surgeries. While cesarean hysterectomy is the standard treatment, conservative options, including methotrexate, may be considered in stable patients seeking uterine preservation.

Case Report: A G4P1L1A2 woman with one previous normal vaginal delivery was induced at 38+5 weeks for elevated blood pressure. She delivered vaginally, but the placenta

remained adherent and could not be expelled. As the patient was hemodynamically stable with mild postpartum hemorrhage, the placenta was left in situ. Bleeding was managed with Bakri balloon tamponade. Methotrexate 75 mg intramuscular was administered immediately postpartum, repeated after one week and again after one month. Ultrasound monitoring was done regularly. Patient had spotting per vaginum twice and remained afebrile. The placenta was spontaneously expelled three months later without complications.

Discussion: Methotrexate facilitates placental resorption by suppressing trophoblastic activity. Literature, including cases by Arunkumar et al. (1896) and studies by Mittal et al. (2009) and Yogendra Singh et al. (2015), supports its conservative use. However, risks such as infection and methotrexate toxicity necessitate close monitoring.

In selected cases of placenta accreta where patients are stable and uterus-sparing is desired, methotrexate can be a safe and effective alternative to surgical management, provided thorough follow-up is ensured.

PP3

OHVIRA Syndrome - When Anatomy Plays a Trick on You

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Introduction: OHVIRA syndrome (Obstructed Hemivagina and Ipsilateral Renal Anomaly), a congenital condition characterized by uterine didelphys, obstructed hemivagina, and unilateral renal agenesis. It is a rare, obstructed müllerian anomaly, affecting the physical, reproductive, sexual, and mental health of the patient.

Objective: To present a rare case of OHVIRA syndrome. This report highlights the diagnostic challenges and management strategies involved.

Methods: A 24-year-old female (P1L1) with a history of C-section presented with chronic pelvic pain and secondary amenorrhea of six months. Clinical examination revealed a cystic mass in the right fornix. Imaging studies including transvaginal sonography, KUB ultrasound, and MRI confirmed uterine didelphys with hematometocolpos and ipsilateral renal agenesis. Diagnostic vaginoscopy and hysteroscopy were followed by surgical intervention.

Results: Findings included a right-sided obstructed hemivagina with hematometra and hematocolpos, and absent right kidney.

Surgical management involved drainage, resection of the right uterine horn, metroplasty and right uterine artery ligation. Symptoms resolved postoperatively.

Conclusion: OHVIRA syndrome should be considered in females with atypical pelvic pain and renal anomalies. Early

recognition and timely surgical management are critical for symptom relief and improved outcomes.

PP4

Pregnancy with complete heart block: management dilemmas

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Background: It is challenging to manage a patient with complete heart block in pregnancy due to dilemmas regarding need for pacemaker, type of anesthesia and mode of delivery.

Case Report: 25 year old second gravida with history of an abortion, presented at 32 weeks of gestation with complains of ghabrahat, difficulty in breathing for 1 day and spotting per vaginum for 2 days. She had history of pacemaker implantation 12 years ago for complete heart block. On admission she had bradycardia (pulse-50/minute), on ECG complete heart block was found. USG pelvis revealed placenta previa. Her further management posed dilemmas regarding: is new pacemaker needed? How urgent? Temporary/permanent pacemaker?-considering need for anticoagulation in temporary pacemaker, risk of bleeding if need for emergency cesarean section. After a multidisciplinary approach involving cardiologist, anesthetist, neonatologist and discussion with patient/attendants, permanent pacemaker implantation was decided upon. An uneventful permanent pacemaker implantation was performed by cardiologists at 33 weeks. Strict maternal and fetal monitoring followed by elective cesarean section at 37 weeks for placenta previa was done. Discharged on day 14 postpartum to follow up in cardiology OPD.

Discussion: Most cases of congenital heart block reported were managed conservatively, 50% delivered vaginally. Data on permanent pacemaker outcomes in pregnancy is limited. Our case being symptomatic required permanent pacemaker and cesarean for obstetric indication. Careful multidisciplinary approach resulted in favorable outcome.

PP5

Dual burden in early pregnancy: a case of schizophrenia and hyperemesis gravidarum

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Introduction: Hyperemesis gravidarum (HG) and schizophrenia can co-occur, and the case reports highlight the complexities of managing these conditions during pregnancy. While HG is a severe form of morning sickness, schizophrenia is a chronic psychiatric illness. When they coincide, the combination can lead to significant

challenges in management.

Case Report: A 32 year lady G3P1A1L0 known case of hypothyroidism presented in her first trimester at 11 weeks multiple times with hyperemesis gravidarum and altered mental status. Refractory HG and starvation ketosis lead to Wernickes encephalopathy leading to ICU stay for a week and was medically managed. Psychiatric opinion was taken in view of non pervasive mood, immediate and recent memory difficulty, persecutory ideas accompanied by visual and auditory hallucinations, was diagnosed with schizophrenia and started on antipsychotic medications. Step wise approach for management of HG was followed starting with optimization of glucose control, hydration, pharmacological therapy with prokinetics, antiemetics and thiamine. It was a hectic course as symptoms persisted beyond 20 weeks and needed multidisciplinary approach. Throughout her pregnancy she was kept admitted in the ward for safe confinement. At term patient delivered a healthy baby of 2.3 kg with no immediate perinatal complications.

Conclusion: HG is a treatment disorder of early pregnancy. However a refractory case of HG with pointer of altered mental status persisting even after treatment of HG beyond second trimester may warrant a psychiatric evaluation for early diagnosis of schizophrenia which may be a cause or effect of refractory HG.

PP6

Cerebral Tuberculosis mimicking Toxemia of Pregnancy: A case report and Review of Literature

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Introduction: Unless one specifically observes the nature of seizures, it is easy to miss uncommon etiologies like infections- especially in endemic regions like India. Cerebral tuberculosis, although rare in pregnancy, poses significant diagnostic and therapeutic challenges due to its non-specific symptoms. Prompt diagnosis and management is crucial both for mother and baby.

Case Summary: A 33-year-old woman, G3P1L1A1 came to the emergency at 36 weeks gestation with sudden-onset recurrent seizures, with associated fetal growth restriction and occasional high blood pressure. A provisional diagnosis of eclampsia was made. On observation, seizures were found to be focal with facial distortions. CEMRI confirmed diagnosis of cerebral tuberculosis. Antitubercular therapy was initiated along with antiepileptics and corticosteroids. She subsequently underwent a cesarean delivery for fetal growth restriction. A strong clinical suspicion and typical radiological findings helped in timely management and cessation of the recurrent seizures, improving the fetomaternal prognosis.

Discussion: Observing or recording seizures is crucial to know non-grandmal seizures. Kochs is often paucibacillary and diagnostic samples may not always be obtainable, making clinical and radiological findings critical for diagnosis. Other case reports too have managed with ATT, steroids and antiepileptics. With multidisciplinary care and close fetal monitoring, there is significant improvement in fetomaternal morbidity.

Conclusion: This case emphasizes the need for a comprehensive, tailored and multidisciplinary approach in evaluating seizures during pregnancy. In regions where tuberculosis is prevalent, cerebral tuberculosis must be considered a differential diagnosis to ensure timely intervention and optimize maternal-fetal health.

Keywords: Pregnancy, seizures, cerebral tuberculosis, neuroimaging, multidisciplinary care.

PP7

Beyond the womb: a life that refused to end- secondary abdominal pregnancy

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Introduction: Intra-abdominal pregnancy is a rare form of ectopic gestation, accounting for <1% of ectopic pregnancies. Secondary abdominal pregnancies typically result from uterine rupture or tubal abortion. They pose significant diagnostic and surgical challenges, especially when diagnosed in advanced gestation.

Objective: To highlight the clinical course, diagnostic approach, and multidisciplinary management of a secondary abdominal pregnancy following tubal abortion

Methods: A 25-year-old gravida 3, para 2 woman presented with abdominal pain, perception of foetal movements, and a palpable mass 3 months after undergoing mtp by surgical method at 2 month of amenorrhea. USG imaging revealed a 24-week extrauterine fetus and placental attachment to the uterine fundus and anterior abdominal wall. MRI suggestive of uterine rupture at fundus with secondary implantation of the fetus and placenta

Results: Emergency laparotomy was performed. Live 700-gm fetus free in the abdominal cavity was delivered. Due to massive placental adherence and hemorrhage (2.3 litre blood loss), subtotal hysterectomy with bilateral internal iliac artery ligation and sigmoid mesocolon repair was performed. Patient was discharged on postoperative day 10 after recovery

Conclusion: Secondary intra-abdominal pregnancy is a rare and life-threatening condition requiring high clinical suspicion, advanced imaging, and prompt surgical management. This case underscores the need for cautious surgical interventions in early pregnancy and demonstrates the importance of a multidisciplinary approach to minimize

maternal morbidity.

PP8

Colonic Bleed- A Grave and Life-Threatening Complication Due To Unopposed Antibiotic

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Introduction: Pseudomembranous colitis (PMC), primarily caused by *Clostridium difficile*, is a serious complication of antibiotic therapy. Clindamycin disrupts normal gut flora, enabling *C. difficile* overgrowth that leads to colonic inflammation, ulceration and in severe cases, colonic bleed. Postoperative patients, particularly following cesarean section, are at increased risk.

Case Report: A 19-year-old P1L1 on postoperative day 10 of emergency cesarean section performed at a district hospital was referred to our tertiary care center in septic shock with clinicoradiologically confirmed peritonitis. Exploratory laparotomy revealed slough, multiple pus-filled loculated pockets, and approximately 1L hemoperitoneum. Broad-spectrum antibiotics (piperacillin-tazobactam with clindamycin) were initiated.

On POD 3, the patient developed loose stools; probiotics were added. By POD 4, she experienced rectal bleeding, which became profuse on POD 5. Gastroenterology review and CT angiography showed active bleeding from the hepatic flexure of the proximal colon. Colonoscopic ablation was deemed unsafe due to a thinned colonic wall, and right hemicolectomy was considered too radical. Through inter-hospital multidisciplinary coordination, digital subtraction angiography (DSA) with embolization of the right colic branch of the superior mesenteric artery was successfully performed.

Diagnosis of antibiotic-associated PMC causing colonic bleeding was made. Clindamycin was discontinued, and vancomycin with metronidazole were initiated. The patient stabilized and discharged on POD 15.

Conclusion: Colonic bleed due to unopposed antibiotic use post-cesarean is rare but life-threatening. Judicious antibiotic use, early diagnosis of PMC, and a multidisciplinary approach are critical to prevent fatal outcomes.

PP9

Saving one heart: Radiofrequency ablation in monochorionic twin pregnancy with anomalous Co-Twin

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Introduction: Selective reduction is often required in complicated monochorionic twin pregnancies to improve

perinatal outcome of the co-twin. Radiofrequency ablation (RFA) has emerged as a minimally invasive and effective technique in such situations. We report a case of monochorionic diamniotic twin pregnancy complicated by acrania and anencephaly in one twin, successfully managed with RFA.

Objective: To highlight the role of RFA in selective reduction for anomalous twin in monochorionic diamniotic pregnancy and its impact on co-twin survival.

Method: A 26-year-old G2P1L0 woman at 21+1 weeks with MCDA twins was diagnosed with severe cranial malformation acrania and anencephaly in twin B. After counselling regarding poor prognosis of twin B and risks to the normal co-twin, decision for selective reduction was taken. Under ultrasound guidance, RFA was performed targeting the intra-abdominal portion of the umbilical cord of the affected twin.

Result: Successful cessation of cardiac activity in twin B was achieved. The procedure was uneventful, and the co-twin demonstrated stable cardiac activity post-procedure. Patient was monitored closely with follow-up ultrasounds and has ongoing pregnancy with viable co-twin.

Conclusion: RFA is a safe and effective option for selective reduction in complicated monochorionic twin pregnancies such as acrania/anencephaly. It improves the chances of survival of the normal co-twin while minimizing maternal morbidity. Early diagnosis, detailed counselling, and timely intervention are crucial for optimizing perinatal outcomes.

PP10

Medical Management of Cesarean Scar Ectopic Pregnancy with Transvaginal Potassium Chloride and Methotrexate Injection under ultrasound guidance.

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Background: Cesarean scar ectopic pregnancy (CSEP) is a rare yet potentially life-threatening condition where the gestational sac implants within a previous cesarean section scar. Clinical presentations vary from asymptomatic cases to severe complications like uterine rupture and hemorrhage. CSEP is diagnosed primarily via transvaginal ultrasound, though standardized treatment guidelines remain limited.

Case Report: A 31-year-old woman, gravida 2 para 1, presented with a viable CSEP at 6 weeks and 6 days of gestation. She was asymptomatic and hemodynamically stable. Diagnosis was confirmed by transvaginal ultrasound and a β -hCG level of 86,000 mIU/ml. After counseling and informed consent, she underwent an ultrasound-guided transvaginal procedure involving intracardiac instillation of 1 ml potassium chloride (KCl), followed by 50 mg

methotrexate (MTX) directly into the gestational sac. Cardiac activity ceased immediately post-procedure. The patient was monitored closely and had no complications. Serial β -hCG levels declined steadily, and follow-up ultrasound confirmed complete resolution of the gestational sac.

Conclusion: Ultrasound-guided transvaginal injection of KCl and MTX provides a safe, minimally invasive, and fertility-preserving alternative to surgical management in selected cases of CSEP. This approach highlights the potential for medical therapy in managing cesarean scar pregnancies. Further research and case series are needed to establish standardized protocols and patient selection criteria.

PP11

Torsion complicating hyperreactio luteinalis in a spontaneous singleton gestation.

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Background: Hyperreactio luteinalis (HL) is rare, benign condition in pregnancy characterized by bilateral ovarian enlargement with multiple luteinized follicular cysts, associated with high β -hCG levels. HL is often asymptomatic and discovered incidentally, but complications such as ovarian torsion or rupture may necessitate urgent intervention. This case report describes a case of HL in a singleton pregnancy with normal β -hCG levels, complicated by ovarian torsion.

Case report: A 31-year-old primigravida at 15 weeks period of gestation presented with severe, persistent right-sided abdominal pain and vomiting. Examination revealed tender, cystic mass in right adnexa. Ultrasound showed bilateral enlarged ovaries with multiple cysts and signs of right ovarian torsion. β -hCG levels (66130 mIU/ml) were within expected range according to period of gestation. Patient underwent emergency laparotomy because of suspected torsion, intraoperatively right ovarian cyst (12×10×13 cm) was present. Right salpingo-oophorectomy was done as ovary was completely necrotic and vascularity didn't returned even after detorsion. Left ovary had theca lutein cyst (10×8.2×10.2 cm). Recovery was uneventful, and pregnancy progressed normally. At 38 weeks POG, healthy infant was delivered by caesarean section due to meconium-stained liquor. Intraoperatively, left side ovarian theca leutin cyst persisted. Six weeks postpartum, ultrasound confirmed spontaneous resolution of the left ovarian cyst.

Conclusion: HL is rare but important differential diagnosis for adnexal masses during pregnancy. Though usually benign and self-limiting, complications like torsion or rupture may require prompt surgical management. They may mimic ovarian neoplasm and lead to unnecessary

ovarian resection. Most cases resolve spontaneously within few months postpartum.

PP12

Ebstein anomaly in pregnancy : A Rare Case

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Introduction: Ebstein anomaly is a rare and complex congenital heart disease, accounting for approximately 1% of congenital heart diseases and with a prevalence of 0.3–0.5%. It is characterized by atrialisation of the right ventricle and dilation of the right atrium. Fertility is not affected, but pregnancy outcomes depend on the severity of the disease. This report emphasizes the importance of awareness and early detection, as the presented case had a poor pregnancy outcome due to the extreme seriousness of the disease and late diagnosis.

Case Summary: A 24-year-old P3L0 was referred to SJH on postnatal day six due to shortness of breath and fever for six days, initially diagnosed as rheumatic heart disease, for further management. She had delivered by breech-assisted vaginal delivery at 9 months of amenorrhea, with a severely growth-restricted baby weighing 1.5 kg. In the immediate postpartum period, the patient complained of shortness of breath and developed a fever. A screening echocardiogram revealed suspicion of Ebstein anomaly, which was confirmed on a detailed 2D echocardiogram.

Conclusion: Due to the varying degrees of disease severity, early diagnosis and close surveillance, combined with a multidisciplinary approach, are essential to improve pregnancy outcomes.

PP13

Raynaud's Phenomenon of the Nipple Triggered by Labetalol: An Unusual Side Effect

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Introduction: Raynaud's phenomenon of the nipple (RPN) is a rare condition that can occur as a side effect of labetalol, characterized by vasospasm episodes leading to symptoms to that of Raynaud's phenomenon of the peripheries, often triggered by cold or stress [1].

Case Report: We report the case of a 30-year-old Indian primigravida with class 1 obesity and hypothyroidism, who conceived via intrauterine insemination (IUI) and developed gestational diabetes mellitus (GDM) and pregnancy-induced hypertension (PIH) during her pregnancy. In her third trimester, she was prescribed labetalol for BP control. Following administration, she experienced severe, episodic nipple pain described as "electric lightning" without associated colour changes, consistently resolving within 20 minutes of onset. The patient had no similar complaints

in the past prior to the pregnancy even on cold exposure or stress. The symptoms were attributed to RPN induced by labetalol. After switching to nifedipine, her blood pressure remained controlled, and she experienced no further adverse events. The pregnancy was terminated with an emergency caesarean section secondary to fetal distress after induction of labour at term. Postpartum recovery was uneventful, and follow-ups revealed no similar complaints.

Conclusion: This case highlights the importance of recognizing RPN as a potential side effect of labetalol and considering alternative treatments for PIH when necessary.

PP14

Triple Theatre in a Twin Pregnancy- Successful pregnancy outcome in a monochorionic twin pregnancy with torsion and TTTS

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Background: Monochorionic diamniotic twin (MCDA) pregnancies are at high risk due to complications like twin-twin transfusion syndrome (TTTS), selective fetal growth restriction and twin reversed arterial perfusion. Ovarian torsion during pregnancy is an extremely rare but can be a life-threatening event. Laparoscopic management is an effective approach in treatment, however, it is often challenging in twin pregnancy at advanced period of gestation. Here we present, successful pregnancy outcome in a case of ovarian torsion in a 27-year-old MCDA twin pregnancy at 24 weeks gestation.

Case report: Mrs X presented at 24 weeks gestation with complaints severe pain in left iliac fossa for last 2 days. Despite conservative treatment, the pain persisted and laparoscopy was planned. During laparoscopy three turns were detected in left adnexa and left salpingectomy was performed. However, she was then detected to have Stage III TTTS which was managed by radiofrequency ablation. After one month of treatment, she presented with preterm premature rupture of membranes and underwent emergency preterm caesarean section delivering a healthy baby. Baby was discharged uneventfully after one month of NICU care.

Discussion: Ovarian torsion should be kept as a differential diagnosis while managing acute abdomen in the pregnancy. This case uniquely combines laparoscopic surgery for torsion along with fetal medicine intervention (RFA) for TTTS in second trimester of pregnancy highlighting the safety of minimally invasive procedures even in advanced gestation

PP15

Navigating Pregnancy with Klippel-Feil Syndrome: Clinical Challenges and Outcomes

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Introduction: Klippel-Feil Syndrome (KFS) is a rare congenital condition characterized by fusion of cervical vertebrae, often associated with scoliosis and other systemic anomalies. Pregnancy in women with KFS presents multiple challenges, particularly with airway management, neuraxial anesthesia, and delivery planning. Due to limited evidence, individualized, multidisciplinary care is essential. This case highlights the anesthetic and obstetric considerations in managing a pregnant patient with KFS and prior occipito-cervical fixation.

Case details: A 30-year-old primigravida with KFS, status-post occipito-cervical fixation at age 19, and thoracic scoliosis, presented for antenatal care at 16 weeks of gestation. She developed exertional dyspnea at 29 weeks, but cardiac and pulmonary evaluations were normal. Fetal anomaly scan and echocardiography were unremarkable, but fetal growth restriction was noted at 36 weeks. Induction of labor was initiated at 37 weeks after multidisciplinary evaluation, which identified potential difficulties with neuraxial anesthesia. After eight hours of labor, the patient requested to discontinue induction due to poor tolerance, and an emergency cesarean section was performed under general anesthesia. A healthy male infant was delivered, and the patient recovered well postoperatively.

Discussion: This case illustrates the complexity of obstetric care in KFS, particularly following cervical spine surgery. Although neuraxial anesthesia can be considered using ultrasound-guided techniques, anatomical distortion from spinal fusion and scoliosis increases the risk of block failure and neurological injury. General anesthesia, with careful airway planning, may be safer in such cases. A multidisciplinary approach ensured favorable maternal-neonatal outcomes, underscoring its importance in managing rare skeletal syndromes during pregnancy.

PP16

Navigating Pregnancy in Wermer Syndrome: A Multidisciplinary Triumph Over Endocrine and Obstetric Complexities

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Background: Multiple Endocrine Neoplasia type 1 (MEN1) is a rare autosomal dominant disorder marked by functional tumors of endocrine glands, posing significant challenges

in pregnancy due to multisystem involvement.

Case Report: A 32-year-old woman with MEN1 conceived via in vitro fertilization following primary infertility. She had prior pituitary and parathyroid surgeries with auto-implantation, resulting in chronic hypopituitarism and hypoparathyroidism. This required thyroid and calcium supplementation, with dose adjustments throughout pregnancy guided by biochemical monitoring.

The antenatal period was complicated by gestational diabetes mellitus (GDM) and preeclampsia. GDM was managed through medical nutrition therapy and frequent glucose monitoring. A high risk for fetal trisomy 21 was initially noted but later ruled out. Hormone replacement therapy was dynamically adjusted to meet increasing gestational demands, effectively preventing hypothyroidism, hypocalcemia and adrenal insufficiency.

Peripartum steroid stress dosing posed a challenge in the context of GDM, requiring a balance between preventing adrenal crisis and minimizing glycemic fluctuations. This was addressed through proactive endocrinological and obstetric coordination. The patient underwent induction of labor and delivered a healthy neonate via vacuum-assisted vaginal delivery.

Discussion: This case illustrates that successful pregnancy in women with MEN1 is achievable through proactive, individualized, and multidisciplinary care, ensuring optimal maternal and fetal outcomes in this high-risk condition.

Keywords: MEN1, Wermer syndrome, pregnancy, hypopituitarism, hypoparathyroidism, gestational diabetes, multidisciplinary care, adrenal insufficiency

PP17

Paraparesis secondary to hyperemesis gravidarum

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Background: Hyperemesis gravidarum, though common in early pregnancy, can rarely result in life-threatening complications like severe dyselektrolytemia and nutritional deficiencies leading to neuromuscular weakness. Subacute-onset paraparesis in pregnancy warrants evaluation beyond neurologic causes.

Case Report: A 29-year-old pregnant woman presented at 16 weeks gestation with profound lower limb weakness, inability to ambulate, and features of hyperalgesia. She had a two-month history of persistent vomiting. Examination revealed flaccid paraparesis (proximal > distal), hypotension, tachycardia, diminished reflexes. Laboratory tests showed hyponatremia, hypokalemia, hypomagnesemia, hypophosphatemia, hypochloremia, and low vitamin B1, vitamin D, low vitamin B12. Thyroid and parathyroid functions were normal. The patient showed significant neurological recovery following parenteral

correction of electrolytes, vitamin B1 and vitamin B12 and was discharged on oral supplementation.

Conclusion: This rare case highlights the critical need for early recognition and correction of severe metabolic disturbances in hyperemesis gravidarum. Multisystem vitamin and electrolytes imbalances can mimic neurological disease and cause disabling paraparesis. A high index of suspicion and prompt supportive care are vital to prevent morbidity.

PP18

A second chance at life from perimortem caesarean to viable second pregnancy: a rare case report

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25 Year old female admitted with diagnosis primigravida at 36 weeks 6 days of pregnancy with rh negative pregnancy with pre eclampsia without severe features with gestational hypothyroidism (not on treatment). Patient had bp of 150/100 on repeat 140/96 received tab. Labetalol 200mg in qrr, had complaints of dry cough for 1 week not associated with fever. She had no history of any known case of cardiac disease or any chronic medical or surgical illnesses. Pedal edema was present on examination with urine albumin 1+. All basic investigations done diagnosis revised to partial hellp planned for induction of labor patient developed sudden shortness of breath oxygen support given planned for emergency lscs while shifting the patient to OT table she started gasping and suddenly collapsed CPR started patient was intubated she revived after 3 cycles of CPR perimortem caesarean was done and in intubated state shifted to ICU after 2 days on mechanical ventilation she was extubated shifted to HDU maintaining well on room air. In postop period she had complaints of blurring of vision and slurring of speech for which neurology and cardiology opinion were taken and in 2d echo peripartum cardiomyopathy was found for which treatment was started also she had complaints of urinary incontinence which improved by bladder training. Patient and baby were discharged from the hospital in good condition. She came back after 3 years with another spontaneously conceived fetus for follow up.

PP19

When One of the Two Twists: Bilateral dermoid Cysts with Unilateral Torsion in Pregnancy: A case report and review of literature

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Introduction: Ovarian torsion is one of the gynecological emergencies. Adnexal torsion during pregnancy is an

uncommon condition with an incidence rate of 5 in 10,000 pregnancies. Dermoid cysts are common ovarian tumours in reproductive age women. However, bilateral dermoid cysts are rare and occur in 10% of the cases. Here, we present a case of bilateral ovarian dermoid cysts with unilateral torsion during pregnancy.

Case report: Mrs X, a 37-year-old lady, G2P1L1 at 12 weeks 4 days of gestation presented to the emergency with complaints of sudden onset severe lower abdominal pain for last 2 days. Pain was associated with nausea and vomiting. There was no history of fever or any bladder/bowel complaints. Past medical and surgical history was unremarkable. On examination, tenderness was localised to right iliac fossa. Ultrasound showed bilateral adnexal enlargement with 15 cm mass on right side with ascites. Based on strong suspicion of torsion clinically, an emergency laparotomy was performed. Intraoperatively, right tube and ovary were found to be necrosed and edematous. There were 6 twirls of ovarian pedicle on right side. On detorsion, no healthy ovarian tissue was identified. Right salpingo-oophorectomy and left sided cystectomy was performed uneventfully. Final histopathology showed bilateral mature cystic teratoma.

Discussion: Ovarian torsion should be kept as a differential diagnosis while managing acute abdomen in the pregnancy. The diagnosis is clinical. Early identification and timely intervention are crucial for optimal outcomes.

PP20

Gestational Trophoblastic Disease with Uterine Perforation

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Background: Gestational trophoblastic disease (GTD) is a spectrum of interrelated conditions ranging from benign hydatidiform mole to malignant choriocarcinoma. Clinical presentation may vary from abnormal vaginal bleeding to life threatening complication like uterine perforation and haemoperitoneum.

Case report: Jyoti devi 35 years G3P1A1 presented with bleeding per vaginum since last 10 days and generalised weakness and in shock on 4/4/2025. On examination her blood pressure was 70/40 mmHg, pulse rate 120 bpm and SpO2 80%. Her pallor was +4 and history of suction and evacuation. On USG large haemoperitoneum with intrauterine solid cystic mass suggestive of GTD. Histopathology also suggestive of GTD. Her beta hCG was 12354. She had taken emergency laparotomy and found almost 2 litres haemoperitoneum and 3 cm uterine fundal perforation and grape like vesicular products protruding through perforation. Evacuation of haemoperitoneum and repair of perforation done.

Discussion: Uterine perforation with haemoperitoneum

is a rare but severe complication of molar pregnancy and GTD. Risk factors are prior suction evacuation, invasive mole, late diagnosis. Clinical importance are shock due to hemorrhage, risk of systemic metastasis, requires immediate surgical and supportive management. Beta hCG monitoring is essential for follow up and early detection of persistent trophoblastic disease. Multidisciplinary management (gynaecology, oncology, pathology) is often required.

PP21

Management Dilemma in a Rare Case of Vaginal Sarcomatoid Squamous Cell Carcinoma in Chronic Uterovaginal Prolapse

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Background: Uterovaginal prolapse is a common benign condition in elderly multiparous women. Ulcers on the prolapse are usually benign; however, malignant transformation is rare, often presenting late with diagnostic and therapeutic challenges.

Case Presentation: A 75-year-old multiparous woman presented with a one-year history of prolapse and foul-smelling discharge for one month. Examination revealed 3rd-degree prolapse with a 10×6 cm ulcerative, fungating lesion on the lateral vaginal wall, bleeding on touch, and 1–2 decubitus ulcers. The unusual lateral site, rather than a dependent area, raised suspicion of malignancy. Kidney function tests were deranged, possibly secondary to chronic prolapse or malignancy. Ultrasound showed bilateral gross hydronephrosis with ureteric dilatation. MRI revealed a heterogeneous right anterolateral vaginal mass with diffusion restriction, muscularis loss, parametrium invasion, loss of bladder fat plane, Grade 1 cystocele, Grade 2 rectal prolapse, and bilateral hydronephrosis. Imaging was technically difficult due to prolapse, raising consideration of reduction before scanning. Cystoscopy and proctoscopy were normal. Histopathology revealed pleomorphic cells with mitoses, necrosis, and prominent nucleoli. Immunohistochemistry (pan-Cytokeratin, Epithelial membrane antigen, vimentin positive) confirmed sarcomatoid squamous cell carcinoma. Management was challenging, with dilemmas regarding primary surgery versus neoadjuvant or adjuvant therapy versus palliative treatment. Prognosis was assessed with ECOG Performance Status Scale. As radiotherapy was not feasible in the prolapsed organ and renal dysfunction limited options, low-dose paclitaxel-based chemotherapy was initiated.

Conclusion: This case highlights a rare malignant transformation in longstanding prolapse, complicated by atypical ulcer location, renal dysfunction, technical imaging limitations, and restricted treatment options, requiring

individualized multidisciplinary management.

PP22

Chronic Uterine Inversion Complicating a Myomatous Polyp : Diagnostic & Management Dilemmas.

Drishti chola, Ratna Biswas, Divya Garg, Swati Agrawal, Dalimi LHM & SSKH

Acute Uterine inversion is an uncommon but serious condition, most frequently seen in the puerperal period. Non-puerperal inversion is extremely rare and is usually associated with large submucous fibroids.

Case: The patient presented to gynae casualty with acute retention of urine and heavy menstrual bleeding. Per speculum examination revealed a necrotic foul smelling polypoid mass filling the upper vagina with cervix felt partially but on repeat examination it was not felt. She was catheterized. MRI was suggestive of incomplete uterine inversion with submucous myoma. She was then taken up for vaginal polypectomy under laparoscopic guidance.

Intraoperative findings: Dimpling of uterus seen at the fundus site with the round ligament drawn into it. On per vaginum examination- necrosed, friable mass felt in the vagina. Upper limit of polyp and cervix could not be felt. While putting traction to the polyp during removal the dimpling at fundus increased but under laparoscopic guidance carefully the entire polyp was removed piecemeal as it was friable after which inversion got corrected by itself. Around 500gm of necrotic tissue was removed which were sent for histopathology.

Conclusion: Non-puerperal uterine inversion secondary to fibroid polyp should be suspected when cervix is not felt all around the polyp. This recognition is essential before vaginal excision of polyp lest the fundus be removed along with the mass if not recognised. Laparoscopic guidance assists in preventing fundal injuries during procedure.

PP23

Against All Odds: Successful Pregnancy Outcome in a Young Woman with High-grade Epithelial Ovarian Cancer

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Background: High-grade serous ovarian carcinoma (HGSO) in pregnancy is extremely rare requiring individualized management. Platinum-taxane chemotherapy is recommended in the second or third trimester to prolong pregnancy, with definitive cytoreductive surgery deferred until after delivery. Here, we present a successful pregnancy outcome in a 36-year-old woman who was diagnosed and treated for HGSO

during pregnancy.

Case Report: Mrs X,

Primigravida, spontaneous conception after infertility of six years, presented in first trimester with complaints of nausea and abdominal distension. Imaging revealed a 16 x 16.5 cm multiloculated solid-cystic right adnexal mass with a viable pregnancy. In view of complex lesion and CA-125 of 877.3U/dL, she underwent Exploratory Laparotomy with Right Salpingo-oophorectomy and Peritoneal Biopsies at 16 weeks of gestation. Final histology showed High Grade Serous Ovarian Carcinoma with TP53 mutation. She was offered MTP in view of HGSOc. However, she declined and opted to continue the pregnancy. After multidisciplinary meeting and thorough discussion, three cycles of neoadjuvant chemotherapy using Paclitaxel 240 mg and Carboplatin 570 mg was initiated. At 34+5 weeks, she was induced and delivered a healthy child vaginally. After 6 months postpartum, she underwent Interval Cytoreductive Surgery (Total Abdominal Hysterectomy, Left Salpingo-oophorectomy, and Omentectomy) and further received adjuvant chemotherapy. She continues to be disease-free at 6 months follow-up.

Discussion: Pregnancy associated cancers are increasingly encountered probably due to delayed child bearing. Although HGSOc cancers are rare in pregnancy, mortality risk is high. A multidisciplinary individualized approach is essential to achieve favorable maternal and fetal outcomes in such cases.

PP24

Vulvar Elephantiasis: A Rare Clinical Entity

Oishi Debnath, Ratna Biswas

Vulvar elephantiasis is rare gynaecological presentation and challenging to manage. Aetiology includes Filariasis, LGV, Donovanosis, Malignancy and Tuberculosis.

45 years perimenopausal lady presented with gradually increasing vulvar swelling associated with itching and discomfort on walking for 1 year and erythematous nodular lesion in upper lip since 2 months. On examination there was erythematous nodular lesion on philtrum of upper lip and B/L massive enlargement of labia majora with coarse irregular, hypertrophied overlying skin. Each labia measures 25X10 cm approximately. Skin over mons pubis and fourchette show similar changes. Filarial antigen was negative. HPE of lip lesion revealed granulomatous for which ATT was started. Surgery: B/L Wide Local Excision of Vulvar lesion was performed after 3 months of ATT. Inner skin incision given on the mucocutaneous junction of labia. Outer incision on the healthy skin on outer border of labia majora. Upper skin incision of both sides extended on the mons pubis to form a continuous incision. Similarly posterior incision extended on the fourchette. Primary closure was done successfully. HPE: Scattered epithelioid

cell granuloma. Foreign body type giant cells present. Post op follow up 6 months revealed complete labial healing with no recurrence and disappearance of the lip lesion

Granulomas in the labial specimen was suggestive of primary cutaneous tuberculosis of vulva. Elephantiasis was a result of destruction of inguinal lymph-node leading to lymphectasis and lymphedema of the region which it drains. Residual lymphectasis and lymphedema following tuberculosis does not respond to ATT. Wide local excision is the treatment of choice.

PP25

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PP26

Total laparoscopic hysterectomy in large cervical fibroid in obese patient - An operative challenge

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Background: Cervical uterine myoma is rare among all uterine fibroids with an incidence of 1-2 percent. Here we will present a case of large cervical fibroid which was managed laparoscopically.

Operative difficulties seen during surgeries in large cervical fibroid are due to distorted pelvic anatomy, difficulty in identifying the correct cleavage plane. This case highlights the importance of comprehensive preoperative assessment, surgical planning, meticulous surgical technique, operative skill and familiarity with pelvic anatomy.

Case report: A 52-year-old female, P2L2 was admitted with a complaint of heavy menstrual bleeding for 3 months. Diagnosis- AUB with large CERVICAL FIBROID. Patient was planned for Total laparoscopic hysterectomy with bilateral salpingo-oophorectomy under GA. Ureteric injuries are very common while handling large cervical and broad ligament fibroids. Total laparoscopic hysterectomy with salpingectomy done in usual steps with the use of energy sources. Cystoscopy followed by bilateral ureteric stenting was done to check integrity of ureter. As cervical fibroids are intracapsular and the ureter and uterine artery are extracapsular, this knowledge makes surgeons do safer surgical procedures despite dangerous ones. So, it is safe to do an intracapsular myomectomy i.e., enucleation before proceeding to a hysterectomy.

Discussion: To avoid ureteric injury bilateral ureteric stenting is necessary to avoid ureteric injury and to diagnose ureteric injury on table.

We can conclude that Large cervical fibroids are rare presenting with operative challenges especially in obese patients by laparoscopy. Intraoperative delineation of the ureter before applying clamps and dissection within the fibroid capsule are the best principles.

PP27

The Scar That Kept Growing: Laparoscopic Excision of Cesarean Scar Endometriosis

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Background: Cesarean Scar (CS) endometriosis is a rare form of extra-pelvic endometriosis occurring at previous surgical scars. Patients often present with cyclical scar-site pain and tender swelling. Here, we present laparoscopic management of a CS endometriosis in a 40-year-old lady

with chronic pelvic pain.

Case Report: Mrs X, P2L2 lady with two prior low-transverse CS presented with complaints of lower abdominal pain for 2 years which worsened during menses requiring intravenous analgesics. Examination revealed an anteverted bulky uterus and tender nodular swelling of 6x4cm in CS scar. Ultrasound showed a 5.3x4.5x3.5 cm heterogeneous mass at CS scar with rectus sheath involvement. Pelvic MRI was done to demarcate the lesion and demonstrated an anterior abdominal lesion of 6x5x3 cm in continuity with the endometrial cavity. She underwent total laparoscopic hysterectomy with bilateral salpingo-oophorectomy and laparoscopic excision of CS scar endometriotic lesion. Intraoperatively, endometriotic tissue was seen arising from anterior wall of uterus extending up to posterior rectus sheath. Histopathology confirmed multiple leiomyomas in uterus and fibrotic endometriotic tissue with hemosiderin-laden macrophages. She is symptom free at 3-months follow-up.

Discussion: Surgical excision is mainstay treatment for scar endometriosis refractory to medical therapy. Laparoscopic excision offers a minimally invasive approach that permits complete wide resection of the abdominal wall lesion and concurrent management of pelvic pathology. Effective management relies on targeted imaging, meticulous surgical excision, and histopathological confirmation.

PP28

The Perplexity of a Dual Pregnancy: A Silent Ruptured Noncommunicating Rudimentary Horn Pregnancy with Retained fetus and a Viable Intrauterine Gestation in Communicating Horn

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Rudimentary horn pregnancy (RHP) is a rare with incidence of approximately 1 in 76,000–150,000. Its limited muscular and vascular development predisposes it to rupture commonly in the second trimester.

Case: We present a silent rupture of noncommunicating rudimentary horn with retained dead foetus and a viable pregnancy in communicating horn of different gestational ages.

A 25-year-old G2A1 presented with ultrasound findings of a heterotopic pregnancy, viable intrauterine gestation (10 weeks) and nonviable right adnexal gestation (17 weeks) with bony structures. Menstrual history revealed a missed period followed by acute pain in abdomen in the past. On admission vitals were stable and per vaginal examination revealed a 10–12 week-sized uterus with a bony mass in the right fornix. MRI pelvis suggested unicornuate uterus with pregnancy and a rudimentary horn on the right side with ill-defined fundus with a crumpled

foetus s/o? ruptured RHP.

Diagnostic laparoscopy revealed a bulky gravid uterus on the left side with right ruptured rudimentary horn with the foetus extruded from the fundus but attached to the ruptured site. Laparotomy with excision of the rudimentary horn with foetus was done.

Conclusion: Silent rupture of rudimentary horn pregnancy occurred first followed by a second conception later in the communicating horn. Rupture usually causes catastrophic haemorrhage but avascular ruptured site could be the reason for absence of haemorrhage. Was it superfetation? Probably not though conception occurred at different times, however due to extrusion of foetus from the endometrial cavity the first conception was not perceived as ongoing.

PP29

A Rare Beat: Spontaneous Conception in Turner Syndrome with Reduced LVEF

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Introduction: Turner syndrome is a chromosomal disorder characterized by short stature, gonadal dysgenesis, and cardiovascular anomalies. Infertility is common, and spontaneous conception is reported in only 2–5 % of cases. Pregnancy in such women carries significant maternal and fetal risks, particularly when complicated by cardiac dysfunction.

Objective: To present a rare case of spontaneous conception in a woman with Turner syndrome and reduced left ventricular ejection fraction (LVEF), emphasizing clinical challenges and management strategies.

Methods: We report the case of Komal, a 25-year-old G2A1 woman, with last menstrual period on 18 January 2025, who presented at 24+2 weeks of gestation for routine antenatal care. She has Turner's habitus, with karyotype confirmed as 45,X. Cardiac evaluation showed a reduced LVEF of 40–45 %. Comprehensive obstetric assessment, serial echocardiography, and multidisciplinary consultations were undertaken as per high-risk pregnancy protocols.

Results: At presentation, maternal vitals were stable, and there were no symptoms of cardiac decompensation. Echocardiography confirmed LVEF at 40–45 %. Fetal growth corresponded with gestational age, and anomaly scan revealed no structural abnormalities. The patient was enrolled for intensive surveillance with joint input from obstetrics, cardiology, and endocrinology teams to optimize outcomes.

Conclusions: Spontaneous conception in Turner syndrome is exceptionally rare, occurring in only 2–5 % of cases. The coexistence of reduced LVEF further heightens maternal risk. This case highlights the importance of

vigilant, multidisciplinary care in ensuring maternal safety and favorable pregnancy outcomes, contributing valuable insight into managing such high-risk pregnancies.

PP30

Undiagnosed primary hypothyroidism as a cause of spontaneous Ovarian Hyperstimulation Syndrome

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Background: Spontaneous ovarian hyperstimulation syndrome is an extremely rare clinical entity typically occurring without fertility treatment. It can be associated with pregnancy, hypothyroidism or gonadotropin secreting tumours. This case report emphasizes the importance of considering primary hypothyroidism as a cause of spontaneous OHSS in differential diagnosis of ovarian cystic masses and ascites in women without history of fertility treatment or pregnancy. It also highlights the importance of evaluating thyroid status for initiating proper management and avoiding life threatening complications and unnecessary surgical interventions in cases of spontaneous OHSS.

Case Report: We report a case of 28 year old female who presented with complaints of abdominal distension, pain, nausea for 1 week and new onset breathlessness for 2 days. Patient had tachycardia, with hypotension with distended tender abdomen. Imaging revealed grossly enlarged bilateral multicystic ovaries with significant ascites. Hormonal evaluation revealed elevated TSH levels, low free T4. Diagnosis of spontaneous OHSS secondary to primary hypothyroidism was made. Management included supportive care, initiation of thyroxine, anticoagulation, dopamine agonist, therapeutic paracentesis and close monitoring.

Discussion: The pathogenesis of spontaneous OHSS in hypothyroidism is thought to involve cross reactivity between elevated TSH and FSH receptors, resulting in ovarian stimulation.

PP31

A study to access the gynaecological problems among the adolescent girls attending the outpatient department in a tertiary care hospital in north India

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Introduction and Background: Adolescence is a transition phase wherein various physical, cognitive, sexual, psychosocial and mental developmental changes occur. Adolescent girls are hesitant in addressing and discussing their problems. Since they occupy a significant proportion

of society and their wellbeing is empirical, their problems need to be identified promptly. This study identifies major health conditions faced by them.

Objectives:

1. To evaluate gynaecological problems and their clinical profile in adolescent girls
2. Types of menstrual disorders
3. Causes of irregular menses
4. Distribution according to age, menarche and body mass index

Methodology: A prospective observational study was conducted where adolescent girls in the age group of 10-19 years who attended the outpatient department were enrolled after the inclusion and exclusion criteria

Result and Discussion: The study reveals that most adolescent girls were between the ages 17-19 years and the most common problem encountered was menstrual abnormalities (57%) Irregular menses (40%) accounted to polycystic ovarian syndrome and hypothyroidism. Other menstrual complaints included heavy menstrual bleeding (50%) and dysmenorrhoea (10%)

Conclusion: Adolescent gynaecology is an important part of gynaecology. Health education regarding menstrual hygiene, healthy life style practices and reproductive health is important. Thus setting up of adolescent clinics can be useful for them.

PP32

A rare case report on OEIS complex diagnosed by USG

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Introduction: A rare congenital condition characterized by a combination of four defects: omphalocele, exstrophy of the bladder, imperforate anus, and spinal defects. The incidence is estimated to be 1 in 200,000 to 400,000 live births. Early identification through prenatal imaging is crucial for planning delivery and postnatal care.

Case report: A 40 year old female gravida 5, para 4, presented for routine prenatal care at 19 weeks of gestation. A detailed level 2 ultrasound revealed significant fetal anomalies, including 1) a large omphalocele containing bowel 2) bladder exstrophy with an exposed bladder 3) evidence of an imperforate anus 4) spinal defects consistent with myelomeningocele. The patient was counselled regarding the prognosis and the options available, including the possibility of termination of pregnancy. After thorough discussion with a multidisciplinary team, the patient chose to terminate the pregnancy. Patient was given misoprostol according to FIGO-regimen and expelled after 5 doses of tab misoprostol pervaginally.

Discussion: The OEIS complex requires careful prenatal diagnosis and planning to optimize outcomes. The collaboration between obstetricians and pediatric specialists is essential in managing such complex cases. Early surgical intervention postnatally can significantly improve quality of life and functional outcomes for affected infants.

Conclusion: This case emphasize the importance of prenatal diagnosis and a multidisciplinary approach in managing pregnancies complicated by OEIS complex.

PP33

Abdominopelvic mass with multiple rare congenital malformations -a diagnostic dilemma

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Introduction: Multiple rare congenital malformations including anorectal malformation, sacrococcygeal osseous defect, and an abdominopelvic mass clinically suspicious of malignancy is presented here, with the possibility of a rare diagnosis of Currarino syndrome. Adult presentation is extremely uncommon, occurring in approximately 1 in 1,00,000 population, and often poses diagnostic and surgical challenges.

Case Presentation: A 37-year-old female, P1L1, last childbirth (LSCS) 12 years ago at private hospital (no records available), presented with lower abdominal pain for 4-5 years. Examination revealed a 24-week uterus sized, hard abdominopelvic mass with restricted mobility. No external anal sphincter was present, anal tone was absent, yet the patient was continent. The anal opening was displaced leftward with cranial orientation. There was a double vagina separated by a 2-4 mm septum: the anterior vagina contained the cervix, while the posterior vagina opened into the rectum/anal canal ~5 cm above the fourchette. Imaging revealed a heterogeneous presacral mass (15x15 cm) abutting a septate uterus, left crossed fused ectopic kidneys, and a partial sacrococcygeal osseous defect. Intraoperatively, a large right-sided abdominopelvic mass was encountered with lower pole not accessible. Complete removal of mass tried intracapsular and approximately 200 ml of thick, putty-like material was evacuated and the cyst wall biopsy was sent for histopathology, suggestive of epidermoid cyst.

Discussion: This case fulfilled the triad criteria for Currarino syndrome: anorectal malformation, partial sacrococcygeal defect, and presacral mass.

Conclusion: Currarino syndrome may rarely present in adulthood. High index of suspicion, detailed imaging, and multidisciplinary approach are key to diagnosis and treatment.

PP34

Transverse vaginal septum with secondary endometriosis and hydrosalpinx: importance of early diagnosis and surgical management

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Background: transverse vaginal septum is a rare müllerian duct anomaly (~1 in 70,000 females) caused by incomplete canalization or fusion of the müllerian ducts with the urogenital sinus. it may present with primary amenorrhea, cyclical pain, or infertility. delayed diagnosis can cause hematocolpos, pyometra, endometriosis, and infection.

Case Report: a 32-year-old nulliparous woman presented with cyclical lower abdominal and back pain for 6–7 years, worsening over 6 months, with primary amenorrhea and infertility. per speculum: vagina normal, cervix not visualized. per vaginally: uterus anteverted, ~6 weeks, transverse vaginal membrane palpable, cervix not felt. ultrasound: hematometra (~4 cc echogenic fluid), thick transverse vaginal septum (~12 mm), right bilobed ovarian cyst with ground-glass echogenicity (endometrioma), left hydrosalpinx. combined vaginoscopic and laparoscopic septoplasty with hematometra drainage and ovarian cystectomy was performed; balloon catheter placed for stenting. recovery was uneventful.

Discussion: delayed recognition may lead to retrograde menstruation and secondary pelvic pathology. in this case, ultrasound showed hematometra, thick vaginal septum, right endometrioma, and left hydrosalpinx. mri confirmed a t2-hypointense septum in the lower third of the vagina with proximal hematocolpos, an endometrioma with t1 hyperintensity and t2 shading, and a dilated t2-bright fallopian tube. these explain the long-standing pain and amenorrhea. early diagnosis, aided by imaging, enables timely surgical excision with stenting to restore menstrual outflow, prevent recurrence, and improve fertility.

PP35

Role of Risk Factors in the Causation of Gestational Diabetes Mellitus and Fetomaternal Outcome: A Prospective Observational Study

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Introduction: Gestational diabetes mellitus (GDM) is a common pregnancy-related metabolic disorder, associated with increased maternal and neonatal complications. Early identification of risk factors is essential for timely diagnosis and improved outcomes.

Aim: To assess maternal risk factors contributing to GDM and evaluate related fetomaternal outcomes.

Materials and Methods: A prospective observational study was conducted on 121 antenatal women. GDM was diagnosed using DIPSI criteria. Risk factors analyzed included maternal age >30 years, body mass index (BMI), and family history of diabetes. Maternal outcomes studied were preeclampsia, polyhydramnios, urinary tract infection (UTI). Fetal outcomes included birth weight, NICU admission, and stillbirth.

Results: Mean maternal age was 30.28 ± 5.13 years; mean BMI was 25.74 ± 4.05 ($p=0.033$). Family history of diabetes was significantly associated with GDM ($p=0.001$). GDM women had higher rates of UTI (20.0% vs 6.3%, $p=0.033$), preeclampsia (16.0% vs 8.0%, $p=0.034$), and polyhydramnios (8.0% vs 1.0%, $p=0.046$). Stillbirths occurred only in the GDM group (4.0% vs 0%, $p=0.049$). Mean birth weight in the GDM group was 3.03 ± 0.47 kg. NICU admissions were significantly higher in GDM cases (32.0% vs 11.5%, $p=0.012$).

Conclusion: Maternal age >30, high BMI, and positive family history are key risk factors for GDM. GDM significantly increases maternal and neonatal complications. Early screening of high-risk women can help reduce adverse outcomes.

PP36

Rarity Meets Reality: Ovarian Adenosarcoma presenting with gross ascites in perimenopausal women- A case report

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Introduction- Mullerian adenosarcoma is a rare malignancy that can involve uterine and extra-uterine sites, out of which ovarian adenosarcoma is extremely rare. It comprises of both benign epithelial and malignant stromal component. Ovarian counterpart usually comes with more aggressive nature, but with fair prognosis if sarcomatous overgrowth is absent.

Case Presentation- A 45 years old perimenopausal female presented with sudden onset abdominal distension and breathing difficulty. She had abdominopelvic mass of approximately 24 weeks gravid uterus size with hepatosplenomegaly with gross ascites, elevated CA-125 levels and deranged coagulation profile. CECT Pelvis suggestive of bilateral (Left>Right) malignant ovarian mass. Ascitic fluid cytology and USG-guided FNAC from ovarian mass was non-contributory. Adenosarcoma of left ovary with no heterologous element and sarcomatous overgrowth reported after the histopathological examination of surgical biopsy. Patient symptomatically improved after debulking surgery. Carboplatin and

Paclitaxel based chemotherapy regimen decided for the patient assuming fair prognosis in accordance with the histopathological findings.

Conclusion- Adenosarcoma should be kept in mind in the differential diagnosis of ovarian masses. Multimodality treatment comprising debulking surgery followed by chemotherapy is the mainstay of treatment. More studies are needed to decide chemotherapy regimen based on presence or absence of heterologous element and sarcomatous overgrowth to improve survival rate.

PP37

Unusual Complication of Transobturator Midurethral Sling: Necrotising Granulomatous Inflammation and Chronic Pain – A Case Report

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Background: Stress urinary incontinence (SUI) affects up to 17% of women, and midurethral sling (MUS) procedures, including the transobturator tape (TOT) approach, are established surgical options when conservative measures fail. Although generally safe, TOT may rarely result in delayed, severe complications that significantly impair quality of life.

Case Report: A 26-year-old woman (P2L2A2) presented with chronic pelvic pain and persistent bilateral groin discharge, six months after an outside-in TOT insertion with pelvic floor repair for SUI. She had previously undergone incision and drainage for postoperative groin infection, with histopathology revealing necrotising granulomatous inflammation, and had completed six months of anti-tubercular therapy. Despite this, perineal pain and bilateral groin discharge persisted with mixed urinary incontinence (stress > urge) and coital incontinence. Examination showed no mesh erosion. MRI pelvis demonstrated bilateral ischioanal and inguinal collections with sinus tracts. Given the refractory symptoms and impaired daily functioning, complete mesh excision via a mid-urethral approach was performed. The tape was removed intact without complications, resulting in complete resolution of pain and discharge.

Discussion: Mesh-related complications after TOT are uncommon (1.4–2%) but can be challenging to diagnose and manage. Necrotising granulomatous inflammation is rare and may mimic infective or inflammatory conditions. Chronic symptoms often necessitate complete mesh removal, which may relieve pain but risks recurrence of SUI.

Late-onset mesh-related complications following TOT, though rare, can be debilitating. High clinical suspicion, timely surgical intervention, and structured long-term follow-up are essential to restore function and quality of

life.

PP38

When Hormone Told Two Stories: Granulosa Cell Tumour in a woman with polycystic ovarian syndrome

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Background- Granulosa cell tumours (GCT) are rare ovarian tumours comprising of less than 2% of all ovarian malignancies. These are often seen in postmenopausal women and have good prognosis. We report an unusual occurrence of GCT in a young woman with polycystic ovarian syndrome (PCOS).

Case Report- Mrs X, a 30-year-old P1L1 lady presented to gynecology OPD with chief complaints of secondary infertility infrequent menstrual cycles (only on progesterone withdrawal) for last 2 years. On examination, her weight was 42 kg, BMI 17.5 kg/m². On evaluation, a diagnosis of PCOS-D was made and was planned for ovulation induction using Letrozole. During follicular monitoring, a right adnexal solid-cystic mass measuring 4 x 5 cm size was detected. Tumour markers showed elevated AMH 49 ng/ml and serum inhibin B 1025 IU/L. A fertility sparing laparoscopic staging including peritoneal wash cytology, right salpingoophorectomy, infracolic omentectomy, peritoneal biopsy and endometrial aspiration was performed. Final histopathology was adult type granulosa cell tumour with immunopositivity for inhibin, FOXL2, pancytokeratin and calretinin (focal), while negative for SALLA4 and epithelial membrane antigen. Her normal menstruation returned four weeks after the surgery. After 4 weeks of surgery AMH was 3.4 ng/ml and inhibin B 160 IU/L.

Discussion- GCT in a PCOS patients is extremely rare and should be considered in the differential diagnosis if a PCOS patient with amenorrhea shows a unilateral solid mass. Timely diagnosis and treatment are crucial for optimal oncological and reproductive outcomes.

PP39

A Tale of Two FGR

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Introduction: The classical association of uteroplacental insufficiency with FGR is well established. With the advent of next-generation-sequencing and advances in prenatal genetics, an important cause for FGR is coming to the fore. The following two cases describe stepwise workup in the management of early-onset FGR.

Case 1: 30-year-old, G2P1L1 had combined first-trimester screen (cFTS) positive for Trisomy 21 (1:36) with abnormal biochemistry (PAPP-A; 0.25 MoM BhCG – 1.89 MoM) on dual

marker. An early anomaly scan at 17 weeks showed severe early-onset FGR. Amniocentesis with QFPCR, TORCH-PCR, Microarray was unremarkable, while WES showed a VUS in the IGF1R gene. Serial growth remained below 1st centile. AEDF was detected at 35 weeks that resulted in preterm LSCS delivering a 1.6kg healthy boy.

Case 2: 31-year-old, G2P1L0 with a previous preterm IUD at 35 weeks due to severe FGR, underwent cFTS, with screen positive for Trisomy 18/13. The Dual Marker showed low PAPP-A (0.13MoM). Early anomaly at 16 weeks was suggestive of early-onset FGR. Amniocentesis with QFPCR, TORCH-PCR, Microarray and WES was unremarkable. Subsequent scans showed severe FGR (<1st centile) with AEDF at 26 weeks. Close monitoring was done till 29 weeks when the mother had preterm IUD. She delivered a male fetus weighing 440gm.

Conclusion: Systematic workup including an early anomaly scan with genetic evaluation in a stepwise manner can refine the management of early-onset FGR. In cases with negative results on microarray and TORCH PCR, WES can be done after adequate counselling to guide the prognosis, tailor surveillance and individualise management.

PP40

Sex Cord-Stromal Tumour Masquerading as Ovarian Torsion

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Introduction: Granulosa cell tumours of the ovary are rare sex cord-stromal neoplasms, accounting for approximately 2–5% of all ovarian tumours. Although generally slow-growing, they carry malignant potential with a risk of late recurrence. Due to their rarity and varied presentation, they may mimic more common gynecological conditions such as ovarian torsion, creating diagnostic challenges.

Findings: We describe the case of a 38-year-old woman who presented with lower abdominal pain and a large abdominopelvic mass. Imaging was suggestive of ovarian torsion. However, exploratory laparotomy with intraoperative frozen section revealed malignant cells, leading to complete surgical staging. Final histopathology confirmed the diagnosis of adult-type granulosa cell tumour.

Conclusion: This case highlights the need to consider granulosa cell tumour in the differential diagnosis of adnexal masses. It underscores the importance of complete surgical management and emphasizes the necessity of long-term surveillance because of the risk of recurrence.

PP41

Bladder as an Unintended Destination: A Case Report of Intra-vesical Copper T

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Background: Intrauterine contraceptive devices (IUCDs) are commonly used for long-term contraception. It is used by approximately 14% of women due to its efficacy, safety and low cost. IUCD migration is common into abdominal cavity, also migration into adnexa, iliac vein and broad ligament has been reported. Intravesical migration is a rare complication of IUCD.

Method: We report a case of a 31-year-old P2L2 female with Copper T IUCD migration into the urinary bladder, leading to chronic lower urinary tract symptoms like urinary urgency, frequency and dysuria. On per speculum examination, the strings of IUCD were not visible and ultrasound was done which was suggestive of empty uterus with an echogenic structure in bladder. Cystoscopy was done to confirm IUCD migration in bladder and it was retrieved successfully.

Conclusion: This case highlights the importance of careful technique during insertion of IUCD and vigilance in evaluating persistent urinary symptoms following IUCD placement. Removal using cystoscopy appears to be minimally invasive and effective approach for intravesical migration of IUCD with excellent outcomes.

Key words: Copper T IUCD, Intravesical migration, Cystoscopic retrieval

PP42

Incidental Ectopic Pregnancy Diagnosed During Interval Tubal Ligation Following Unsupervised Medical Abortion

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Introduction: Ectopic pregnancy is a potentially life-threatening condition that may be masked by unsupervised use of medical abortion pills. We report a rare case where multiple interventions within a single week led to the incidental diagnosis of ectopic pregnancy during interval tubal ligation.

Case: A 33-year-old P2L2A5 woman presented with abdominal pain after self-administration of MTP pills without ultrasound confirmation. Persistent bleeding led to VACC at a local hospital. Subsequently, she underwent mini-laparotomy with left tubal ligation at a government hospital, during which a right tubal ectopic was incidentally noted. She was referred to AIIMS, where laparoscopic right salpingectomy was performed.

Discussion: This case illustrates the dangers of unsupervised medical abortion which can mask or delay the diagnosis of

ectopic pregnancy. Multiple sequential procedures within one week increased the risk of morbidity. Routine early ultrasound prior to abortion or sterilization is crucial for preventing missed ectopics.

Conclusion: Ectopic pregnancy must be ruled out before any medical abortion or gynaecological procedure is undertaken. Use of MTP pills without medical guidance poses serious risks, especially when ectopic gestation is unknowingly present. Incidental findings during routine procedures further underscore the importance of comprehensive preoperative assessment.

PP43

Postpartum Pubic Bone Diastasis : A Rare Complication of Difficult Labour

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Introduction: Postpartum pubic bone symphysis diastasis is defined as abnormal separation of the two pubic bones following delivery of >10 mm. It is an uncommon and debilitating complication of difficult labour, presenting as severe pelvic pain. Incidence varies from 1 in 300 to 1 in 30000.

Case presentation: 25-year-old, P3L2 presented on postpartum day 3 following vaginal delivery at home conducted by local birth attendant with complaints of severe pain in suprapubic region along with difficulty in walking and urinating. Labor duration was >24 hours. Local examination revealed 3x4 cm hematoma on the right labia with surrounding induration and tenderness over the mons pubis. PS and PV examinations were normal. She was catheterized, 200 cc hemorrhagic urine drained.

X-Ray Pelvis showed pubic bone separation. Ultrasound revealed heterogeneous hypoechoic collection in suprapubic region just below muscular plane. Right labial collection of 28cc. CT urography after orthopedic and surgery consultation revealed retropubic collection 2.6x1.4 cm with wide pubic bone separation and no injury to bladder or urethra. She was managed conservatively with analgesics, pelvic binder and physiotherapy was commenced after 1 week for weight bearing and gradual ambulation. She was discharged after 1 month.

Conclusion: During pregnancy and delivery, the ligaments around the pubic symphysis become flexible and physiological separation of 4-5mm may occur. However, pathological separation should be suspected in women experiencing excruciating pain in the pubic region after prolonged/difficult labour. Radiological imaging is key to diagnosis. Most women respond to conservative management. Severe cases may require surgical intervention.

PP44

A Benign Masquerade of Malignancy: Diffuse Peritoneal Leiomyomatosis – Case Report

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Background: Diffuse peritoneal leiomyomatosis (DPL) is an uncommon benign condition characterized by the proliferation of multiple smooth muscle nodules dispersed over the peritoneal surfaces. It can closely mimic peritoneal carcinomatosis in both clinical presentation and imaging, often leading to diagnostic confusion. Clinically, patients may be asymptomatic, or incidentally detected during imaging or surgery, present with abdominal pain, palpable masses, or pressure symptoms depending on the extent of peritoneal involvement. The condition is related to hyperestrogenic states. Although generally benign, rare cases of malignant transformation have been reported.

Case Presentation: A 35-year-old woman, P1L1, presented with a one-year history of persistent abdominal pain and a palpable abdominal mass. Her surgical history included laparoscopic myomectomy in 2022, followed by total laparoscopic hysterectomy. Contrast-enhanced CT and MRI revealed two irregular, lobulated masses distributed over the peritoneum and abdominal wall, radiologically mimicking peritoneal carcinomatosis. Tumor markers were within normal limits. An exploratory laparotomy revealed large, firm nodular lesions adherent to the peritoneum and one along the visceral surface of the liver. Histopathological evaluation is pending for definitive diagnosis.

Discussion: This case highlights the diagnostic challenge of DPL, which closely mimics peritoneal malignancy and importance of meticulous surgical technique during laparoscopic myomectomy to prevent dispersion of residual fibroid tissue within abdominal cavity. Awareness is important to avoid unnecessary radical interventions. Accurate diagnosis requires combination of careful clinical assessment, imaging, and histopathological evaluation. Management should be individualized to patient's symptoms, reproductive desires, and disease extent, with long-term surveillance recommended given the potential risk of malignant transformation.

PP45

Villar Nodule Without Surgical Scar – A rare case report

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Background: Umbilical endometriosis, also known as Villar's nodule, is an uncommon manifestation of extra

pelvic endometriosis, accounting for less than 1% of all endometriosis cases. It typically presents as a painful umbilical swelling during menstruation. Its coexistence with deep infiltrating endometriosis (DIE) and infertility is rare, posing diagnostic and therapeutic challenges. Here, we present a case of umbilical endometriosis in a 32-year-old woman with infertility.

Case Report: Mrs X presented with complaints of primary infertility and severe dysmenorrhoea for 4 years. There was no past surgical history. For last 6 months, she noticed a painful umbilical swelling that enlarged and bled during menstruation. Clinical examination revealed a 1x1cm firm, tender nodule in umbilicus. Imaging suggested right ovarian endometrioma and an umbilical deposit. She initially opted for medical treatment with dienogest 2 mg once daily but there was minimal relief. After thorough discussion, she underwent laparoscopic right ovarian endometriotic cystectomy and excision of umbilical endometriosis. Histopathology confirmed diagnosis of endometriosis at both pelvic and umbilical sites.

Discussion: Umbilical endometriosis can occur secondary to surgical seeding or, very rarely via hematogenous or lymphatic spread without prior abdominal surgery, as in our case. Presence of concurrent DIE and infertility necessitates comprehensive evaluation and multidisciplinary surgical management. Complete excision of lesion is usually curative along with addressing coexisting pelvic disease to improve reproductive outcomes. This case highlights the importance of considering umbilical endometriosis as a benign mimic of Sister Mary Joseph nodule in women of reproductive age presenting with cyclical umbilical lesions.

PP46

Double uterus, single kidney: Difficult Laparoscopic Hysterectomy for complex mullerian anomaly in a young renal transplant recipient woman with previous four laparotomies

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Background: Mullerian anomalies are congenital malformations resulting from improper development, fusion, or resorption of Mullerian ducts during embryogenesis requiring multiple interventions. Here, we present a difficult laparoscopic hysterectomy in a 34-year-old renal transplant recipient woman with previous four laparotomies for refractory dysmenorrhea due to complex mullerian anomaly.

Case Report: Mrs X, diagnosed with complex mullerian anomaly, presented with chief complaint of severe dysmenorrhea for 8 months requiring injectable analgesics. She had history of primary amenorrhea requiring

laparotomy for haematometra and excision of vaginal septum at 12 years of age. She remained asymptomatic for 2 years, when she developed haematometra again. Vaginoplasty, metroplasty were performed. However, post-operatively, bladder injury was detected and repaired surgically after 6 weeks. Subsequently, right hydroureter and renal failure was detected requiring renal allo-transplant in left iliac fossa. At present, she was counselled thoroughly about limited options and opted for hysterectomy in view of severe dysmenorrhea and compromised quality of life. She underwent laparoscopic adhesiolysis, hysterectomy and bilateral salpingectomy. Intraoperatively, there were dense adhesions with anterior abdominal wall, bladder was densely adherent and DIE posteriorly. Patient remains symptom-free at 3 months follow-up

Discussion: Conservative surgical interventions in this particular case had high probability of developing obstruction, sepsis, pelvic abscess or compromise of transplanted kidney leading to increased morbidity. Thus, while fertility-preserving surgery remains important in selected anomalies, in complex cases, the emphasis should shift towards timely definitive treatment to optimize patient outcomes. For patients with complex Mullerian anomalies with severe pelvic adhesions, minimally invasive approach is feasible.

PP47

Diagnostic Challenge: Ovarian Fibroma Masquerading as Broad Ligament Fibroid"

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Introduction – Ovarian fibroma are benign tumor composed mainly of fibrous / connective tissue. They are usually slow-growing, firm asymptomatic but can cause symptoms depending on their size and location. In the pelvis, they can mimic uterine fibroid.

Objective - Ovarian fibroma are rare benign tumor that can mimic uterine fibroid or broad ligament mass. Preoperative diagnosis is often challenging as ultrasound and MRI may not clearly differentiate them.

Method- A 55 yr old multigravida female presented with abdominal pain of 2–3 months. The pain was insidious in onset and non-progressive. The patient reported restart of menses after five months of amenorrhea. Over the past year, her cycles have been irregular, occurring every 2–3 months. On palpation, the abdominal mass corresponded to an 18-week size uterus, firm to hard in consistency, with side-to-side mobility. On per vaginal examination, the cervix was felt separately from the mass, which was mobile and non-tender. MRI suggested a broad ligament fibroid. Ultrasound revealed a large heterogeneous mass measuring 10.6 × 10.8 × 11 cm in the right adnexa, separate from the uterus; the right ovary was not visualized separately.

Result- The patient underwent total abdominal hysterectomy with bilateral salpingo-oophorectomy, intraoperative frozen section which revealed a cellular fibroma.

Conclusion - This case highlights dilemma in diagnosing ovarian fibroma on MRI and significance of a good clinical examination.

PP48

Accessory Cavitory Uterine Malformation(ACUM)

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Background: Accessory Cavitory Uterine Malformation (ACUM) is rare Müllerian duct anomaly, characterized by the presence of non-communicating, functional endometrial cavity within the normal uterus. Patients typically present in adolescence with severe, progressive dysmenorrhea chronic pelvic pain that is refractory to conventional medical therapies. Case Report We report the case of a 35-year-old multiparous female presented with left sided pelvic pain increasing during menses. The ultrasound was suggestive, 2.5 x 2.5cm lesion in the left adnexa with normal vascularity and ovary on right side. MRI revealed a well defined cavitory lesion in left lateral wall of uterus. The provisional diagnosis was Accessory and Cavitated Uterine Malformation. The differential diagnosis was non communicating rudimentary horn and subserosal fibroid with degeneration. The patient was taken up for diagnostic laparo-hysteroscopy. The diagnosis of ACUM was confirmed by the presence of a 3Å—3cm lesion on the left wall of uterus below the round ligament, not communicating with the endometrial cavity. The mass was excised. Upon a follow up of about six months, the patient has been completely relieved of her symptoms. Discussion Patients with ACUM usually present in adolescence and early adulthood with severe dysmenorrhoea and pelvic pain. As the entity is very rare, a high index of suspicion is required to diagnose it, especially in older parous women in whom other causes of secondary dysmenorrhea and pelvic pain are prevalent.

PP49

Antenatal diagnosis of 22q11 deletion syndrome: case report with autopsy correlation

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Introduction: 22q11 deletion syndrome is congenital disorder resulting from microdeletion at chromosome 22q11 characterized by defects in the development of the third and fourth pharyngeal pouch leading to abnormalities in the thymus, parathyroid, heart and craniofacial structures..

antenatal diagnosis often difficult as sonographic findings may be subtle. Early identification facilitates informed counseling and pregnancy management.

Objective: To report a case of antenatal diagnosis of 22q11 deletion syndrome detected on targeted imaging and confirmed by chromosomal microarray, with autopsy and histopathological correlation.

Method: 35-year-old g5p11a3 26 weeks of gestation underwent detailed level 2 ultrasound revealed polydactyly and echogenic foci in fetal liver. fetal echocardiography demonstrated major and multiple heart defects, hypoplastic thymus. amniocentesis performed and evaluated by chromosomal microarray analysis. following confirmation 22q11.2 deletion, medical termination of pregnancy was undertaken. complete fetal autopsy and histopathological examination was conducted.

Results: Chromosomal microarray detected pathogenic 22q11.2 deletion. autopsy confirmed thymic hypoplasia on histopathology and hepatic calcifications, correlating with antenatal imaging findings.

Conclusion: This case emphasizes role of integrated prenatal imaging and invasive genetic testing in detecting syndromic anomalies. thymic hypoplasia, though subtle, may be critical marker for 22q11 deletion. chromosomal microarray remains valuable diagnostic tool but ultrasound findings are suspicious. autopsy correlation enhances diagnostic accuracy, provides closure to families and supports genetic counseling for future pregnancies.

PP50

Septic abortion leading to septic myocarditis

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30 year old female P2L2A1 presented to casualty with h/o MTP pill intake one month back followed 2 weeks later by ghabrahat and disorientation, USG s/o RPOCs. She had h/o admission to ICU in Hospital A and then went to hospital B in gasping state and one episode of GTCS where she was intubated and referred to LNH. On admission, pH 7.285 Na+ 103 and K+ 4.6. Patient received ICU care, mechanical ventilation ionotropic support and higher antibiotics. The patient gradually recovered and was extubated, regained consciousness but slowly became disoriented to time place and person. Echo s/o Cardiomyopathy with reduced EF 30-35%. MRI S/o multiple infarcts in basal ganglia? wernickesencephalopathy ?septic emboli

PP51

Heart block in pregnancy

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Introduction: Heart block, atrioventricular (AV) block, is a rhythm disorder where the electrical signals that coordinate the heart's contractions are delayed or blocked, which can lead to a slower or irregular heartbeat. It can be congenital or acquired.

Atrioventricular (AV) block in pregnancy is infrequently encountered.

Case Report: A 27 year old woman, G2P1L1 with previous 1 LSCS, was referred to Lok Nayak Hospital at 38 weeks with third-degree atrioventricular block, which was an incidental finding in preoperative investigation. Patient was worked up and had no significant history other than a history of chicken pox at 7 months of amenorrhea, with one episode of fainting.

On examination patient had pulse rate of 50 beats per minute, regularly irregular, systemic examination was within normal limits. A multidisciplinary team consisting of Obstetrician, cardiologist, anaesthetist and paediatrician was made. The patient underwent temporary pacemaker implantation with the heart rate set at 100 beats per minute, followed which patient underwent LSCS for obstetrical indication at 38+3 weeks in the presence of a cardiologist.

Postoperative period was uneventful.

Patient was then transferred to cardiology department on post op day 3 for permanent pacemaker implantation.

Clinical Relevance : Complete heart block(CHB) in pregnancy is rare, if present it is usually congenital.

Isolated Congenital CHB is relatively benign, compatible with normal pregnancy.

Acquired heart block are usually symptomatic.

Permanent pacemaker can be implanted at any stage of pregnancy. Short-term temporary pacing may be required during labour and delivery.

Patient should be monitored throughout pregnancy and postpartum.

PP52

Postpartum Cardiomyopathy on Postoperative Day 1 Following Emergency Cesarean Section: A Case Report

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Background - Postpartum cardiomyopathy (PPCM) is an uncommon but serious form of heart failure occurring in the last month of pregnancy or within five months

postpartum, without prior cardiac disease. The incidence in India is approximately 1 in 1,374 live births. Proposed causes include immune-mediated injury, coronary abnormalities, gestational hypertension, preeclampsia, diabetes, and genetic susceptibility (e.g., TTNC1, TTN, STAT3 mutations). The "two-hit" hypothesis suggests myocardial damage from a 16 kDa prolactin fragment in genetically predisposed women. Presentation mimics congestive heart failure (CHF) with fatigue, breathlessness, orthopnoea, and pulmonary oedema.

Case Report -A 22-year-old unbooked G2P1L1 at 37+6 weeks with prior cesarean, breech presentation, scar tenderness, and short interconception interval underwent emergency LSCS. Six hours postoperatively, she developed chest pain and breathlessness. Vitals showed hypovolemic, regularly irregular pulse (62/min), BP 110/70 mmHg, and SpO2 88% on room air. Initial suspicion of thromboembolism led to anticoagulation, but subsequent workup (normal D-dimer, CTPA) excluded it. 2D Echo revealed left atrial and ventricular dilatation, EF 35%, moderate MR, and trivial AR. PPCM was diagnosed, and the patient improved with dobutamine and supportive management in ICU.

Discussion- PPCM remains poorly understood and potentially life-threatening, affecting women in their reproductive years. Early recognition is crucial, particularly in postpartum patients with CHF-like symptoms unresponsive to standard therapy. Echocardiography is key for diagnosis, and multidisciplinary management in high-dependency or ICU settings is essential. Prompt initiation of heart failure therapy, including diuretics, beta-blockers, and inotropes when indicated, can significantly improve outcomes.

PP53

A large ovarian cyst detected in second trimester and its management a large ovarian cyst detected in second trimester and its management

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Background: Adenexal and pelvic masses are encountered in approximately 0.3% of pregnancies. While the majority are benign and asymptomatic, some lead to acute complication and turn out to be malignant.

Case Report: A 23 year, Primi at 20+6 weeks presented to emergency room with acute abdomen, nausea and vomiting increasing since morning. She was vitally stable, on per abdomen examination uterus of 20 weeks and a solid cystic mass of 10*10*10 cm with restricted mobility was palpable. On per vaginal examination tenderness and fullness felt at right side. Previous documents showed dermoid cyst. tumor markers were sent which revealed

normal values. Ultrasound was done which revealed a solid cystic lesion in right adnexa 9.5*6.1*9.7 cm showing haemorrhagic contents largest measuring 4.8*5.2cm with dilated fallopian tube suggestive of right ovarian dermoid cyst with right hydrosalpinx. Patient was taken up for exploratory laprotomy. Per operative findings suggestive of right adnexal mass of 10*9*7 cm twisted 360 with one turn at ovarian ligament. Cystectomy and detorsion was done and specimens were sent for histopathology. Histopathology is suggestive of mature cystic teratoma. Post operative stay was uneventful. Currently patient is 27+6 weeks and following in our antenatal OPD.

Discussion: Approximately 0.3% of pregnancies contain a dermoid cyst, which is usually detected in second trimester. Dermoid cysts are more likely to cause complications like torsion, rupture and infections in pregnancy. A large cyst can cause significant maternal and fetal morbidity cases if it ruptures or twists. A timely intervention like done in this case is beneficial too both mother and baby.

PP54

Early Detection of Caesarean Scar Ectopic: A Case Report and Clinical Insight

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Background: Caesarean scar pregnancy (CSP) is a rare form of ectopic pregnancy where implantation occurs at the site of a previous caesarean section scar. Although it represents less than 1% of all ectopic pregnancies, it carries a high risk of uterine rupture and severe bleeding. With rising caesarean delivery rates, the incidence of CSP is increasing.

Case Report: A 34-year-old G2P1L1 at 8 weeks of gestation was found to have trophoblastic tissue extending into the previous scar on routine dating scan. Serum beta-HCG was 123,963 mIU/ml. MRI revealed intact serosa, absent myometrium, thinned anterior uterine wall, and a beak-like protrusion of the gestational sac into the scar. The patient was started on mifepristone and misoprostol. Due to heavy bleeding she was admitted and given a single intramuscular dose of methotrexate followed by folic acid. Beta-HCG showed a decreasing trend post-treatment.

Discussion: Early detection of CSP is critical to prevent complications such as uterine rupture and hemorrhage. Diagnosis relies on transvaginal ultrasound, MRI and beta-HCG monitoring. This case highlights the need for high suspicion of CSP in early pregnancy among women with prior caesarean delivery, even if asymptomatic.

PP55

First trimester uterine rupture-A rare and baleful event

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Introduction: Uterine rupture is a rare but serious cause of obstetric hemorrhage, particularly in early pregnancy. First-trimester rupture is uncommon and is typically associated with uterine anomalies, such as a bicornuate uterus. In some instances, the etiology may remain undiagnosed.

Case Description: A 29-year-old nulliparous woman, with a previous cesarean section, presented to the hospital at 13 weeks and 5 days of gestation (as determined by an early ultrasound) with complaints of abdominal pain. Upon examination, the patient appeared moderately pale, with a blood pressure of 100/60 mmHg and a pulse rate of 90 beats per minute. Abdominal examination revealed diffuse tenderness, and the uterine size could not be ascertained. Speculum examination revealed the absence of vaginal bleeding. Per vaginal examination, the uterus was not palpable, and cervical motion tenderness was noted. Ultrasound demonstrated a dead fetus at 13 weeks located outside the uterus, an anterior placenta, and free fluid in the cul-de-sac, sub-hepatic, and left flank regions—suggesting uterine rupture or scar dehiscence.

Result: Emergency laparotomy revealed approximately 800 cc of hemoperitoneum. A complete fundal rupture was observed, with the fetus and placenta present in the abdominal cavity. The previous lower segment cesarean scar was intact. Bilateral fallopian tubes and ovaries were normal. Bilateral tubal ligation was performed.

Conclusion: Although extremely rare, fundal rupture in early pregnancy can lead to life-threatening complications. Early suspicion and prompt surgical management are essential for a favorable outcome.

PP56

Successful outcome of pregnancy in Eisenmenger syndrome

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Objective / Introduction: A rare case of pregnancy complicated by Eisenmenger Syndrome (ES) and its successful outcome.

Case Description: 25 year old primigravida (married for 3 years) at 31+5 weeks of gestation made her first ANC visit, referred from local hospital because of Eisenmenger syndrome. Patient was diagnosed with Eisenmenger Syndrome at 3 months of age with recurrent pneumonia during childhood. Surgery and cath study couldn't be done because of poor built, so started on tadalafil by cardiologists but was not compliant, was admitted at 31+5 weeks with acyanotic congenital heart disease (large VSD) with Eisenmenger Syndrome with NYHA II CARPREG 2 with modified WHO gd 4. Following admission, Feto-maternal surveillance done. After multidisciplinary referrals and consultations, was conservatively managed with tadalafil and planned for elective CS at 34 weeks. Post operatively

monitored in ICU for 6 days for inotrope support, weaned off, shifted to HDU, discharged on sildenafil on post-op day 12 with healthy baby with no complications.

Result: Pregnancy is associated with 30 - 35 percent maternal mortality in ES. Intrauterine growth restriction is expected in 30% fetuses. Epidural anesthesia should be preferred. For above reasons, contraception advice is very important.

Conclusion: Pregnancy is generally avoided, if conceives medical termination of pregnancy is advised because of high mortality, should be managed in tertiary care.

PP57

Peripartum Cardiomyopathy

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Aim /Introduction: Peripartum cardiomyopathy (PPCM) is a rare but potentially life-threatening form of heart failure occurring in last month of pregnancy or within 5 months after delivery. In Indian population, it's incidence is 1 in 1340 live births with maternal mortality rate of 11.7% and fetal mortality of 14.7%.

Method/Case description: A 25 year primigravida at 38+3 week of gestation was referred with acute-onset shortness of breath for 2 days, gradually worsening with orthopnea. She was vitally stable, with unremarkable chest and cardiovascular examination. On per abdomen examination, uterus was corresponding to 30-32 weeks with fetal cardiac activity present on auscultation.

Two dimensional echocardiography(2D Echo) Report showed left ventricle systolic dysfunction with Ejection Fraction of 35%, suggestive of dilated cardiomyopathy. On ultrasound, absent end diastolic flow was present. Multidisciplinary team was formed, and after risk counselling, the patient underwent an emergency cesarean section for fetal indication. Intraoperative period was uneventful. Single live child of birth weight 2095 gm was delivered.

Post operatively patient was monitored in a high dependency setting and managed with intravenous antibiotic, furosemide and carvedilol. Repeat 2D Echo confirmed left ventricle systolic dysfunction consistent with peri partum cardiomyopathy. Post operative stay was uneventful and the patient was discharged on carvedilol and torsemide.

Result/Conclusion: Early diagnosis and prompt multidisciplinary intervention can prevent severe complication like arrhythmias, heart failure and significantly improve recovery.

PP58

A rare case of decidual cast expulsion following uterine compression sutures

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Introduction: Decidual cast is a rare occurrence when there is spontaneous sloughing of endometrium (decidua) as a single, large piece while retaining the shape of the endometrial cavity. This condition could be caused by hormonal fluctuations, hormonal contraceptions, ectopic pregnancies or due to other unknown reasons.

Case: A 21-year lady, P1L1 on day 34 of cesarean section done in view of second stage arrest, presented to casualty with complaints of something coming out of vagina. There was history of atonic PPH intraoperatively, controlled by bilateral uterine artery ligation and Hayman sutures, along with history of puerperal sepsis. Patient was admitted and investigated. USG revealed heterogeneously hypoechoic content in endometrial cavity of max thickness 2.9 mm with multiple echogenic foci. Patient was examined under spinal anesthesia, where a mass of 15x4 cm in size and 2 cm thickness protruding from vagina, suspected as decidual cast, was removed under aseptic precautions and sent for histopathological examination. Histopathology report was suggestive of myometrial tissue.

Clinical Relevance: Uterine compression sutures may cause uncertain effects on the myometrium and endometrium. If suitable amount of compression is generated on the myometrial and endometrial blood supply, then decidua may shed in the form of a cast. In suspected cases, the patients can be counselled regarding the potential complications and follow up.

PP59

The Eye Does Not See What The Mind Does Not Know: A Rare Case Of Fetal Umbilical-Portal-Systemic Venous Shunt

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Background: Umbilical-portal systemic venous shunts (UPSVS) are rare congenital venous malformations that can be reliably detected on ultrasound yet are underreported. They can be associated with aneuploidies and have a higher risk of foetal growth restriction, intrauterine demise or perinatal morbidity and mortality. Here, we present an interesting case of UPSVS.

Case Report: Mrs X, primigravida, IVF conception, presented with routine foetal ultrasonography showing absent ductus venosus (DV) at 30 weeks gestation. First trimester NT/NB scan was normal. Level II scan showed

single umbilical artery and small ventricular septal defect. Sonography at 28 weeks revealed absent DV with umbilical vein (UV) draining into right atrium. Foetal echocardiography confirmed the above findings and additionally suggested severe tricuspid regurgitation and non-visualisation of right ventricular outflow tract. Fetal MRI showed right UV draining into right atrium with atretic left UV. Geneticist advised invasive testing for karyotype and microarray, however, this was declined by patient. Pregnancy was further complicated by impending eclampsia with severe features necessitating caesarean delivery done at 34 weeks. Postnatally baby required a month of NICU stay with non-invasive ventilation and ibuprofen and was discharged at 5 weeks of life. Both mother and baby continue to be under follow-up.

Discussion: Awareness on UPSVS is very limited. With advanced ultrasound and doppler technology it is increasingly recognized. Genetic testing should be offered in all cases. The prognosis depends on prenatal cardiac overload and is variable depending on the type of shunt. Delivery should be planned at a tertiary level NICU facility.

PP60

From Crisis to Cradle: A Remarkable Pregnancy Journey Through Hyperhemolytic Crisis in Thalassemia Intermedia

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Case Report: A 21-year-old G2A1 woman, beta thalassemia intermedia, presented at 27 weeks gestation with diamniotic dichorionic twins and complaints of jaundice and breathlessness following massive blood transfusion. Investigations revealed haemoglobin level of 2.7 g/dL, reticulocytopenia, rising bilirubin, and elevated LDH, consistent with Hyperhemolytic syndrome. Anti-S and JK antibodies were detected. Despite low haemoglobin no further blood could be transfused due to blood transfusion reactions. After multiple sessions of MDT counselling, Rituximab was started despite lack of safety data in pregnancy after explaining consequences. Slowly some clinical improvement was apparent and her Hb came to be 5g/dL%. However, by this time, twins developed alloimmunisation and severe anaemia (raised MCAPSV) due to the maternal antibodies, suggesting alloimmunisation with minor antibodies. An emergency caesarean delivery was performed at 32 weeks in view of severe fetal anaemia. One of the twins survived and discharged after 5 weeks of NICU care.

Discussion: This case highlights importance of early recognition of HHS in pregnancy and critical role of immunomodulatory therapy in management. Avoidance

of further transfusion, prompt initiation of IVIG and steroids, and multidisciplinary care can optimize outcomes. Awareness of this rare entity is essential for obstetricians and hematologists managing high-risk pregnancies.

PP61

When Aorta, Lens, and Womb Collide A Multidisciplinary Triumph in Marfan Syndrome

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Background: Marfan syndrome is a rare autosomal dominant connective tissue disorder with multisystem involvement, posing significant maternal and fetal risks during pregnancy.

Careful multidisciplinary management is essential to optimize outcomes. Here, we report successful pregnancy outcome in a 31-year-old woman with Marfan Syndrome.

Case Report- Mrs.X, primigravida, presented at 3 months amenorrhea for antenatal care. She was diagnosed with Marfan Syndrome in childhood following visual disturbances and bilateral lenticular subluxation with secondary glaucoma. She denied any cardiovascular complaints and pre-pregnancy ECG and echocardiogram was normal. First trimester NT/NB scan was unremarkable. Chorionic villous sampling suggested fetus with heterozygous Marfan mutation. Parents were counselled regarding variable phenotype and, incomplete penetration, and opted to continue the pregnancy. Antenatal care was complicated by moderate anemia, visual issues, and backache. Maternal MRI Spine showed a large meningocele with dural ectasia. Neurosurgical assessment advised postnatal repair of meningocele. Repeat maternal cardiovascular evaluation showed normal ECG and aortic root dilatation of 34mm.. An elective caesarean delivery was conducted under general anesthesia at term and a healthy baby was delivered. Early puerperium was unremarkable and she was discharged on post-operative day-4.

Discussion: Marfan syndrome is one of the most common autosomal dominant genetic conditions that affects connective tissue. Often, cardiovascular system, skeleton and eyes are affected. During pregnancy, these individuals are at increased risk of aortic dissection. An individualized approach involving multidisciplinary team (cardiologist, ophthalmologist, genetics, anesthetist, neonatologist) is crucial for monitoring, decision-making and perinatal preparedness. Comprehensive surveillance—including serial echocardiography, ophthalmologic evaluation, and genetic counseling is critical

PP62

Corrosive injury with burst abdomen in pregnancy: a rare co-incidence

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Introduction: Corrosive ingestion during pregnancy is a rare but serious condition that can lead to severe upper gastrointestinal damage, systemic toxicity, and complications for both mother and fetus. Management requires a multidisciplinary team to optimize outcomes.

Objective: To highlight the importance of a multidisciplinary approach in managing corrosive injury during pregnancy.

Case Report: Mrs. A, a 34-year-old woman, G3P2L2 at 28 weeks gestation, presented with accidental ingestion of a toilet cleaner. She experienced burning in the mouth, hoarseness, and progressive dysphagia. Upper GI endoscopy showed severe oesophageal mucosal congestion and oedema. As she could not tolerate oral intake, total parenteral nutrition (TPN) was initiated. Due to risks associated with prolonged TPN, an elective feeding jejunostomy (FJ) was performed at 30 weeks.

On postoperative day 8, she developed wound dehiscence with burst abdomen. A Bogota bag was used for temporary closure, and intravenous antibiotics were administered. Regular dressing and bag changes led to granulation and eventual wound healing. She tolerated a curd-based diet via FJ. Fetal surveillance revealed fetal growth restriction at 34 weeks. At 37 weeks, gestational hypertension prompted planned LSCS, coordinated with GI surgeons to prevent evisceration during labor.

The procedure and postpartum period were uneventful. She was discharged on postoperative day 4.

Results: FJ remains functional. The wound healed well, and the patient is under follow-up with gastroenterology for ongoing care.

Conclusion: Successful maternal and fetal outcomes in corrosive ingestion during pregnancy depend on timely, multidisciplinary care.

PP63

Navigating the Dual Challenge of Evans syndrome and Pregnancy

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Background- Evans syndrome is a rare autoimmune disorder characterized by the simultaneous or sequential occurrence of autoimmune hemolytic anemia (AIHA) and immune thrombocytopenia (ITP), with or without neutropenia. We present a case of Evans syndrome in

pregnancy with its unique challenges during pregnancy.

Case Report: Mrs. X, a 26-year-old G3P1L1A1, a diagnosed case of Evans syndrome (since last 5 years) with APLA positive was well controlled on low-dose prednisolone, azathioprine and anticoagulant therapy. She had spontaneous conception. At 18 weeks of gestation, she had hematological flare as presented with gum bleeding, blood in stools, bleeding from injection sites, and anasarca. On investigations, she had bicytopenia (Hb 7.5 g/dL, platelets 40,000/mm³) and neutrophilic leukocytosis with toxic changes. She was well managed with IV methylprednisolone and escalation of azathioprine. Antiplatelet and anticoagulant therapy were withheld during recovery. Her blood counts improved without requiring transfusion and was kept on close antenatal follow up. She underwent pre-term emergency cesarean section at 31+3 weeks for PPRM with non-reassuring NST. Baby received NICU care.

Conclusion: Evans syndrome should be kept in mind as differential of unexplained thrombocytopenia in pregnancy. Multi-disciplinary approach for life threatening anaemia and thrombocytopenia, close maternal-fetal surveillance & appropriate monitoring of blood parameters during pregnancy is the key to favourable foeto-maternal outcome.

PP64

Recurrent Vulvar Aggressive Angiomyxoma with Hormonal Receptor Shift following Treatment Interruption- A Rare Case Report

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Background: Aggressive angiomyxomas (AA) are rare, with only around 350 cases been documented in the scientific literature so far, slowly growing soft tissue tumors seen in the pelvic and perineal region of women in reproductive age. Although benign, they are locally infiltrative with high risk of recurrence.

Case report: A 41-year-old woman presented to a district hospital in 2016 with a gradually increasing perineal swelling. Examination revealed a 20 × 10 cm pedunculated mass arising from the left labia majora. MRI showed a hyperintense lesion involving the ischiorectal fossa. Wide local excision was performed. Histology confirmed aa, positive for Estrogen receptor (ER), Progesterone receptor (PR) and Desmin. She was started on Tamoxifen to prevent recurrence. During the covid-19 pandemic, therapy was interrupted. The mass recurred gradually over 3 years. In 2025, at age 50, she presented to our tertiary hospital with an 8 × 8 cm firm, infiltrative lesion causing difficulty in defecation. MRI revealed a solid-cystic lesion extending across the pelvic diaphragm suggestive of recurrence.

Wide excision was repeated. Histopathology showed spindle cells in myxoid stroma with hemorrhagic foci. Immunohistochemistry was now PR, Desmin positive, but ER, Periodic- acid-schiff (PAS), Alcian blue, and Smooth Muscle Actin (SMA) negative. She was started on Mifepristone 25 mg daily and advised periodic imaging for follow up.

Discussion: This case underscores the importance of continued hormonal therapy and follow-up in AA. Recurrence may be associated with receptor profile changes. Maintenance chemotherapy and periodic imaging should be done to reduce recurrence risk.

PP65

A Case Report on Aggressive Angiomyxoma of the Vulva

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Introduction: Aggressive angiomyxoma (AAM) is a rare, locally infiltrative benign mesenchymal tumour that affects women of reproductive age and often presents as recurrent vulvoperineal mass.

Objective: AAM should be considered in differential diagnosis of a recurrent vulvoperineal mass as it is a cause of recurrence in 30 to 72% cases.

Methods: A case report on a 29-year-old nulliparous female presented with a recurrent, painful, enlarging right labial swelling since February 2025. There was no family history of malignancy or significant comorbidities. No menstrual abnormalities. She had previously also undergone excision of a right vulval cyst in May 2023. On examination, an 8×5 cm tender, fluctuant lesion was palpable in the right labia. On palpation via rectum confirmed extension into the pelvis. Transabdominal ultrasound revealed a normal uterus, clear adnexa and no free fluid. Pelvic MRI revealed a large, lobulated, hyperintense on long TR, T1-hypointense, cystic mass measuring 12×11.5×7 cm with a classic swirling pattern. It was involving the right labia, vagina, ischioanal fossa and was abutting the obturator muscle without evidence of infiltration or lymphadenopathy, favouring the diagnosis of aggressive angiomyxoma.

Results: The patient underwent combined abdominoperineal excision under spinal-epidural anaesthesia on June 30, 2025. Histopathological examination revealed a myxoid stroma with scattered spindle and stellate cells, abundant vascular channels, and infiltrative margins. Immunohistochemistry was positive for estrogen receptor, progesterone receptor and desmin with a Ki-67 index <1%, confirming aggressive angiomyxoma.

Conclusion: Aggressive angiomyxoma requires regular long-term follow up. MRI aids in diagnosis and follow up. Systemic hormonal therapy may be considered.

PP66

Adnexal High-Grade Endometrial Stromal Sarcoma Arising from Ovarian Endometriosis : A Rare Case Report in a Nulliparous Female

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Introduction: Endometrial stromal sarcoma (ESS) is a rare uterine mesenchymal tumor, with high-grade variants known for their aggressive clinical course. Malignant transformation of endometriosis is uncommon but can occur, particularly in extrauterine sites.

Objective : To present a case of a 38-year-old nulliparous female with endometrioma later diagnosed as high grade endometrial stromal sarcoma.

Methods : Patient presented with progressive abdominal pain and distension with a right adnexal mass with raised CA125 levels for which she underwent total abdominal hysterectomy with bilateral salpingo-oophorectomy and excision of left endometrioma in June 2025. She already had a history of laparotomy with left ovarian cystectomy and myomectomy in 2022, performed for primary infertility with a degenerative broad ligament fibroid and hematosalpinx.

Results: The final histopathology revealed endometrial high-grade endometrial stromal sarcoma (ESS), possibly arising from ovarian endometrioma. Tumor showed high mitotic index ($>5/5\text{mm}^2$), areas of necrosis, hemorrhage, and atypical mitosis.

IHC Profile revealed Positivity for Vimentin, DOG-1, Cyclin D1, CD10, Focal PR

Ki-67 index: 20%

Patient was counselled for need of future chemotherapy in view of histopathology and IHC profile.

Conclusion: This case highlights a rare but significant occurrence of malignant transformation of ovarian endometrioma into high-grade ESS in a middle aged patient with prior infertility with history of surgery for endometriosis. It underscores the importance of vigilant long-term monitoring and thorough histopathological evaluation of complex adnexal masses, especially in women with infertility with prior endometriosis. Early detection and complete surgical management are critical in such rare gynecologic malignancies.

Zoomed, Zoned, verified: The diagnostic leap from conventional to three ring vulvoscopy

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Introduction: Vulval disorders are frequently underdiagnosed due to subtle clinical presentations and limited visualization techniques. Conventional vulvoscopy, although standard, may miss multifocal or early lesions. Three-Ring Vulvoscopy (TRIV), a novel technique dividing the vulva into embryologically based outer, middle, and inner rings, offers improved lesion localization and diagnostic clarity.

Objective: To compare the diagnostic accuracy and clinicopathological correlation of Three-Ring Vulvoscopy versus Conventional Vulvoscopy in evaluating vulval diseases.

Methods: This observational study included 208 women presenting with vulval symptoms. They randomly underwent conventional and TRIV assessment, followed by biopsy. Lesions were categorised by NSP scheme in TRIV and IFCCP in conventional vulvoscopy and biopsy was taken.

Results: Sensitivity of both conventional and TRIV was 100%, specificity was 66.6%, 70.3% respectively. Diagnostic accuracy for dermatosis was 75%, and for pre malignant & malignant lesion was 88.8% via TRIV which was more compared to conventional vulvoscopy i.e. 67.6%, 77.5% respectively. Using NSP scheme, pathological lesions were most common in middle ring, suspicious lesions were common in inner ring.

Conclusions: Three-Ring Vulvoscopy significantly improves the diagnostic yield in vulval disorders through structured lesion mapping and superior visualization. Its integration into clinical practice may enhance early detection and management of vulval diseases.

Rarity Meets Reality: Ovarian Adenosarcoma presenting with gross ascites in perimenopausal women- A case report

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Introduction- Mullerian adenosarcoma is a rare malignancy that can involve uterine and extra-uterine sites, out of which ovarian adenosarcoma is extremely rare. It comprises of both benign epithelial and malignant stromal component. Ovarian counterpart usually comes with more

aggressive nature, but with fair prognosis if sarcomatous overgrowth is absent.

Case Presentation- A 45 years old perimenopausal female presented with sudden onset abdominal distension and breathing difficulty. She had abdominopelvic mass of approximately 24 weeks gravid uterus size with hepatosplenomegaly with gross ascites, elevated CA-125 levels and deranged coagulation profile. CECT Pelvis suggestive of bilateral (Left>Right) malignant ovarian mass. Ascitic fluid cytology and USG-guided FNAC from ovarian mass was non-contributory. Adenosarcoma of left ovary with no heterologous element and sarcomatous overgrowth reported after the histopathological examination of surgical biopsy. Patient symptomatically improved after debulking surgery. Carboplatin and Paclitaxel based chemotherapy regimen decided for the patient assuming fair prognosis in accordance with the histopathological findings.

Conclusion- Adenosarcoma should be kept in mind in the differential diagnosis of ovarian masses. Multimodality treatment comprising debulking surgery followed by chemotherapy is the mainstay of treatment. More studies are needed to decide chemotherapy regimen based on presence or absence of heterologous element and sarcomatous overgrowth to improve survival rate.

Mosaic Turner syndrome presenting as secondary amenorrhea: A rare case report

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Background: Secondary amenorrhea is most commonly physiological. However, endocrine, medical disorders, outflow tract abnormalities and Premature ovarian failure (POF) are important pathological causes. POF before 30yrs has incidence of 1 in 1000 and a genetic testing is recommended to rule out Turners syndrome.

Case report: A short statured 26 yrs old woman, married for 2 yrs, came to OPD with 2 months amenorrhea. Her UPT was negative and on examination uterus was nulliparous size. On follow up, she had a withdrawal bleeding only with estrogen and progesterone combination. Her investigations revealed normal S.TSH and S.Prolactin. Ultrasound was suggestive of hypoplastic uterus with streak ovaries following which S.FSH, S.LH and S.estradiol were advised and found to be in menopausal range suggestive of POF. Patient was advised Karyotyping which revealed Turners Mosaic pattern 47XXX/46XX/45XO. Patient was counselled regarding the reproductive outcome and referred to higher centre for further management.

Discussion: Turners Syndrome affects 1 in 2000 to 2500 females and has a spectrum ranging from pure Turners who can be identified by characteristic phenotypic

features to mosaic where the physical features are variable. Common to pure Turners and mosaics is short stature and ovarian dysfunction. Once hormonal causes of secondary amenorrhea are ruled out, a high index of suspicion should always be maintained in women with short stature for ovarian insufficiency and a Karyotype should be advised. Early diagnosis will help in prompt estrogen replacement therapy and fertility treatments when needed.

PP70

Puberty Menorrhagia Unmasking Myxedema crisis

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Objective: To highlight the diagnostic and therapeutic challenges of refractory puberty menorrhagia in a patient with shock.

Case: A 15-year-old girl presented to our gynecology emergency with 4 days of profuse bleeding per vaginum and shock (tachycardia 110/min, BP 58/32 mmHg) and Hb 0.9 g/dl. She had a history of prolonged heavy menstrual cycles lasting for 10 to 15 days since her menarche. On examination, patient was sick, had high grade pallor, was short statured and had hyperpigmented macules over her abdomen. Patient was resuscitated and transferred to ICU and was started on vasopressors, inotrope support and blood products along with tranexamic acid to control bleeding. Complete investigation profile was sent and imaging was done. Thyroid profile showed TSH 302 µU/ml with low T4; while cortisol, coagulation panel and adrenal imaging were normal. With a working diagnosis of Myxedema crisis, stress-dose hydrocortisone was given and patient was started on levothyroxine 200µg stat followed by 100 µg/day. Recovery was complicated by hypokalemia and transient transaminitis. Skin biopsy of hyperpigmented macules confirmed Dowling-Degos disease. Genetic work-up was also done. The patient was discharged hemodynamically stable on levothyroxine and cyclical progesterone therapy after one month of hospital stay.

Conclusion: Severe primary hypothyroidism can precipitate catastrophic puberty menorrhagia and hemodynamic collapse, rarely complicating to myxedema crisis.

PP71

A case of maternal near miss in ivf conceived pregnancy with multiple comorbidities- time to introspect

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A case of maternal near-miss in ivf-conceived pregnancy with multiple comorbidities-time to introspect dr divya aggarwal, dr deepti chaudhary, dr rajiv acharya shri guru

ram rai institute of medical and health sciences dehradun uttarakhand india Assisted reproductive technologies (ART), particularly in vitro fertilization IVF, have transformed the spectrum of infertility treatment. IVF has enabled many couples to conceive despite significant reproductive challenges. However, pregnancies conceived through IVF are associated with increased maternal and fetal risks. These include higher incidence of pregnancy complications like abruptio placentae, preeclampsia, gestational diabetes, preterm birth, and perinatal mortality. These risks are further aggravated in elderly women with existing comorbidities such as obesity, hypertension, hypothyroidism, and diabetes mellitus. We present a case maternal near miss in a 44 year old woman with multiple comorbidities conceived through IVF (twin pregnancy) using donor egg who encountered life threatening complications from peripartum collapse requiring intubation to peripartum hysterectomy (due to massive hemorrhage) requiring ICU care. This case underscores the critical importance of pre conceptional optimization of health in women undergoing ART, particularly in elderly, and the toll on her health of iatrogenic multiple pregnancy taken on already fragile, compromised metabolic milieu. Comprehensive screening, tight control of metabolic conditions and an IVF with single embryo transfer are essential along with maternal health. This case report also highlights the need to introspect the need for optimizing and prioritizing the health of women before embarking upon assisted reproduction.

PP72

Clitoral Abscesses in Young Females: An Overlooked Diagnosis

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Introduction: Clitoral abscess is a rare vulvar infection, frequently misdiagnosed as more common entities such as Bartholin gland abscess, sebaceous gland cyst, or infected epidermoid cyst. Due to its sensitive anatomical location, timely diagnosis and careful surgical intervention are crucial to avoid complications including sexual dysfunction, scarring, or sensory loss. Given the limited literature on this condition, awareness among gynaecologists is very essential.

Case Description: We report the case of a 17-year-old sexually active female presenting to OPD with a two-day history of localized pain, redness, and swelling in the perineal region. She reported progressive discomfort during urination but denied history of fever, trauma, shaving, recent sexual activity, or past similar episodes. Examination revealed a 4×3 cm erythematous, fluctuant mass over the clitoral hood without discharge or ulceration.

Under general anaesthesia, the patient underwent incision and drainage. Approximately 15–20 ml of purulent material was evacuated. The incision was strategically placed

laterally to avoid injury to clitoral nerves and blood vessels.

Conclusion: Although rare, clitoral abscess should be considered in the differential diagnosis of vulvar masses near the clitoris. Prompt identification and management using incision, drainage, and antibiotics generally ensure complete recovery. Early diagnosis is vital to prevent long-term complications, preserve clitoral function, and support the patient's sexual health and quality of life.

PP73

A Rare Case of Recurrent Large Hematometra due to Transverse Vaginal Septum with Previous 3LSCS

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Background: Hematometra is a rare condition characterised by congenital or acquired anatomical blockage of the cervical canal. Amenorrhoea or dysmenorrhoea in premenopausal women, pelvic pressure or discomfort are common signs of this condition.

Case Report: A 40-year-old female para3, live1 visited our hospital on May 7, 2025, with c/o severe pain in lower abdomen on and off for last 8 years. She had h/o three vertical c-section and one ex-lap done 20, 15, 8.5, 8 years back respectively. In October, 2021 she was diagnosed with hematometra (6.7*8.5 cm) for which drainage was tried but could not be done due to presence of vaginal mucosal curtain over cervical-os and its non-visualisation and was discharged on analgesics. Patient developed severe pain abdomen again and visited our hospital on May 7, 2025. On per-abdomen 28wks size uterus was palpable and ultrasound done was s/o hematometra (14*9.6*6.8cm). Examination under anaesthesia and trial for hematometra drainage was attempted but abandoned again due to non-visualisation of cervical-os. She was planned for hysterectomy i/o recurrent hematometra with refractory pain abdomen with failure to drain per-vaginally. A difficult hysterectomy with help of general surgeon due to presence of multiple adhesions was done on May 16, 2025. The postoperative period was uneventful and she was discharged on POD13 after stitch removal.

Discussion: This is a rare case of large hematometra due to transverse vaginal septum in a woman with previous 3LSCS. Early diagnosis and treatment can prevent the complications of hematometra.

PP74

Hope within the Scar: A Successful Fertility-Sparing Approach to Viable CSEP

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Background: Caesarean scar ectopic pregnancy (CSEP) is defined as implantation into the myometrial defect in the previous uterine incision. It poses a diagnostic and management challenge and if left undiagnosed or untreated in early pregnancy, it can result in significant maternal morbidity or even mortality. Prompt diagnosis and individualized management are thus crucial to prevent complications and preserve fertility.

Case Report: A 29-year-old woman (G3P1L1A1) at 7+3 weeks gestation, with one prior lower segment caesarean sections, presented with mild vaginal bleeding. She was hemodynamically stable. Transvaginal ultrasound revealed a viable gestational sac implanted at the previous scar site, with a thin myometrial layer and no intrauterine pregnancy, confirming caesarean scar ectopic pregnancy (CSEP). Serum β -hCG was 107,598 mIU/mL.

After detailed counselling on treatment options, the patient opted for conservative medical management. Under ultrasound guidance, 1.5 mL of intracardiac potassium chloride (KCl) was administered, followed by 60 μ g of methotrexate (MTX) into the gestational sac. Within 24 hours, foetal cardiac activity ceased, and the sac appeared crumpled. Weekly monitoring showed gradual decrease in sac size, with β -hCG levels declining to non-pregnant levels by 8 weeks. The patient remained stable and asymptomatic.

Conclusion: CSEP poses significant diagnostic and therapeutic challenges. This case highlights the successful use of intracardiac potassium chloride followed by intragestational methotrexate, highlighting the potential of this conservative and uterus-preserving strategy as effective treatment in selective cases of live caesarean scar ectopic pregnancy.

PP75

Caesarean section scar endometriosis with sinus

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Introduction- Endometriosis is a condition in which endometrial glands & stroma are seen in sites other than normal endometrial cavity. CSSE is a form of extra pelvic endometriosis developing by implantation of endometrial cells anywhere along the route of previous caesarean section.

Case Presentation – A 32-year-old P2L2 woman with two previous LSCSs presented with a lower abdominal mass

in midline and cyclical bleeding from the scar site starting on day 2 of menses for the past 5 months. Her last LSCS was 9 years ago. Examination revealed a 6×6 cm ill-defined mass with central puckering at the infraumbilical scar. USG revealed thickening along anterior abdominal wall anterior to uterus with small early hernia formation and uterus normal size, appeared to abut anterior abdominal wall and showed 5.4cm ill-defined heterogeneously hypoechoic lesion in midline, located beneath the scar and anterior to the uterus-findings suggestive of scar endometriosis. Patient underwent surgical excision of scar endometriosis along with excision of sinus tract. Intraoperatively, the tract extended through rectus sheath, muscle, and peritoneum to the anterior uterine surface. Histopathology confirmed endometrial glands. Recovery was uneventful.

Conclusion- One should suspect scar endometriosis when women present with cyclic swelling in relation to menstruation with history of previous gynecological and obstetrical surgery. Surgical excision is the treatment of choice. Definitive diagnosis is verified by histopathology analysis. Patient should be followed up for recurrence.

PP76

Ruptured Rudimentary Horn Pregnancy at 18 Weeks: A Rare but Life-Threatening Emergency

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Background: Rudimentary horn pregnancy is an uncommon form of ectopic gestation, occurring in approximately 1 in 76,000 pregnancies. It is usually associated with a non-communicating Müllerian duct anomaly and carries a significant risk of uterine rupture, most commonly between 10–20 weeks of gestation, contributing to maternal morbidity and mortality.

Case Report: We present the case of a 23-year-old primigravida at 18 weeks of gestation who reported abdominal pain for one day. Ultrasound suggested intrauterine fetal demise, and she received multiple doses of misoprostol without effect. She subsequently developed tachycardia, hypotension, and abdominal guarding. Per vaginal examination revealed an open 1finger loose cervix without palpable fetal parts. Emergency laparotomy revealed one litre of hemoperitoneum, a normal uterus and left adnexa, and a ruptured right-sided non-communicating rudimentary horn connected to the uterus by a fibrous band. A dead fetus weighing 450 gm was delivered, followed by excision of the rudimentary horn and ipsilateral fallopian tube. The patient recovered uneventfully postoperatively.

Discussion: Rudimentary horn pregnancy poses a

diagnostic challenge, as clinical findings and imaging may mimic intrauterine pregnancy. Delayed recognition frequently leads to rupture and life-threatening hemorrhage. High clinical suspicion, early use of advanced imaging, and prompt surgical intervention are essential for improving maternal outcomes. This case underscores the importance of considering rudimentary horn pregnancy in patients with unexplained abdominal pain during mid-gestation and the need for timely diagnosis and surgical management to prevent catastrophic complications.

PP77

Case Report of Isthmoele in Pregnancy: Antenatal Challenges and Outcomes

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Introduction: Also known as 'niche' or 'caesarean scar defect'- arises due to defect in the healing of a caesarean section scar at the isthmic level.

Delayed complication of cesarean delivery.

- Associated with both obstetric and gynaecological problems.
- Obstetric-placenta previa, placenta accreta spectrum (PAS), caesarean scar pregnancy, uterine rupture.
- Gynaecological-abnormal uterine bleeding typically postmenopausal, dyspareunia, abdominal/pelvic pain, secondary subfertility

Case Report: 33yr old G3P2L2 woman with previous 2 LSCS at 32wk of POG with? isthmoele admitted for safe confinement. Had no significant comorbidities and was asymptomatic.

USG: Single viable intrauterine fetus. Bladder myometrial interface distance = 3.5mm

Diagnosis: Detected intraoperatively.

Management:

- Elective caesarean section performed at 37+1week.
- Intraoperative findings: Bulging over the upper uterine segment~1.5*2cm.
- Healthy girl (2.8kg), APGAR 9/9
- Niche repaired by two layered techniques.
- Blood loss~300ml, no complications,
- Follow up-uneventful recovery, discharged on day 8.

Discussion:

1. Can pose a challenge in pregnancy due to its association with uterine rupture and PAS disorders.
2. Residual myometrial thickness (RMT) <2.5 mm is considered high risk for rupture.

3. Elective cesarean section before the onset of labour is the recommended strategy.
4. Delivery by cesarean section at no later than 38 weeks.
5. Intraoperative repair of the isthmocoele is preferred if feasible.

Surgical correction outside of pregnancy (laparoscopic / transabdominal/ transvaginal) is generally reserved for symptomatic women or those planning future pregnancies

Conclusion: It requires careful monitoring and planned delivery. Early detection, patient counselling, and regular ultrasound follow-up are essential to reduce the risk of adverse outcomes.

PP78

Pregnancy outcomes in women with Ebstein Anomaly: A case series

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Background: Ebstein's anomaly, a rare congenital malformation of the tricuspid valve, poses significant challenges during pregnancy due to its potential for maternal and fetal complications.

Case series: Mrs S, a 27-year-old, second gravida, operated at the age of 7 years for Ebstein anomaly. During antenatal period, she had peripheral cyanosis, NYHA II-III, grade 4 clubbing and SpO₂ of around 80% to 85%. Emergency LSCS was performed for APH at 30 weeks POG with delivery of a 410-gram baby with APGAR of 1/4/7.

Second patient was Mrs N, 20-year-old, operated at the age of 16 years for Ebstein anomaly, had bioprosthetic tricuspid valve replacement, conceived spontaneously, and had uneventful pregnancy. Unfortunately, baby expired at day 15 of life with suspected milk aspiration. After 2 years, she again conceived and developed PPROM at 33+2 weeks POG. A male, 1717 g baby with APGAR 7/9 was delivered by emergency LSCS at 33+5 weeks POG.

Our third case, Mrs A, 28-year-old, G4P0+2+1+0, not operated for Ebstein, had a cesarean delivery at 30+1 weeks for REDF, with a male baby of 1050 g at 7/9 APGAR discharged at day 54 in stable condition.

Discussion: Ebstein's anomaly, though rare, poses significant maternal and fetal risks during pregnancy, especially in women with cyanosis, poor functional status, or uncorrected lesions. Our series highlights the spectrum of outcomes, influenced by baseline cardiac function and prior surgical correction. Successful management requires preconception counselling, close antenatal monitoring, and delivery in a tertiary care centre with a multidisciplinary team.

PP79

Hemihysterectomy for unicornuate uterus with non communicating rudimentary horn with functional endometrium

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Introduction :- Unicornuate uterus with distal uterine remnant with functional endometrium with unilateral endometrioma and haematosalpinx is rare mullerian anomaly with associated pelvic pathologies and was treated with hemihysterectomy along with endometriotic cystectomy and unilateral salpingectomy.

Case Report :- 17y unmarried girl attained menarche at 14 years of age, presented with lower abdominal pain (severe dysmenorrhea) associated with nausea and vomiting during menses since last 3 years. 6 months back she noticed mass per abdomen which was gradually progressive in size. On evaluation diagnosed with right unicornuate uterus with non communicating left rudimentary horn with functional endometrium (ASRM 2/ U4C0V0) with hematometra in the rudimentary horn, left endometrioma and left haematosalpinx. Rest of the genitourinary and skeletal system was well developed on evaluation. Open hemihysterectomy for rudimentary horn with left endometriotic cystectomy with left salpingectomy was performed. Intraoperatively stage 4 endometriosis was noted. Procedure was successful and patient improved gradually. Histopathology was consistent with the above diagnosis.

Discussion :- When conservative management fails, surgical management should be considered. The association between mullerian anomalies and endometrioma with haematosalpinx is relatively uncommon and difficult to diagnose. Ideally the anomaly should be completely defined before the operation. Often, however the extent of anomaly can only be properly determined at surgery. Hemihysterectomy for an obstructed uterine horn is a safe and effective management modality and other pathologies like left endometrioma with left haematosalpinx was operated in the same sitting in this case.

Conclusion - Hence sharing different therapeutic approaches of a rare diagnosis with scientific community is of paramount importance for surgical intervention and restoration of reproductive function.

PP80

Uterocutaneous Fistula

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The uterocutaneous fistula is an abnormal connection between the uterus and the skin. Mostly it occurs as a complication to surgical intervention, such as Caesarean

section or chronic infection like tuberculosis, Here we are reporting a case of a 39-year-old who presented with a complaint of bleeding and pus discharge from the previous pfannenstiel scar and infraumbilical midline Caesarean scars There is a history of purulent and bloody discharge from the stitch line since post-operative day 25, for which she had a dressing done for one month, and was relieved of her symptoms. Provisional diagnosis of endometriosis was made; however, the USG findings suggested a tract between the uterus and the abdominal wall CEMRI revealed a tract between the uterus and the anterior abdominal wall in the midline and another in the right lower quadrant Peroperatively, two fistulous tracts were delineated, one from the posterior surface of the uterus to a point on the longitudinal scar and another from the distal part of the right fallopian tube to the transverse scar. Patient underwent surgical excision of the fistulous tract with complete right and partial left salpingectomy Abdominal examination revealed two indurated lesions, one 3 cm above the pfannenstiel incision in the midline and another just below the pfannenstiel incision in the midline. Uterocutaneous fistula, a rare entity, may be confused with scar endometriosis in the initial stage of diagnosis. Accurate imaging and surgical excision are the mainstay of treatment.

PP81

Umbilical Vein Varix: A Rare Entity, Antenatal Diagnosis and Management

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Introduction: Umbilical vein varix (UVV) is a rare prenatal condition characterized by a focal dilatation of the umbilical vein. It is observed in approximately 0.4 to 1.1 per 1000 pregnancies. Diagnosis is based on ultrasound findings showing a vein diameter exceeding two standard deviations for the gestational age, or a diameter more than 1.5 times the intrahepatic portion or 50% larger than non-dilated segment. Though an incidental finding, UVV can be associated with intrauterine fetal demise (IUFD), intrauterine growth restriction (IUGR), and chromosomal abnormalities.

Case History: A 29-year-old woman, gravida 2 para 1 live 1, with a previous cesarean section, was diagnosed with fetal UVV at 28 weeks of gestation with a vein diameter of 12.3 mm and normal doppler flow. Her first and second trimester anomaly scans and aneuploidy screening were normal. At 28 weeks scan a growth lag of two weeks was also noted. Fetal echocardiography was normal. Serial weekly ultrasounds showed progressive dilatation of the umbilical vein, peaking at 15.2 mm by 34 weeks, along with new onset turbulent flow. Doppler studies showed normal ductus venosus and middle cerebral artery flow. Due to

progressive IUGR and turbulent flow, cesarean delivery was performed at 34+5 weeks resulting in the birth of a 2.295 kg female infant.

Conclusion: UVV poses potential risks depending on the degree of dilatation, flow turbulence, and associated anomalies. Close monitoring with ultrasound and Doppler is essential for timely intervention. In this case, early diagnosis and surveillance led to favourable outcome.

PP82

Non-Communicating Functional Rudimentary Horn of the Uterus in an Adolescent Female

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Background - Müllerian anomalies are rare congenital conditions, and a non-communicating functional rudimentary horn of the uterus is an uncommon variant. This anomaly often presents during adolescence and is typically associated with symptoms such as cyclical abdominal pain and intermenstrual pain. The underlying cause of these symptoms is outflow obstruction, leading to the retention of menstrual blood within the rudimentary horn.

Case Summary - A 16-year-old female presented with cyclical lower abdominal pain since menarche and persistent intermenstrual pain for the past year, with regular menstrual cycles. Clinical examination revealed normal external genitalia. Ultrasound suggested Bicornuate uterus or uterine didelphys, which was further evaluated by MRI, revealing a bicornuate unicollis uterus with a non-communicating right functional rudimentary horn. The imaging also showed hematometra within the right horn, caused by the presence of functional endometrium without an outlet for drainage. The patient underwent a laparoscopic excision of the right non-communicating horn, with intraoperative findings confirming the diagnosis. Her postoperative recovery was uneventful, and she experienced complete resolution of symptoms following 3 months of the procedure.

Discussion - Surgical excision of functional non communicating horn is treatment of choice. Early diagnosis and treatment helps in complete resolution of symptoms. It also helps in preventing long term complications like endometriosis, chronic pelvic pain and infertility

PP83

Arterio-Venous Malformations of Uterus- A Management dilemma

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Introduction: Uterine arteriovenous malformations (AVMs)

are rare vascular anomalies that can cause acute, life-threatening uterine hemorrhage. They may be congenital or acquired, associated with gestational trophoblastic disease, intrauterine infection, or post-abortion/postpartum states. Diagnosis is challenging, especially after recent pregnancy, and accurate identification via Doppler ultrasonography or magnetic resonance angiography (MRA) is critical to prevent catastrophic hemorrhage.

Objective: To highlight the importance of considering acquired uterine AVMs in patients with persistent post-suction and evacuation bleeding unresponsive to conventional therapy, emphasizing early Doppler and MRA evaluation.

Methods: Two patients with severe post-procedural uterine bleeding were reported:

A 21-year-old woman (G2P1L1A1) presented 20 days post-suction evacuation with persistent bleeding and anemia. Ultrasound revealed a 2.5 × 1.4 cm intrauterine lesion with arterial and venous flow, confirmed as AVM on MRA. She underwent uterine artery embolization (UAE) with complete resolution.

A 20-year-old nulliparous woman presented with recurrent bleeding three months after molar evacuation. Plateauing β -HCG levels, imaging showing multiple AVMs, and CT chest evidence of pulmonary metastases led to a diagnosis of gestational trophoblastic neoplasia (GTN). EMA-CO chemotherapy was initiated.

Results: The management of these entities differs substantially: AVM necessitates UAE or medical management with high dose progesterone to prevent catastrophic hemorrhage, whereas GTN requires prompt initiation of chemotherapy to prevent metastatic progression. These contrasting scenarios underscore the critical importance of timely and accurate diagnosis in guiding appropriate therapy and optimizing patient outcomes.

Conclusion: AVMs are rare with nonspecific presentation, often delaying diagnosis; advances in imaging now have significantly improved timely and accurate detection.

PP84

The Unexpected Cardiac Guest: An interesting case of Intravascular Leiomyomatosis with Cardiac Extension

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Background: Intravascular leiomyomatosis (IVL) is a rare benign smooth muscle tumor of uterine origin characterized by intravascular proliferation that may extend into major venous channels and even reach the heart. Despite its histological benignity, its clinical course can be aggressive

with potential life-threatening complications, necessitating prompt diagnosis and management. Here, we present an interesting case of uterine leiomyomatosis with extensive intravascular extension into the inferior vena cava (IVC) and right atrium of the heart, highlighting the diagnostic challenges and multidisciplinary surgical management.

Case Report: A 37-year-old woman, P2L2, presented with progressive abdominal pain and distension for last six months. Initial evaluation revealed an enlarged uterus corresponding to 28 weeks gravid uterus. Ultrasonography showed multiple uterine fibroids with suspicion of thrombus in inferior vena cava. Further MRI Abdomen and pelvis revealed multiple uterine fibroids along large intravascular mass extending from left gonadal vein into left renal vein and IVC up to right atrium. A multidisciplinary surgical approach including gynaecologists, cardio-vascular surgeons and cardio-vascular anaesthesiologists was undertaken. Patient underwent total abdominal hysterectomy and IVC thrombectomy under intraoperative transesophageal echocardiography and ultrasonography. A large type VI fibroid (30×25 cm) with 16 cm intravascular extension was retrieved. Postoperative recovery was uneventful and she was discharged in stable condition on postoperative day 3. Final histopathology showed a benign leiomyoma.

Discussion: Multidisciplinary surgical planning is crucial for optimal outcomes and depends on tumour extension. Early recognition and complete surgical excision remain the cornerstone of management to prevent recurrence and fatal complications.

PP85

Fibroepithelial Stromal Polyp in Vagina- A Rare Incidental Finding

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Introduction- Fibroepithelial stromal polyps are defined as benign mesenchymal mass characterized by a polypoid proliferation of the stroma with overlying squamous epithelium. They are most commonly found in the skin fold such as neck, armpit and groin, rarely in the genital region, so rare that their incidence rate is yet to be define. They are usually asymptomatic, sometimes presenting with painful coitus, bloody vaginal discharge, or general discomfort. They exhibit a wide range of morphological appearances that lead to both their under-recognition and misdiagnosis which engenders unnecessary interventions.

Case presentation- A 29 year old female came to OPD with dyspareunia and inability to conceive since 2 years. On routine per speculum examination, a greyish 2x2 cm shaggy, sessile, bluish non-tender nodule with irregular border noted on the upper posterior wall of vagina. Punch Biopsy revealed the diagnosis of fibroepithelial stromal

polyp of vagina. Following the preliminary HPE, decision for wider excision was taken to confirm the diagnosis and prevent recurrence. She was relieved of dyspareunia and is now on follow up for infertility.

Discussion- They say half the job of a clinician is done once the diagnosis is made while the treatment is the easier counter half, making it important to have appropriate differential diagnosis varying from simple growths like warts to serious lesions like neoplasia. Soft tissue growths have common presentation but wide treatment variations.

Conclusion- Vaginal fibroepithelial tumours are usually asymptomatic. Clinical diagnosis is challenging. Complete excision should be performed after pathologic diagnosis to avoid recurrence.

PP86

Postnatal Day 6 Uterine Inversion Resistant to Repositioning: A Case Report and Review

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Background: Subacute uterine inversion is a rare obstetric emergency that occurs between 24 hours and four weeks postpartum. Unlike acute inversion, its presentation may be insidious, often with pelvic pain, vaginal bleeding, or a vaginal mass, leading to diagnostic delay and increased maternal morbidity.

Case Presentation: We report a case of subacute uterine inversion in a 20 year-old woman, presenting on postpartum day 6 with complaints of persistent vaginal bleeding and foul smelling discharge. Clinical examination revealed [findings, e.g., mass in vagina, absent uterine fundus on abdominal palpation], and ultrasonography confirmed uterine inversion. Resuscitative measures with fluid and blood transfusion were initiated, followed by attempted manual repositioning.

Conclusion: Subacute uterine inversion, though uncommon, should be suspected in women presenting with postpartum bleeding and pelvic mass. Early diagnosis and timely intervention are vital to prevent life-threatening complications. Greater awareness among clinicians can facilitate prompt recognition and improve maternal outcomes.

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Malignant Brenner Tumor

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Background: Malignant brenner tumor is an exceptionally rare epithelial ovarian neoplasm, accounting for less than 2% of all brenner tumors and less than 150 cases worldwide. Clinical presentation is often nonspecific, and diagnosis is usually made incidentally or postoperatively. ovarian torsion as a presenting feature of malignant brenner tumor is extremely uncommon.

Case Presentation: We report a case of a 44 year-old woman who presented with acute onset lower abdominal pain, nausea, and vomiting. clinical and radiological evaluation suggested right adnexal cyst torsion. emergency laparotomy revealed a large, solid-cystic ovarian mass with torsion of the pedicle. right salpingo-oophorectomy was performed. histopathology confirmed the diagnosis of malignant brenner tumor.

Discussion: Malignant brenner tumors are rare and pose a diagnostic challenge preoperatively, often mimicking other surface epithelial ovarian tumors. torsion complicating such tumors is a rare event that may obscure the underlying pathology. surgical excision remains the mainstay of treatment, with staging and further management guided by intraoperative and histopathological findings. early recognition and prompt surgical intervention are crucial to prevent life-threatening complications and ensure accurate diagnosis.

Conclusion: This case highlights the rare occurrence of ovarian torsion as the presenting manifestation of malignant brenner tumor. awareness of this unusual presentation is essential for timely management and appropriate postoperative care.

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