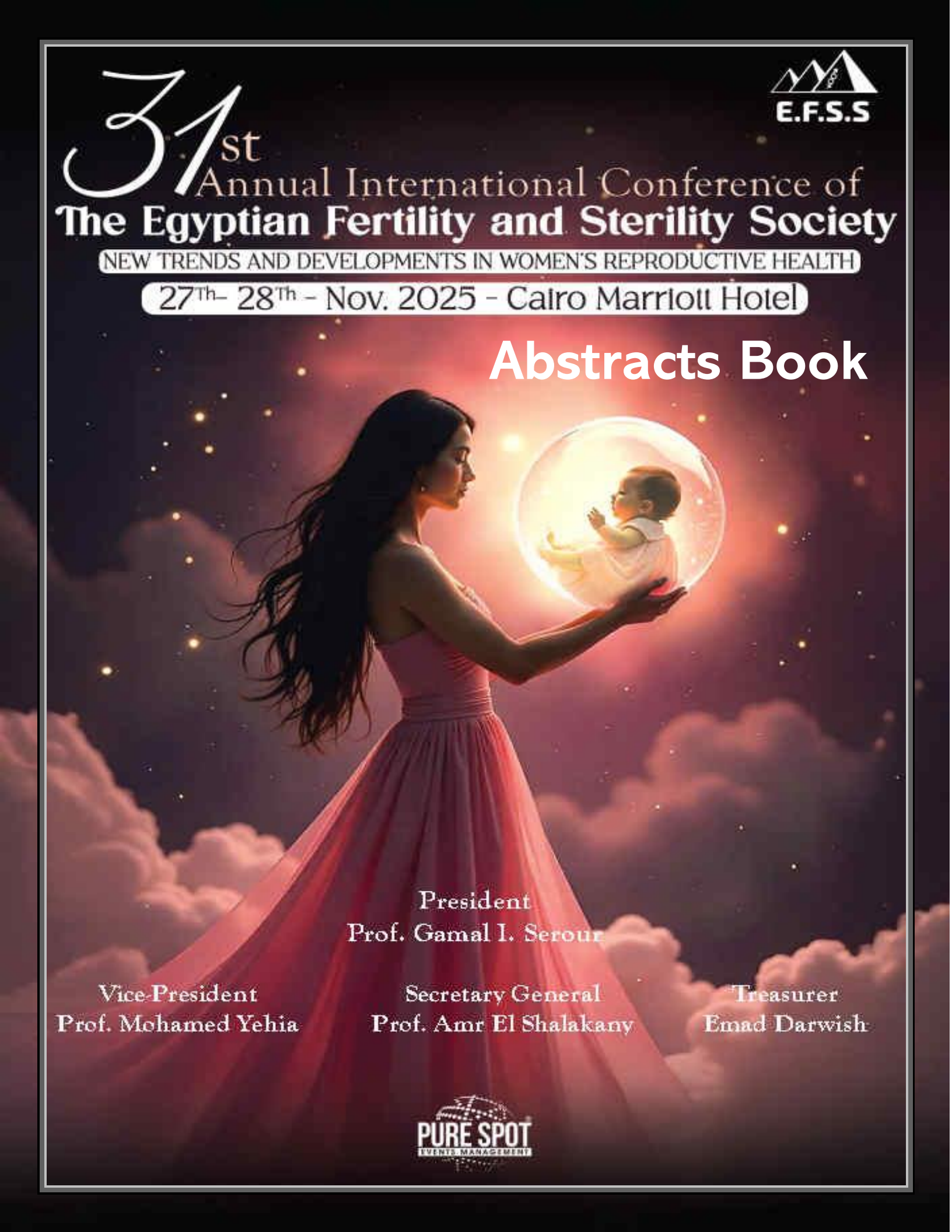
E.F.S.S

31st Annual International Conference of The Egyptian Fertility and Sterility Society

NEW TRENDS AND DEVELOPMENTS IN WOMEN'S REPRODUCTIVE HEALTH

27Th– 28Th – Nov. 2025 - Cairo Marriott Hotel

Abstracts Book



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THE EGYPTIAN FERTILITY AND STERILITY SOCIETY

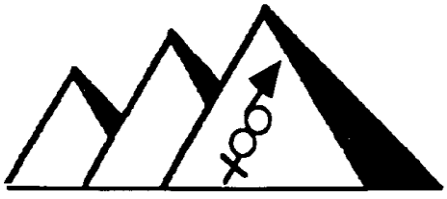
The 31st Annual International Conference

November 27th - 28th, 2025

Cairo Marriott Hotel

Zamalek, Egypt

NEW TRENDS AND DEVELOPMENT IN WOMEN'S REPRODUCTIVE HEALTH



Abstract Book

2025

- Role of misoprostol in non-surgical management of endometrial polyps.

Dr. Ahmed El Sherbiny, Egypt.

- Evaluation of the Effect of Two Different Types of Suture Patterns on Cesarean Scar Niche Formation in Elective Primary C.S.

Prof. Abdel Hasseib Salah Saad, Egypt.

- Single visit, US-based, infertility evaluation

Dr Amr Adeel, *MD ObGyn*

Introduction
Infertility is defined as the inability to achieve pregnancy after one year of regular, unprotected intercourse. Causes of infertility include male factors, ovulatory dysfunction, uterine abnormalities, tubal obstruction, peritoneal factors, or cervical factors. Evaluation needs thorough history taking, examination, and investigations. The best bed-side investigation tool is ultrasound scan, by which female fertility status can be fully evaluated. 2D ultrasound can assess the ovarian reserve through counting the antral follicle count, PCOS, endometrial pattern, endometriosis & adenomyosis. 3D ultrasound can diagnose mullerian anomalies. Doppler ultrasound can assess masses. Saline infusion sonography can assess the endometrial cavity, and by adding contrast media, the tubal patency as well.
Objectives
Using the bed-side ultrasound scan to evaluate the infertile female in one visit, in most instance, to reach a clear diagnosis inorder to put a management plan.
Data collection
Data were collected from ISUOG, AIUM, Sonaworld , RCOG , ACOG , ESHRE , ASRM , Cochrane library, UpToDate ,and American Family Physician.
Results and Conclusion
Ultrasound based evaluation of infertile couple is reliable, efficient, time saving, non-invasive and cost effective.
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- **New vaginal cerclage (through cervical canal cerclage) TC3**

Ibrahim Elsaeid Mashaal
Consultant obstetrician. and gynecology, Egypt
Elmehalla Elkopra General Hospital
President of Elmehalla Elkopra and Samanoud Society of Obstetricians and Gynecologists.

Introduction: - Through cervical canal cerclage (TC3)

New creative cervical cerclage operation titled TC3 operation that is accepted here in Egypt and has been introduced in many conferences
OBJECTIVE: We create in our practice this new very simple operation to reduce complications of different vaginal operations with low cost, little time, and carrying the fetus and membranes till the end with much improved outcomes.
METHODS: By using Merseline tape with 2 needles, only putting 2 stitches in perpendicular manner passing through the cervical canal.
We can start at any point as much high as possible at or near the level of the internal os. for example we can start at 120'clock passing through the cervical canal and exit at 6 0'clock .then we can move the upper or the lower needle to put the 2nd stitch start from the 9 0'clock or 3 0'clock passing through the cervical canal to form a firm stitch then press the upper lip over the lower lip of the cervix also the lateral walls are pressed and putting the knott either at 10.50'clock or 1.50'clock in this situation when using lower part of the tape —If we use the upper part of the tape to do the -2nd stitch we can putting the knott at 4.5 or7.5 o'clock.
With a very wide range of malleability to start and end at any point and putting the knott at any place of the cervix.
RESULTS: Very good outcomes and results upon more than 300 cases with different indications of cervical cerclage either post traumatic, repeated mid trimesteric. Failed other vaginal cervical cerclage operations and bicorneate uterus, we did a study on the first 100 cases with very good results and very, very minimal complications compared to the other operations.
DISCUSSION.: Why TC3 operation is accepted and widely used in our location. general hospital, friends and in many medical centers around us in Mansora and Elmehalla Elkopra -that's because it's Very simple. easy. preventing prolapse or decent of membranes through the cervical canal by cross shaped firm, soft very kind septum roof formed by the cross-shaped soft sterile stitches inside.

Also, by preventing the process of cervical dilatation without ischemic changes or effect on cervical tissues that is still formed till the end

Advantage: Very simple only two stitches.
Low coast
Short time of anesthesia.
Less traumatic to the cervical tissues only 4needle punctures

No or very little bleeding

No ischemic changes or blood supply interference that is may result in gangrenous and necrosis of the cervical tissue that is may occur in other vaginal operation.

Wide range of malleability can start at any point very useful in cases with old cervical tears that we can start above the angle of the old tears

Very low rate or no cases complicated by infection as the operation less traumatic with no lacerations and no more tissue dissection

As we do passing the tape through the all layers of the cervical tissue and through the cervical canal the process of cervical dilatation stopped and the cervix still formed till the end so it's very easy to remove the tape when needed without any trauma to the cervical tissue.

Very good results and outcomes

Respecting stress of the patients and their families when a premature fetus inter the incubator with more cost and more stress by reducing the rate of premature labor and incubation.

CONCLUSION: Very good, simple. easy. solving the problem of habitual abortions or miscarriages due to cervical incompetence with no or very limited complications like hemorrhage, infections trauma, lacerations, premature labour, rupture of membranes, and ischemic changes and when other vaginal operations failed and going to do another more traumatic cerclage operations in which we need to do it either vaginal or laparoscopic surgeries.

Also it takes very short time only five minutes

So its simply may be the best effective vaginal cervical cerclage operation ever.

- **In utero fetal therapy: Treating conditions before delivery.**

Prof. Mohamed Mahmoud Abdallah, Egypt.

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Setting realistic expectations for IVF (in vitro fertilization) success rates.

Prof. Mohamed Bedaiwy, Canada.

- **Early diagnosis of endometriosis.**

Prof. Charles Chapron, France.

Society of Endometriosis and Uterine Disorders (SEUD), President.
Head and Chair, Université Paris-Cité, Faculté de Santé, Faculté de Médicine Paris Centre, Assistance Publique – Hôpitaux de Paris (AP-HP), Hôpital Universitaire Paris Centre (HUPC), Centre Hospitalier Universitaire (CHU) Cochin, Department of Gynecology Obstetrics II and Reproductive Medicine (Professor Chapron), Paris, France

Endometriosis, a chronic inflammatory disease characterized by the presence of endometrial tissue outside the uterus, is responsible for pelvic pain and infertility. Observed in 10 to 15% of women, this disease has a major impact on patients' quality of life and imposes a significant socioeconomic burden, making it a public health concern. The significant advancements in imaging techniques, such as transvaginal ultrasound and magnetic resonance imaging (MRI), have revolutionized the diagnostic approach to endometriosis. Diagnostic laparoscopy is no longer indicated in routine practice. This paradigm shift in diagnosis has also influenced therapeutic management. In this lecture, we will explain how and why it is important to diagnose endometriosis early.

- **Deep endometriosis: How does it come into being? How to better diagnose it and manage it?**

Prof. Sun-Wei Guo
Research Institute
Shanghai Obstetrics and Gynecology Hospital
Fudan University, Shanghai, China.

As one of three major subtypes of endometriosis, deep infiltrating endometriosis was originally defined as endometriotic lesions infiltrating the peritoneum by >5 mm but now it is redefined to be deep endometriosis (DE) or adenomyosis *externa*, presumably due to its abundance of fibromuscular content reminiscent of adenomyosis. Although the prevalence of DE is less prevalent than ovarian endometriomas, most women with DE have severe pain and it is recognized as the most severe clinical form of endometriosis with challenging clinical management. The challenge, of course, results from our poor understanding of its pathogenesis and/or pathophysiology. In this talk, I will present data that shed new light on the pathophysiology of DE, rounding up new culprits in shaping the destiny of DE progression. With these understanding, I will show a novel mouse DE model based on these understanding, and show a novel imaging method for better diagnosing DE.

- **Accessory cavitated uterine malformation: an underdiagnosed Mullerian anomaly.**

Dr. Ahmed Elhabashy,

Faculty of Medicine, Alexandria Univ. Egypt.

Background: Accessory cavitated uterine malformation (ACUM) is an extremely rare Mullerian anomaly that is not yet classified by the international societies as a type of uterine malformations. Due to its rarity, it is usually misdiagnosed as adenomyoma. Objective was to provide specific sonographic features of ACUM and differentiate it from the more common adenomyoma. Methods: Our study is a comparative retrospective study. We presented the sonographic features of 3 cases of ACUM and compared these features with the sonographic features of 10 cases of adenomyoma. All cases had scanned by 2D and 3D luteal TVUS at Habashy 4D scan centre (Alexandria; Egypt) between June 2019 and June 2024. All the 13 cases in our study were had chronic pelvic pain and dyspareunia with a lesion in the myometrium that was not matched with the whorly echotexture of myoma. We had described the sonographic characteristics of the lesion and matched them with the final diagnosis after histopathology. Results: TVUS features of the 3 cases who had ACUM were cystic lesion within the lateral myometrial wall. Its content has ground glass echotexture. TVUS features of the 10 cases of adenomyoma were heterogeneous ill-defined solid myometrial lesion with translesional minimal flow. Conclusions: ACUM is a rare uterine malformation that is usually misdiagnosed as adenomyoma. Distinction between these two pathologies is important as the treatment of both differ. ACUM is suggested in patients with pelvic pain when there is a myometrial cystic lesion separable from a normal uterine cavity and contained a ground-glass material.
Keywords: Accessory cavitated uterine malformation, Adenomyoma, Sonographic features.

- **Predictive performance of fetal aortic isthmus Doppler velocimetry and the cerebro-placental ratio in cases with fetal growth restriction.**

Dr. Ahmed Elhabashy, Egypt.

Faculty of Medicine, Alexandria Univ. Egypt.

Background: Fetal growth restriction (FGR) is one of the leading causes of intrauterine fetal demise, cerebral palsy and perinatal death. The main cause of FGR is placental insufficiency. Cerebroplacental ratio (CPR) is decreased

with the progression of FGR. Fetal aortic isthmus (AoI) Doppler has been suggested as a useful prognostic marker in monitoring of FGR fetuses.

Objective: to evaluate the relation between the AoI Doppler and CPR on the perinatal outcome in FGR fetuses.

Methods: This is a prospective observational cohort study that entailed 100 cases from November 2022 to October 2023. Group A: 50 cases are normal control and group B: 50 cases are FGR. Doppler interrogation of umbilical artery (UA), middle cerebral artery (MCA), and AoI had been underwent at GA window: 28-37 weeks within 2 days before delivery. Cases were assessed after delivery for Apgar score at 10 minutes and admission to the neonatal intensive care unit (NICU).

Results: NICU admission was statistically significantly higher in cases and controls with higher AoI pulsatility index (PI) values and lower CPR values. The sensitivity of CPR for prediction of NICU admission was higher than that of AoI-PI to predict it (41.94% versus 22.58%).

Conclusions: Abnormal fetal AoI Doppler velocimetry is correlated with abnormal CPR in FGR fetuses. Abnormalities in the PI of AoI-PI and CPR in FGR fetuses had association with adverse perinatal outcome. Further studies needed to test the predictive performance of AoI-PI for adverse perinatal outcomes before its enrolment in the daily practice of FGR cases management.

- **Pattern recognition for prenatal sonographic diagnosis of most congenital heart disease: the "7×2" CHD algorithm.**

Dr. Ahmed Elhabashy,

Faculty of Medicine, Alexandria Univ. Egypt.

Background: Congenital heart defects (CHD) are common anomalies and are commonly missed prenatally because of the difficult learning curve of fetal echocardiography. The aim study was to establish an algorithm to review most of the fetal CHD using a simple pattern recognition that will provide easy approach for their diagnosis. To our best knowledge this is the first algorithm that gather the salient sonographic features of most CHD. Methods: We had reviewed 66 cases of CHD that were gathered by one tertiary center from January 2020 till December 2023. We used an algorithmic path to allow easy deferential diagnosis of these anomalies by using certain sonographic features (we call them: altered key points). This work reviewed 14 fetal CHD. After exclusion of isolated ventricular septal defect (VSD). Results: Each 2 of these CHD has a common altered key point during echocardiography. These 7 key points are: right dominance, left dominance, absent crossover of great arteries, aorta override VSD, abnormal

crux, abnormal area behind the heart and abnormal three vessels trachea view. These 14 anomalies were grouped in tables with their salient sonographic markers for easy mind mapping during echocardiography. Conclusions: The "7×2" CHD algorithm is a simple way that allow easy recognition of 14 fetal CHD by focusing on 7 altered key points that can be recognized on the common sonographic views where each of them has 2 main differential diagnosis. These 14 anomalies represent most of the CHD (78%) after exclusion of isolated VSD.
Keywords: fetal echocardiography, CHD, differential diagnosis, pattern recognition, the "7×2" algorithm

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- **Impact of previous caesarean delivery on IVF/ICSI outcomes: a retrospective study in Abha City, Saudi Arabia.**

Dr. Fatimah A. Alzahrani, KSA.

Introduction: The prior mode of delivery could significantly influence the success rates of in vitro fertilization/intracytoplasmic sperm injection-embryo transfer (IVF/ICSI-ET) and critically impact pregnancy outcomes.

Materials and Methods: In a retrospective cross-sectional study design, 2284 women with childbirth following IVF or ICSI were recruited from Abha City, Saudi Arabia, during 2020- 2023. The participants were categorized into women who previously gave birth vaginally (Group I), delivery by Caesarean section (CS) (Group II); and delivery with Caesarean scar defect owing to prior CS (Group III). Clinical presentation and pregnancy outcome were compared among these groups through binary logistic regression.

Results: There were statistically no significant differences between Groups I and II in the birth rate, mean implantation success, and clinical or ectopic pregnancy. Significant differences were evident between Group I and III in the rate of clinical pregnancy and mean implantation. Further analyses revealed that the rate of implantation, clinical pregnancy, and live birth were all considerably reduced in women ≤ 35 years in Group III when compared to the Group I.

Conclusion: These findings underscore the detrimental reproductive consequences of CSD and highlight the need for careful surgical techniques in Caesarean deliveries to minimize long-term fertility impacts. Future research should explore interventions to improve uterine healing post-CS and optimize outcomes in subsequent IVF cycles.

Keywords: embryo transfer, Caesarean scar defect, clinical pregnancy, embryo implantation, IVF,/ICSI.

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- **The uterine factor: the black box: new hope or hype.**

Prof. Ahmed Samy Abdelazim Saad, Egypt.

The uterus is involved in fertility & conception through many crucial steps. The most important issues involved with the uterus are unexplained infertility, RIF & RPL. In this presentation we will demonstrate the recent ESHRE guidelines concerning the updated evidence for unexplained infertility, RIF & RPL and then the new techniques in assessment and management of the endometrium and myometrium and the tubal factor according to recent advances in minimally invasive techniques for such obstacles from recent world congresses in 2025 IFFS 2025, ESHRE 2025.

- **Hormone receptor expression in ectopic versus eutopic endometrium in adenomyosis: a systematic review.**

Dr. Khaled Abdalla Moghib,

Kasr Alainy School of Medicine, Cairo University, **Egypt.**

RESEARCH QUESTION: How does hormone receptor expression differ between adenomyotic lesions and eutopic endometrial tissue?

SUMMARY OF FINDINGS: Adenomyosis lesions consistently exhibit higher expression of estrogen receptors (ER), particularly ERα, in comparison to their eutopic counterparts. However, findings on progesterone receptor (PR) levels are inconsistent, and data regarding androgen receptor (AR) expression remain scarce.

BACKGROUND: Adenomyotic tissue is known to express receptors responsive to ovarian steroid hormones, indicating a hormonal influence. Nevertheless, hormonal treatments often show limited efficacy in alleviating symptoms, pointing toward a potentially distinct hormonal response and receptor expression profile in adenomyotic tissue relative to the eutopic endometrium.

METHODS: A comprehensive systematic review with thematic analysis was conducted using databases including PubMed, Ovid Medline, Embase, Scopus, and Cochrane Library, covering literature up to May 2024. Only human studies presenting original data on ER, PR, and AR expression in adenomyosis compared to eutopic endometrium were included. Search strategies combined MeSH terms and relevant keywords. The PRISMA guidelines were followed, and study quality was assessed via the Newcastle–Ottawa Scale.

INCLUSION CRITERIA: Studies had to directly compare hormone receptor expression in adenomyotic and eutopic endometrial tissue. Reviews and non-original studies were excluded.

RESULTS: Of 1905 records screened, 12 eligible studies were identified (11 proteomic, 1 transcriptomic), involving a total of 555 participants. Elevated ER expression in adenomyotic tissue was consistently reported, particularly during the secretory phase and predominantly in the functionalis layer. Notably, the increase was specific to the ERα isoform. PR findings were varied, with studies showing unchanged or reduced levels in adenomyosis. Only one small-scale study addressed AR, indicating a significant research gap.

LIMITATIONS: Many studies failed to control for menstrual cycle phase or distinguish between specific endometrial regions, both of which significantly affect receptor expression. Coexisting conditions like endometriosis may also influence results, introducing potential confounding variables.

IMPLICATIONS: The findings support the concept of localized estrogen excess in adenomyosis lesions, as reflected by increased ERα. However, due to methodological inconsistencies—especially regarding cycle phase and endometrial compartmentalization—progesterone resistance remains an unresolved question. Future studies should employ more rigorous designs with clear cycle phase documentation and region-specific analysis to better characterize hormone receptor dynamics and inform therapeutic approaches.

FUNDING & CONFLICTS OF INTEREST: This review was funded by Wellbeing of Women grants RG1073 and RG2137 (D.K.H.), an Entry-Level Scholarship ELS706, and MRC grant MR/V007238/1 (A.M. and D.K.H.), with additional support from the University of Liverpool (L.T.). The authors declare no competing interests.

- **Adenomyosis and fertility: what is the algorithm?**

Prof. Engin Oral, Turkey.

Background: Adenomyosis is a benign but clinically significant uterine condition that frequently coexists with endometriosis, leiomyomas, and other gynecological pathologies. It has increasingly been recognized as a contributor to subfertility, recurrent implantation failure (RIF), miscarriage, and adverse obstetric outcomes. Its diagnosis remains difficult due to nonspecific symptoms and overlapping ultrasonographic findings, while management is equally challenging in women desiring fertility preservation.

Methods: This review synthesizes evidence from meta-analyses, observational studies, and clinical experience to assess the prevalence,

reproductive implications, and treatment options of adenomyosis in infertile women. Outcomes related to spontaneous conception, in vitro fertilization (IVF), pregnancy maintenance, and obstetric complications are discussed, along with both surgical and non-surgical therapeutic strategies.

Results: The prevalence of adenomyosis among infertile women is estimated between 7% and 27%, with higher rates reported in patients with coexisting endometriosis or RIF. Adenomyosis adversely affects reproductive outcomes by lowering implantation and clinical pregnancy rates, while increasing the risks of miscarriage, recurrent pregnancy loss, and poor perinatal outcomes. Meta-analyses have demonstrated significant associations with preeclampsia, preterm birth, postpartum hemorrhage, and small-for-gestational-age infants.

Therapeutic approaches remain limited. No medical therapy currently eliminates adenomyosis while preserving fertility. However, gonadotropin-releasing hormone (GnRH) agonist pretreatment and levonorgestrel intrauterine systems may improve clinical pregnancy rates, particularly when combined with assisted reproductive technologies (ART). Surgical options, including complete adenomyomectomy and cytoreductive techniques, may benefit younger patients with focal disease but carry a measurable risk of uterine rupture, particularly in diffuse cases. Adjunctive use of GnRH analogues following surgery appears to enhance spontaneous pregnancy rates. Non-surgical methods such as high-intensity focused ultrasound (HIFU) and radiofrequency ablation have emerged as minimally invasive alternatives with encouraging results, though evidence remains geographically limited and longer-term outcomes require confirmation.

Conclusion: Adenomyosis is an underdiagnosed yet important factor in infertility and adverse pregnancy outcomes. Its management requires individualized treatment strategies, balancing fertility desires with potential risks. Early recognition, the use of advanced imaging techniques such as three-dimensional transvaginal ultrasound, and integration of medical or surgical pretreatments prior to ART may optimize outcomes. While GnRH agonists, LNG-IUS, and uterine-sparing surgery have demonstrated benefits in selected populations, minimally invasive ablative therapies represent promising future directions. Further large-scale, prospective studies are essential to refine patient selection, evaluate long-term safety, and develop standardized treatment algorithms to improve reproductive outcomes in women with adenomyosis.

Keywords: Adenomyosis**,** Infertility**,** Recurrent implantation failure (RIF)**,** Assisted reproductive technologies (ART)**,** Fertility preservation

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- **Principles of ovarian stimulation in fresh and frozen cycles: Are they different?**

Professor Ioannis E. Messinis

Drepartment of Obstetrics and Gynaecology, Faculty of Medicine, School of Health Sciences, University of Thessaly, Larissa, Greece

There are two main types of ovarian stimulation cycles, the “fresh” cycle in which fresh embryo transfer is taking place and the “elective freeze-all” cycle where it is decided from the outset that all embryos will be frozen. During ovarian stimulation, the occurrence of a premature LH surge is possible, which usually leads to a premature increase in serum progesterone levels (luteinisation). Several studies have shown that premature luteinisation leads to a reduced probability of pregnancy in fresh but not in frozen ones, which means that the increased progesterone affects the endometrium and not the oocyte. For this reason, in fresh cycles prevention of the LH surge is recommended in order to avoid the increase in progesterone. The question is whether the same should be done in elective freeze-all cycles. The careful analysis of various studies advocates for the non-necessity of preventing the LH surge in such cyles (expert opinion), but this requires validation. This position can be supported by the fact that early luteinisation is not significant in elective freeze-all cycles, as no fresh embryo transfer takes place. In addition, the administration of exogenous progesterone to prevent the increase in endogenous progesterone must be justified. Furthermore, an important point to consider is whether a premature LH surge without a progesterone rise is likely to affect clinical outcome or cause premature ovulation. So far, neither is supported by the existing data in the literature. Currently, ovarian stimulation in elective freeze all cycles follows the same strategy as in fresh cycles, which however seems arbitrary and should be justified by further research.

- **OHSS: out of sight but not out of danger.**

Dr. Khaldoun Sharif, Jordan.

The incidence of ovarian hyperstimulation syndrome (OHSS) has markedly decreased over the past twenty years due to the implementation of several evidence-based highly effective preventive measures.

However, because of this reduced incidence, there has been an inevitable decline in the practical experience available to currently trained subspecialists. Many clinicians now have limited exposure to OHSS, which has consequently led to a decrease in awareness of both the condition itself

and its potential complications. As a result, while OHSS is now less frequently encountered in clinical practice, the management of cases that do arise is not as efficient as it once was.

This presentation will examine the preventive strategies that have contributed to the significant reduction in OHSS. Additionally, it will address how clinicians can continue to uphold high standards of care for this condition, despite reduced exposure and

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- **A Digitally Controlled, Remotely Operated ICSI System: Case Report of the First Live Birth**

Dr. Raouf Rushdy, Egypt.

Introduction: Intracytoplasmic Sperm Injection (ICSI) is a standard procedure in assisted reproductive technology (ART), but it is challenged by high reliance on manual skill, resulting in operator variability and high training demands. Automation and Artificial Intelligence (AI) offer pathways to standardize and increase the scalability of ART procedures. This report describes the first clinical case leading to a live birth achieved using a fully automated, digitally controlled ICSI system.

Methods: A fully automated robotics system, developed by Conceivable Life Sciences, was used to execute 23 critical ICSI steps, including sperm selection, laser immobilization, pipette alignment, and injection. The system was remotely operated by embryologists across international locations (Guadalajara and New York). The procedure was performed on a 40-year-old female patient with previous IVF failure (using donor oocytes) as part of an IRB-approved protocol. A comparative analysis was conducted between five oocytes processed via automated ICSI and three via conventional manual ICSI.

Results: The automated ICSI procedure resulted in a fertilization rate of 80% (4/5 oocytes), compared to 100% (3/3 oocytes) via manual ICSI. The total time required per egg was approximately 10 minutes for the automated system. Crucially, one high-quality blastocyst derived from the automated ICSI procedure was successfully transferred, resulting in a healthy term male live birth in April 2025.

Conclusion: This case report demonstrates the successful clinical application of a novel, fully automated, and remotely operated robotic ICSI system, culminating in the world's first live birth using this technology. This breakthrough provides proof-of-concept for enhancing the standardization, precision, and global accessibility of reproductive medicine, suggesting a significant paradigm shift toward automated embryology labs and

telereproductive services. Further large-scale clinical trials are warranted to validate the safety and efficacy of this approach.

- **Sperm morphology assessment In the era of ICSI: reliable values and quality control.**

Prof. Ashraf Hasan, Egypt

- **Managing the infertile male – changing the paradigm – an ongoing debate**

Dr. Yasser El-Khayaat, Egypt- Prof. Ihab Osman, Egypt.

- **Towards the optimal maximization of sperm selection in the era of ARTs: unlocking new possibilities in reproductive medicine**

Dr. Rashad Mahmoud Mostafa, Egypt.

- **Evolving paradigms in non-obstructive azoospermia: recent and future perspectives in the era of evidence-based medicine.**

Dr. Mohamed AbdElSalam, Egypt.

- **New dimensions in predicting sperm retrieval in men with non-obstructive azoospermia: the role of MR spectroscopy and diffusion imaging**

Dr. Ahmed Ragab Ahmed, Egypt.

- **The Role of 3D US in the Diagnosis of PCO: Clinical Observational Study**

Prof. Ibrahim Mahrous, Al Azhar University

- **Emergency U/ S in Gynecology.**

Prof. Hesham El Gamal, Alexandria University

- **Basic Fetal Cardiac Examination**

Dr. Loai Aboul Enen, Ain Shams University

Ob Gyn consultant, Fetal medicine & ultrasound unit. Ain Shams University.

The basic fetal cardiac examination is an essential component of routine obstetric ultrasound aimed at early detection of congenital heart disease (CHD). This assessment focuses on systematic evaluation of the fetal heart anatomy and function using standard sonographic views. Key elements include determination of fetal situs, assessment of the four-chamber view, and visualization of the outflow tracts, three-vessel view, and three-vessel–trachea view. The examination evaluates cardiac size, axis, rhythm, chamber symmetry, septal integrity, and valvular motion. When performed correctly, the basic fetal cardiac scan significantly increases the prenatal detection rates of major CHD and enables early counseling, planning of perinatal care, and timely referral for advanced fetal echocardiography. Ongoing improvements in imaging technology and operator training continue to enhance the accuracy and clinical utility of this critical screening tool.

- **An innovative era in minimally invasive sciatic and sacral nerve surgery: real-time neuromonitoring for sensorimotor protection and foot Drop prevention.**

Prof. Ahmet Kale, Turkey.

Summary

This presentation highlights a new era in minimally invasive sciatic and sacral nerve surgery, focusing on the use of real-time neuromonitoring to protect sensorimotor function and prevent foot drop. By continuously tracking nerve signals during surgery, this technique enables early detection of nerve stress, allowing immediate intervention and reducing the risk of permanent injury. It represents a major advancement in patient safety and functional outcomes, especially in complex pelvic and spinal procedures.

- **Beyond the Common: Laparoscopic Management of Accessory and Cavitated Uterine Masses (ACUM)**

Prof. Mohamed Bedaiwy, Canada.

- **Laparoscopic management of Ovarian torsion: beyond Detorsion.**

Dr. Maryam Al Shukri, Oman

- **Surgical treatments of Deep Infiltrating Endometriosis (Colon, Rectum).**

Prof. Ahmet Kale, Turkey.

Surgical Management of Rectal Endometriosis

A Comparative Overview of Segmental Resection, Discoid Resection, and Shaving Techniques

Rectal endometriosis is one of the most challenging forms of deep infiltrating endometriosis, often associated with severe pelvic pain, dyschezia, and infertility. Surgical intervention plays a crucial role in symptom relief and improving quality of life. However, when the rectal wall is involved, the choice of surgical technique must be carefully tailored to the extent of the disease, balancing efficacy with potential risks.

This presentation will provide a comparative analysis of three primary surgical approaches: shaving, discoid resection, and segmental resection.
- Shaving is a less invasive technique used when the endometriotic lesion does not penetrate the bowel mucosa, preserving intestinal integrity.
- Discoid resection is indicated for localized, partial-thickness lesions and involves full-thickness excision of the nodule with lumen entry but without requiring anastomosis.
- Segmental resection is reserved for extensive or multifocal disease, involving removal of a segment of the rectum followed by reanastomosis. This method is associated with higher morbidity, including the risk of low anterior resection syndrome.

The talk will explore patient selection, technical considerations, postoperative outcomes, and complication rates, supported by current literature and case examples. The goal is to highlight a patient-centered approach in selecting the most appropriate surgical strategy for rectal endometriosis.

- **Hysteroscopy before ART.**

Prof. Mohamed Amer, Egypt.

- **Reproductive Outcome After Laparoscopic Caesarean Section Scar Repair: A Case Report Study.**

Professor Ahmed Fata, professor Mohamed Atef and Dr Eman Ahmed
International Islamic center for population studies and research, AL Azhar university.

Caesarean scar niche correction, also known as niche resection or niche excision, is a surgical procedure aimed at repairing or removing the scar tissue to alleviate symptoms and improve reproductive outcomes.

A case report study to investigate reproductive outcome after laparoscopic caesarean section scar repair.

Three cases with previous implantation failure, investigation revealed caesarean section scar niche. That were Carried at Ahmed Oraby IVF Center Al-Mohandseen, from August 2023 to July 2024

These cases offered laparoscopic caesarean section scar repair before frozen embryo transfer.

All cases get pregnant, unfortunately one of them aborted, other two cases completed full term and delivered by caesarean section.

It is worth noting that the incidence of niche in this study in subsequent fertility, population-based studies with prospective design and large sample sizes are needed to verify our findings.

- **Towards universal fertility care: Improving access to IVF in LMICs.**

Dr. Biswanath Ghosh Dastidar, India

This talk shall begin by summarizing the current global scenario of dropping total fertility rate (TFR) and prevalence of infertility, and its socio-economic implications, with a focus on LMICs. It shall then delve into the current situation of poor access to IVF treatment globally, with a focus on ART costs in LMICs which reduce access to care, and point out the various calls to action released by different global bodies to address the scenario. It shall enumerate the methods by which this can be achieved- through research, innovative technology, financing, and creative policy and partnerships. Finally, this talk will present our 2024 data from establishing Eastern India's 1st, completely free-to-patients, IVF program; initiated by the GD Institute for Fertility Research (GDIFR), in partnership with the Government of West Bengal, which has provided 78 free IVF cycles with over 40% pregnancy rate achieved. Lastly, it will summarize key learnings from this experience, comment on establishing similar programs in other LMICs, and chart out future directions in improving access to IVF and Fertility Care.

- **The use of "add-ons" in assisted reproductive technology: unjustified escalation in costs and reduced access to care?**

Dr. Richard Kennedy, UK.

Richard.kennedy6@nhs.net

Infertility affects approximately 12 % of the reproductive age population. Assisted reproductive technologies are now widely available although current need and demand for them far exceeds availability. Live birth rates following ART have increased modestly whereas costs of treatment have risen substantially. Consumer inflation, pandemic recovery, climate change and conflict all challenge personal income and especially in LMICs assisted reproduction is unaffordable for many. There are two main solutions to increasing access: increased public funding and reduced cost. The use of so called "add-ons" has substantially increased the cost of ART. In the UK the average cost of an IVF cycle is approximately £13,000.

This cost, reflected across most OECD countries, is grossly inflated by the addition of "supplementary" processes promulgated as solutions to increase the chances of a live birth. For a number of these interventions this is not born out by the evidence. For some interventions there is little or no robust evidence available.

The presentation will describe evidence for several interventions to illustrate this point. The consequence of substantially increasing the cost of treatment is to price some patients out of treatment and others to limit their chances. This then poses the question as to whether it is ethical to levy a fee for an intervention which is not proven to increase the chance of live birth. Are profits being put before care?

- **Clean room technology and IVF labs.**

Dr. Essam Abdalla Mansour, Egypt.

- **ART on demand.**

Prof. Tarek K. AL-Hussaini, MD, FRCOG, Egypt.

Professor Emeritus of Obstetrics and Gynecology, Ex-Head of Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt.
Scientific director of El-Salama, and Women`s health hospital IVF/ICSI units.

Infertility is defined as failure of conception after 12 months of regular unprotected intercourse (WHO, 2009) ASRM extends the period to two years if woman is younger. Infertility affects one in every six couples of reproductive age worldwide.

There has been an exponential increase in utilization of ART services since the delivery of Louise Brown in 1987, with the delivery of more than eight million children throughout the world using these techniques. This is observed both globally and even in developing countries with limited resources like Egypt. There is an expected and estimated rise in ART over the next several decades to have 1-3% of the whole world population will be conceived with ART by the year 2100 (5 -Fady Transforming)

In recent years, it has been noticed that ART utilization has been expanded to include and involve couples who don't fulfill the criteria for WHO infertility definition. This led to the suggestion of the name: ART on demand. This will encompass using ART in Non-Infertile couples. Indications for ART on demand include Absent husbands, sex selection and fertility preservation.

- **PRP in infertility: A reality or fantasy?**

Prof. Ahmed Badawy, Egypt.

PRP might offer a hopeful avenue for some challenging infertility cases by harnessing the body's natural regenerative capabilities. While its use for thin endometrial lining and recurrent implantation failure shows more promise, its role in ovarian rejuvenation is still highly debated and considered experimental. Couples considering PRP for infertility should have thorough discussions with their fertility specialist to understand the current evidence, potential benefits, risks, and costs, and to determine if it's a suitable option for their specific situation.

- **IVF and thrombosis.**

Dr. Mohamed Walaa El Deeb, Egypt.

Eldeeb MW, Elrashedy S, Amro E.

Generally, in all patients, IVF increases the risk of venous thrombosis. Moreover, the clinical manifestations of thrombosis during IVF is different from the traditional thrombosis. Up till now, there is a lack of agreement upon routine thromboprophylaxis during IVF. The goal of this presentation is to explore the pathogenesis of IVF-induced thrombosis, diagnosis, prevention, and treatment.

- **The role of ghrelin in the secretion of prolactin in women**

Prof. Ioannis Messinis, Greece

Drepartment of Obstetrics and Gynaecology, Faculty of Medicine, School of Health Sciences, University of Thessaly, Larissa, Greece

Ghrelin is a peptide hormone secreted by the mucosa of the stomach. Its main action is to stimulate food intake and increase body weight. Ghrelin is considered an endogenous ligand of the growth hormone (GH) secretagogue receptor (GHS-R) and when administered intravenously, it causes an increase in the secretion of GH in humans. Studies have shown that ghrelin can exert a stimulatory or inhibitory effect on the secretion of some hormones of the reproductive axis, including prolactin (PRL). It has been observed that the administration of a relatively large dose of ghrelin to women significantly increases the levels of PRL in the blood without any difference between the three phases of the menstrual cycle, suggesting that this effect is not influenced by ovarian steroids. Clinical experiments have shown that bromocriptine can block the stimulatory effect of ghrelin on PRL secretion in women, while it has no additive effect on the stimulatory effect of metoclopramide, an antidopaminergic substance. It has also been observed that estradiol enhances the stimulatory effect of ghrelin on PRL secretion in postmenopausal women. Recently, it has been shown that the administration of smaller (submaximal) doses of ghrelin stimulates PRL secretion significantly only during the late follicular phase of the cycle, when estrogen levels are high in blood, while during the luteal phase its stimulatory effect is not significant, which may be due to the action of increased progesterone levels. Although the mechanism of ghrelin's effect on PRL secretion likely involves the dopamine system with the possible participation of ovarian steroids, further studies are needed to clarify it.

- **GnRH antagonist tab and role in infertility.**

Dr. Mona Ben Salah, Libya

- **Optimization of progesterone treatment in the current management of AUB.**

Dr. Ghassan Lotfy, UAE

-For short presentation: Optimization of Progesterone treatment in the current management of AUB. AUB is a common clinical pathology that affects women in their different stages of reproductive life. Management should be based on conservative medical approach to avoid unnecessary invasive procedures and noncompliance to treatment. This lecture focuses on the importance of progestins in the management of AUB as a first line therapy.

- **Exploring the Saga of Vitamin D and Fertility.**

Dr. Hesham Arab, KSA.

- **Combined hormonal contraception is a blessing not a curse.**

Prof. Zakaria Sanad, Egypt.

I will discuss the recent advances in combined hormonal contraceptives, including pills, injectables, vaginal rings, and skin patches. I will stress the benefits of combined hormonal contraceptives for women and society as well as the potential risks.

Risk Reduction Strategies in Gynecological Malignancy

I will discuss risk factors for gynecological malignancy, including breast, endometrial, cervical, and ovarian cancers. I will delineate how to reduce the risk of these cancers, including methods of screening, vaccines, as well as pharmacological and surgical interventions.

- E**vidence-Based Approach for Secondary Prevention of Uterine Fibroids (Ufs)**
  (The ESCAPE Approach)

Prof. ABOUBAKR ELNASHAR

Elnashar53@otmail.com

Currently, there is no well-established screening test for Ufs & no viable approach for primary prevention. Secondary prevention aimed to slow down or halt progression of disease advancement or recurrence. For a woman at increased risk of fibroids (e.g., family history, African descent, early signs of fibroid tissue) this suggests: ESCAPE approach

1. Earlier detection by
- Imaging
- identification of risk factors

2. Modification of risk factors
- Lifestyle changes
- Avoidance of EDCs

3. Supplementation
- Vit D testing/supplementation
- EGCG supplementation

4. Regular monitoring.

It should not replace standard care (symptomatic fibroids, large fibroids, etc) but could complement it & perhaps reduce the need for invasive interventions over time.

- **Utilizing AI to advance sperm identification in TESE.**

Prof Medhat Amer, Professor of Andrology, Cairo University Hospital and chairman of Adam International Hospital.

Introduction: Azoospermia, defined as the absence of spermatozoa in the ejaculate is classified as obstructive azoospermia and nonobstructive azoospermia (NOA). NOA represents decreased sperm production within the testes. Through extraction of spermatozoa from the testes in combination with ICSI, a subset of NOA patients can achieve biological parenthood. Although sperm retrieval techniques such as testicular sperm aspiration, conventional testicular sperm extraction (TESE) and microdissection testicular sperm extraction (mTESE) have been developed, only 52% of cases were reported obtaining successful sperm retrieval. For those cases with anticipated difficult sperm retrieval, it is better to start testicular sperm

retrieval at least 8 hours before ovum retrieval to avoid post-maturity oocyte damage. However, this can cause scheduling conflicts (operating room availability and the urologist may change his time schedule). In 2024, Goss et al, has successfully demonstrated a proof-of concept application of an AI image analysis model to reduce the sperm search time in testicular tissue samples. They demonstrated a 50% reduction in time taken to identify the spermatozoa. This presents the potential to reduce the negative effect of the extended exposure of spermatozoa to biopsied testicular tissue containing molecules capable of reducing sperm viability. It could result in a standardized and more efficient workflow, improving the current processing procedure of surgically retrieved samples and cryptozoospermic ejaculates and ultimately increase chances of finding spermatozoa.

Aim of work: To investigate the ability of the tested AI sperm search tool to detect the presence of testicular sperms in a cohort of men presenting with primary infertility due to functional azoospermia. That would be compared to the traditional sperm search: Time of sperm search, number of search stations needed and total number of sperms found. False positive results (AI detected sperms that are not really sperms), false negative results (Sperms detected by the traditional method that were not recognized by the AI) and false negative results in traditional search (Sperms detected by AI method that were not recognized by the traditional search) would be documented. Cost effective analysis for both methods would be analyzed.

Materials and Methods: Four hundred Azoospermic patients would be assigned to testicular biopsy by surgical microscope, followed by sample processing by the Erythrocyte Lysing Buffer and the final sample would be submitted for AI facilitated soft-ware search for 30 minutes (Goss et al 2024) then ordinary sperm search by the micro-drop method for another 30 minutes (Nagy et al 1997). Sperm retrieval rates by both methods (SRR) would be analyzed.

Preliminary Results: Up till now we compared ordinary sperm search with AI facilitated soft-ware search in 50 functional Azoospermic cases and no sperms were detected using the ordinary sperm search by the micro-drop

method and that was confirmed by the AI facilitated soft-ware search. We are hoping that by the end of that study to explore the true efficacy of that new method to detect any sperms not detected by the traditional method and saving the embryologist time.

- **Optimizing outcomes in non-obstructive azoospermia: sperm retrieval and ICSI Success in male infertility.**

Dr. Hafez Badawy Hafez, Egypt.

Background: Infertility affects a notable **20% of couples**, with male factors accounting for approximately half of these instances. Among men, **azoospermia**, a severe form of infertility characterized by the absence of sperm in ejaculate, impacts about 1% of the male population and frequently signals testicular failure. **Non-obstructive azoospermia (NOA)** encompasses conditions such as hypospermatogenesis and Sertoli-Cell-Only Syndrome, both involving impaired sperm production, so the **micro-TESE technique** is utilized, as it is designed to maximize sperm retrieval while minimizing damage to testicular tissue.

Aim: To assess the predictive factors of successful micro testicular sperm extraction in patients with non-obstructive azoospermia.

Methods: This prospective randomized clinical study at Qena University Hospital (May 2022 - December 2024) involved 300 patients with non-obstructive azoospermia. Criteria included cases of NOA and redo micro-TESE, excluding obstructive cases and genetic abnormalities. Evaluations included history, physical exams, and lab tests. Surgical intervention involved microdissection of seminiferous tubules. Success rates, complications, and pregnancy outcomes were monitored postoperatively, defined by the detection of a gestational sac.

Results: Among 300 patients, the mean age was 38.83 years; 60.67% were smokers, and the average infertility duration was 6.76 years. The success rate was 62.67%. Significant predictors included age, hormonal levels, and testicular sizes. Positive groups showed higher mean ages (39.39 vs. 37.88, $p=0.0154$) and larger testicular sizes (right: 8.75 vs. 6.79, $p<0.0001$; left: 8.71 vs. 6.74, $p<0.0001$). Hormonal predictors included FSH ($p<0.0001$), LH ($p=0.0056$), estradiol ($p<0.0001$), and testosterone ($p<0.0001$).

Conclusion: Older age, smoking status, larger testicular size, lower FSH, LH, estradiol, and prolactin levels, and higher testosterone levels predicted micro-TESE success in NOA patients. Improved outcomes were associated with higher Juhanson scores and specific testicular locations.

Keywords: Predictive Factors, Micro-dissection, Testicular Sperm Extraction, Non-obstructive Azoospermia

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- **Impact of adding L-carnitine and semen preparation on human semen parameters after cryopreservation.**

Dr. Arwa Gamal, Egypt.

Background: The incorporation of antioxidants into semen extenders is thought to reduce cryo-induced damage to sperm cells. This study aimed to evaluate the effect of adding L- carnitine to the cryopreservation medium on the quality of both raw and prepared human semen following thawing. Methods: Normozoospermic semen samples were collected and categorized into two primary groups: raw and prepared semen (100 samples each). Each group was further subdivided into two: one using a standard cryoprotectant and the other supplemented with L-carnitine. Analysis showed no statistically significant difference in progressive motility between the L-carnitine group (C1: 11.01 ± 2.0%) and the control group (A1: 11.30 ± 1.2%). However, a significant reduction in DNA fragmentation was observed in prepared semen compared to raw semen in both subgroups. In the cryoprotectant-only group, DNA fragmentation dropped from 22.01 ± 1.2% in raw samples to 18.01 ± 1.2% in prepared ones ($P \leq 0.001$). A similar pattern occurred in the group treated with both cryoprotectant and L-carnitine, with prepared semen showing lower DNA fragmentation (13.41 ± 2.5%) than raw semen (15.11 ± 2.2%). Conclusion: Supplementing semen freezing media with L-carnitine improved post-thaw sperm quality, enhancing motility, mitochondrial function, and maintaining both acrosomal and plasma membrane integrity, making thawed .sperm more comparable to fresh semen

Keywords: Semen, cryopreservation, L-carnitine

- **How useful is repeat Micro-TESE?**

Dr. Khaldoun Sharif, Jordan

What is known already: In NOA, studies have so far looked at the sperm retrieval rate of either TESA or M-TESE, but not at both procedures performed sequentially. In SSR, the brief and less invasive TESA is attempted first and, only if negative, is followed by the lengthy and more invasive M-TESE at same the setting. Also, most previous studies have reported sperm retrieval rates regardless of attempt-rank or previous

outcome. But as successful patients are more likely to repeat treatment, this tends to exaggerate success rate and make counselling patients with previous negative retrieval inaccurate. Detailed results are required for accurate counselling.

Study design, size, duration: A retrospective study looking at sperm retrieval rate in 462 NOA patients, undergoing SSR (TESA followed -if negative- by M-TESE at same setting) for 1st time at our unit (to avoid re-entering successful cases, thus artificially inflating results), although many have undergone retrieval previously elsewhere. The outcome was the retrieval of mature sperm, in relation to the step (TESA or M-TESE), attempt-rank, and previous outcome, over a 10-year period (2013-2022).

Participants/materials, setting, methods: Of 462 participants, the number of patients according to retrieval attempt-rank and previous outcome were: 165 undergoing 1st procedure; 155 undergoing 2nd procedure (of which 77: previously positive and 78: previously negative); 91 undergoing 3rd procedure (of which 45: previously ever positive and 46; all previously negative); and 51 undergoing 4th or more (4th+) procedure (of which 41: previously ever positive and 10: all previously negative).

Main results: Overall, sperm were found in 229/462 (49.6%); in 98 (21.2%) with TESA and 131(28.4%) with M-TESE.

In the 165 patients undergoing their 1st procedure ever, sperm were retrieved in 84 (50.9%) in total; in 37 (22.4%) with TESA and 47 (28.5%) with M-TESE.

In patients undergoing 2nd, 3rd, and 4th+ retrievals after at least one positive previous attempt, sperm were retrieved in 61/77 (79.2%), 31/45 (68.9%), and 26/41 (63.4%) %), respectively. The TESA to M-TESE retrieval split for those groups were 33/77 (42.9%) to 28/77 (36.4%), 10/45 (22.2%) to 21/45 (46.7%), and 13/41 (31.7%) to 13/41 (31.7%), respectively.

In patients undergoing 2nd, 3rd, and 4th+ retrievals after all negative previous attempts, sperm were still retrieved in 17/78 (21.8%), 7/46 (15.2%), and 3/10 (30%), respectively. The TESA to M-TESE retrieval split for those groups were 4/78 (5.1%) to 13/78 (16.7%), 0/46 (0%) to 7/46 (15.2%), and 1/10 (10%) to 2/10 (20%), respectively.

Limitations, reasons for caution: The retrospective design and lack of histological correlation may have masked important predictive factors. Also, the single-centre setting (albeit increased consistency), may have made the findings less generally applicable than had it been multi-centred. Additionally, the small number in the group undergoing 4th+ attempt after all previously negative limits generalizability.

Wider implications of the findings: Sperm may be found at SSR in NOA even after multiple previous negative attempts. Moreover, it could be found at the initial less invasive step of TESA in about 1/3 of cases. However, the finding of sperm at first retrieval increases the chances of, but does not guarantee, finding sperm at subsequent attempts.

- **Will the level of kissopeptin differ in semen of fertile than infertile males?!**

Prof. Ahmed Samy Abdelazim Saad, Egypt.
Department of Obstetrics and Gynecology, College of Medicine and Health Sciences, Arabian Gulf University, Manama, Bahrain.

Background:
Intrauterine devices (IUDs) are among the most widely used long-acting reversible contraceptives worldwide, yet pain during insertion remains a major barrier to uptake and continuation. While multiple pharmacological interventions have been evaluated, evidence regarding their effectiveness is inconsistent, creating uncertainty for clinical practice.

Objective:
This study aimed to systematically evaluate and compare the safety and efficacy of pharmacological treatments for pain reduction during IUD insertion, using a network meta-analysis (NMA) framework to provide a comparative ranking of available options.

Methods:
A comprehensive search of PubMed, Cochrane Library, Scopus, Web of Science, and Google Scholar was conducted. Eligible studies were randomized controlled trials (RCTs) assessing pharmacological interventions for pain reduction during IUD insertion. Primary outcomes included pain scores during IUD and tenaculum insertion; secondary outcomes included post-insertion pain, ease of insertion, patient satisfaction, and adverse effects. Effect estimates were reported as standardized mean differences (SMDs) or risk ratios (RRs) with 95% confidence intervals. A frequentist NMA was performed using the *netmeta* package in R, with treatments ranked by P-scores.

Results:
A total of 71 RCTs including 10,870 women were identified, with 48 trials (n = 8,656) eligible for quantitative synthesis. Lidocaine 4% gel (5 mL) was the most effective agent for reducing pain during IUD insertion (SMD = –4.5; 95% CI: –5.9 to –3.0), followed by lidocaine 1% solution (10 mL; SMD = –3.20). Lidocaine 4% gel also ranked highest for minimizing pain during tenaculum placement. Misoprostol 400 mcg improved ease of insertion but showed inconsistent analgesic benefit and was associated with side effects such as abdominal cramping and nausea. Nonsteroidal anti-inflammatory drugs

(NSAIDs), including ibuprofen, demonstrated limited efficacy, while diclofenac and naproxen showed modest benefit. The overall quality of evidence was graded low to moderate due to study heterogeneity, imprecision, and risk of bias.

Conclusions:
This NMA, the largest to date, highlights lidocaine 4% gel as the most effective intervention, with additional roles for lidocaine 1% solution, dinoprostone, and selected NSAIDs. Misoprostol improves ease of insertion but provides inconsistent pain relief. These findings support evidence-based approaches to optimize patient comfort and potentially enhance IUD acceptance. Further high-quality RCTs are required to confirm these results.

Keywords: Intrauterine Device, Pain Management, Lidocaine, Misoprostol, NSAIDs, Network Meta-Analysis.

African Federation of Fertility Societies (AFFS)

Uterine Cavity in trouble

- **Intrauterine Adhesions and Endometrial Fibrosis**

"The Asherman's Syndrome"

Amr El-Shalakany, MBBCh MSc MD FRCOG
Professor Emeritus of Obstetrics & Gynecology
Ain Shams University
Cairo, Egypt.

Asherman's syndrome is a common clinical entity that follows uterine surgery or endometrial trauma resulting varying grades of intra-uterine adhesions that can have adverse menstrual, fertility and obstetric outcomes. It is not an intrauterine disorder only and Understanding of its pathogenesis is far from fully elucidated. Clinical presentation usually involves a history of endometrial trauma followed by secondary amenorrhoea / hypomenrrhoea, infertility, dysmenorrhea/pelvic pain, dyspareunia, recurrent abortions, preterm labour, morbidly adherent placenta.

A possible involvement of adhesion related cytokines in the pathogenesis of IUA (such as b-fibroblast growth factor, platelet derived growth factor and transforming growth factor type 1), was also suggested. Possible genetic factors could explain why certain patients show more frequent adhesions incidence and recurrence, or why IUA adhesions can develop even without any surgical trauma or trigger event. Some doubt the infection role in IUA pathogenesis. There is still no evidence that antibiotic therapy can exert a favourable effect after or before surgical treatment of IUA.

Diagnosis is only possible with viewing or imaging of the uterine cavity by hystero-salpingography (HSG), hysteroscopy, ultrasonography [2 D, 3D, saline infusion sonography (SIS) (Sono-hysterography SHG), power doppler, MRI.

Evolution of hysteroscopic instruments and the use of office hysteroscopy and vaginoscopic techniques have made it as the gold standard for diagnosis and the main tool for treatment. There is still no clear consensus regarding the optimum classification of AS. None of proposed classification systems seems to offer a valuable reproductive prognosis. No clinico-hysteroscopic scoring system appears to be any better than the other.

- **Thin or fluid-filled endometrium: is there any solution?**

Dr. Rudolph K. Adageba, Ghana.

- **Chronic endometritis: Should we treat?**

Dr. Wanjiru Nedgawa, Kenya.

Chronic endometritis (CE) is an often underdiagnosed, subtle inflammatory condition of the endometrium characterized by the presence of plasma cells within the uterine lining. Increasing evidence suggests that CE may be associated with infertility, recurrent implantation failure, and adverse reproductive outcomes, yet it's true clinical significance remains controversial. Diagnostic challenges—including variability in histological criteria, immunohistochemical markers, and hysteroscopic findings—contribute to inconsistent prevalence estimates and treatment approaches. While several studies have reported improved pregnancy outcomes following antibiotic therapy, other investigations question the causal relationship between CE and infertility, citing spontaneous resolution and lack of standardized treatment protocols. This ongoing debate raises important questions: Should CE be routinely screened for in women with unexplained infertility or repeated implantation failure? Does treatment reliably improve reproductive success, or does it risk overtreatment? This presentation examines current evidence on the pathophysiology, diagnosis, and management of chronic endometritis, highlighting the gaps in knowledge and the need for well-designed randomized trials. Ultimately, the decision to treat remains individualized, balancing potential benefits against uncertainties, until stronger evidence defines the true role of CE in infertility.

- **Uterine Septum to Cut or Not to Cut?**

Dr. Mohamed El Sherbiny : MD Ob.Gyn

The presence of a uterine septum has been associated with infertility, recurrent miscarriage, and poor obstetrical outcomes such as preterm birth.

In the setting of infertility, it is recommended to use a shared decision-making model after appropriate counseling to determine whether or not to proceed with septum resection

In the setting of recurrent miscarriage, it is recommended to offer hysteroscopic hysteroscopic septum incision patients with a septum and a history of recurrent miscarriage in a shared decision-making model..

There is insufficient evidence to recommend hysteroscopicresection of a septum in patients who have not yet attempted conception.

It is not recommended to perform another surgery for a residual septum under 1 cm

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- **Re-writing the narrative for infertile women 40+; stimulation paradigm shift and AI directed strategies.**

Prof. Hassan A. El Maghraby, Egypt.

- **Segmentation of the cycle of ICSI in PCOS cases.**

Prof. Emad Darwish, Egypt.

- **Beyond Premature Ovarian Insufficiency.**

Dr. Bohaira Elgeyoushi, UAE

Premature Ovarian Insufficiency (POI), defined as ovarian follicle depletion or dysfunction before the age of 40, presents its most significant impact through loss of fertility potential. While 5–10% of women may still conceive spontaneously, most require timely intervention and counselling. For women at risk, oocyte and embryo cryopreservation, or ovarian tissue cryopreservation with later auto-transplantation, provide opportunities for fertility preservation. In established POI, donor oocytes or embryos remain the most effective route to conception.

Exciting but experimental strategies are being explored to restore ovarian function and natural fertility. These include in-vitro activation (IVA) of dormant follicles, platelet-rich plasma (PRP) therapy, stem cell–based ovarian rejuvenation, and development of bioengineered “artificial ovaries.” Future approaches, such as in vitro gametogenesis, may eventually redefine

possibilities for affected women. This presentation reviews the current state of evidence, standard management, and innovative frontiers, highlighting a fertility-first, holistic approach to supporting women with POI.

- **AMH physiology and clinical significance**.

Dr. Mahmoud Shawer, Egypt.

- **Dual Trigger and Novel approaches: Latest Evidence**

Ayman Nady Abdelmeged, M.D.
Postdoctor Fellow in REI, Toronto, Canada
Professor of Obstetrics and Gynecology
Faculty of Medicine, Minia University, Minia, Egypt

Final oocyte maturation is naturally triggered by the pre-ovulatory surge of luteinizing hormone (LH). This process is crucial for both natural conception and assisted reproductive techniques (ART). LH induces oocyte maturation, promotes ovulation and the transformation of the follicle into the corpus luteum, which support early pregnancy development. The production of progesterone by the corpus luteum induces the transformation of the proliferative endometrium into secretory one, allowing embryo implantation.

hCG was the first trigger and it is the most widely used. It is an effective inducer for triggering oocyte maturation, with exclusively LH activity. This suggests that the elevation of follicle stimulating hormone (FSH) in the middle of the natural cycle seems to play a secondary role in final oocyte maturation (9). On the other hand, GnRH agonists (aGnRH) promote the release of not only LH but also FSH that is responsible for amplifying LH activity, supporting the formation of LH receptors in granulosa cells, favoring cumulus expansion and nuclear maturation.

Besides, the short duration of the LH surge induced by the GnRH agonist to trigger oocyte maturation could explain the notable reduction in the risk of ovarian hyperstimulation syndrome (OHSS).

Recently, “dual triggering” has been used to describe the combination of hCG and a GnRH, which may synergically increase the number of mature oocytes. Its potential benefits have been studied in cases of low ovarian response, poor fertilization rate, suboptimal reproductive outcomes and fertility preservation.
The objective of this review is to describe the rationale of using dual triggering for final oocyte maturation in in vitro fertilization (IVF), and to compare the

reproductive outcomes between dual triggering vs conventional hCG triggering.

Keywords: dual triggering, final oocyte maturation, GnRH agonists, hCG, low ovarian responders, immature oocytes retrieved, clinical pregnancy rate, live birth rate

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- **The untold science about PCOS. (20 min)**

Dr. Hesham Arab, KSA.

- **PCOS is not only a polycystic ovary**.

Professor Moamar Al-Jefout, MD, JBOBGYN, MMed, PhD
CMHS, UAEU, UAE | Founder of JEAG | Past President of ASEA | Senior Ambassador of WES
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Abstract:
Polycystic ovary syndrome (PCOS) is a complex endocrine-metabolic disorder affecting 11–13% of women globally and up to 18% of adolescents. Over the past three decades, PCOS prevalence, incidence, and associated disability-adjusted life years (DALYs) have risen by over 50%. In the Arab world, pooled prevalence ranges from 8.9% (using NIH criteria) to 11.9% (using Rotterdam criteria), with the Gulf states showing the highest rates. Jordanian studies suggest low public awareness of PCOS and a high burden of anxiety and depression among affected women, emphasizing the need for comprehensive education and care.

PCOS is increasingly recognised as a systemic female metabolic disorder with genetic, environmental, and hormonal determinants. Genome-wide association studies have implicated several genes (e.g., LHCGR, INSR, FSHR, DENND1A). Ethnic variation impacts phenotypic expression, comorbidities, and diagnostic sensitivity. Up to 75% of patients present with obesity, 70% with dyslipidemia, and 10% with type 2 diabetes.

In Jordan, the most common phenotype is type I (H/O/PCO) at 50.3%, followed by type III (29.6%). Type I is strongly associated with elevated fasting insulin and HOMA-IR ($p = 0.006$), particularly in patients with central obesity ($x^2 = 35.0$, $p < 0.001$). AMH >23.9 pmol/L showed 76.5% sensitivity and 85% specificity for PCOS diagnosis (AUC = 0.844, $p < 0.001$), though AMH did not differentiate between phenotypes.

PCOS-related endometrial hyperplasia (EH) was seen in 23.3% of cases, significantly more frequent than in controls (5%). Risk of EH increased by

28% for every 1 mm rise in endometrial thickness beyond 9.5 mm, with sensitivity of 92.9% and AUC of 0.738. Oligomenorrhea increased EH risk by 5.5–13.7 fold.

For adolescents, new 2023–2025 international guidelines exclude polycystic ovarian morphology (PCOM) and AMH from diagnostic criteria due to physiological overlap and low specificity. Instead, diagnosis relies on persistent menstrual irregularity and clinical/biochemical hyperandrogenism after excluding other causes. Emerging PCOS (E-PCOS) is a newly defined category in peripubertal girls with incomplete but evolving symptoms.

Clinically, insulin resistance precedes or accompanies hyperandrogenism in many cases. Weight loss reduces both insulin and androgen levels. Sleep disturbance, elevated ALT, and early cardiometabolic markers are increasingly recognised in adolescent PCOS. Moreover, infertility affects up to 72% of PCOS patients; ovulation induction follows a tiered approach with weight loss, Metformin, Letrozole, gonadotropins, and, if needed, laparoscopic ovarian drilling or IVF with step-down protocols.

Cardiometabolic risk in PCOS can be assessed using indices such as AIP, Castelli's Risk Indices, and Atherogenic Coefficient. These should be included in routine evaluation for risk stratification.

Conclusion:
PCOS represents a lifelong condition with diverse clinical presentations, requiring personalised care across age groups. In Jordan, phenotype I predominates and is linked with insulin resistance and endometrial pathology. Updated international guidelines now guide diagnosis in adolescents, aiming for early detection and targeted intervention. Public health efforts must enhance awareness, reduce stigma, and promote screening in high-risk populations.

- **Optimizing IVF in PCOS.**

Dr. Biswanath Ghosh Dastidar, India.

This talk shall begin by providing a short overview of the aberrations in the HPO axis that contribute to the pathophysiology of PCOS. Then, it will summarize the current standard of practice of ovarian stimulation for PCOS patients undergoing IVF. Following this, the talk shall propose a novel new regimen of ovarian stimulation to optimize IVF outcomes in PCOS patients, leveraging an in-depth understanding of the aberrations in reproductive endocrinology in PCOS patients. In doing so, this talk shall present our exciting new data recently published in the Journal of Clinical Medicine (JCM, IF: 3), to show how a slightly modified GnRH antagonist administration

protocol significantly improves IVF outcomes by further optimizing correction of aberrant hormonal balance in PCOS patients.

- **Polycystic ovary syndrome (PCOS) & hypothyroidism: bidirectional relationship.**

Prof. Mohamed Emam, Egypt.

Prof OBS & GYN, Mansoura Faculty of Medicine- Egypt

Introduction: Polycystic ovary syndrome (PCOS) & hypothyroidism are two of the most common endocrinopathy, affecting women, from adolescence to post menopause. They share many clinical, metabolic and reproductive features. Published data on the relationship between these two entities are sparse and confusing.

Objective: To highlight the evidence base (EB) potential links and relationship between PCOS & Hypothyroidism.

Methods: Medline search till January 2025 for English language articles related to PCOS &hypothyroidism during different stages of life.

Conclusions: There is a bidirectional relationship between PCOS and hypothyroidism. They have common aspects: insulin resistance, autoimmunity, inflammation, increased weight, and fertility challenges. Hypothyroidism alone not cause PCOS, but it can exacerbate endocrine dysfunction.

Recommendations: Regular screening for thyroid function and thyroid-specific autoantibodies in women with PCOS, is recommended although till now, no EB data support this. Extensive studies are needed to clarify the relationship between these two common medical conditions.

Corresponder:

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- **Impact of polycystic ovarian syndrome on embryo quality and assisted reproductive technology outcomes.**

Dr. Hanan J. Kadhim, Kurdistan, Iraq.

Background: Polycystic ovarian syndrome is one of the main causes to explain the increase in clinical cases of female infertility. This study examines the impact of polycystic ovarian syndrome on ovarian tissue, with a particular focus on the embryo quality and the outcomes of Assisted Reproductive Technologies (ART). The study aims to analyze key embryological parameters, including embryo quality, fertilization rates, cleavage rates, and embryo morphology, to assess the potential impact of polycystic ovarian syndrome on embryo quality and assisted reproductive technology outcomes.

Methods: A clinical case-control prospective cohortstudy conducted involving women undergoing assisted reproductive technology at assisted reproductive technologyparticipants categorized into two groups. A study group, consisting of women diagnosed with polycystic ovarian syndrome. A control group, comprising women without polycystic ovarian syndrome undergoing assisted reproductive technology.

Result: Patients with Polycystic ovarian syndrome who undergo Assisted Reproductive Technologies have a much higher rate of fertilization than their non-PCOS counterparts, but a higher percentage of the polycystic ovarian syndromegroup's embryos are of lower quality, particularly with notable increases in Grade 2B and 3C embryos:

Grade 2B: ($p = 0.009$). PCOS = 1.92 ± 0.19 vs. Control = 1.32 ± 0.09.

Grade 3C: ($p = 0.001$). PCOS = 1.44 ± 0.17 vs. Control = 0.16 ± 0.07.

Conclusion: The patients with polycystic ovarian syndrome can produce a large number of oocytes and pregnancy success when treated with Assisted Reproductive Technology, but the quality of these oocytes is compromised, leading to higherfertilization rates and poorer embryo quality.

Keywords: Assisted reproductive technology, Embryo quality, Follicle-stimulating hormone, Ovarian tissue, polycystic ovarian syndrome,

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- **Pre-conceptional care of the infertile couple.**

Prof. Engin Oral, Turkey.

Background:
Preconception care is a critical component of reproductive health, aiming to optimize maternal and paternal well-being prior to conception. For couples with infertility, preconception interventions play a pivotal role in improving reproductive outcomes, reducing pregnancy complications, and ensuring healthy generations. Despite clear evidence of benefit, preconception counseling and interventions remain underutilized in routine infertility management.

Methods:
This abstract synthesizes guidelines from international societies, recent clinical evidence, and expert recommendations to define the role of preconception care in infertile patients. The review includes risk identification, lifestyle modification, laboratory and imaging evaluation, supplementation strategies, vaccination, and management of chronic diseases, emphasizing both female and male perspectives.

Results:
Preconception care encompasses comprehensive risk assessment, including maternal age, lifestyle factors (nutrition, smoking, alcohol, and drug use), comorbidities, reproductive history, and psychosocial health. Early fertility assessment is essential, with evaluation recommended after 12 months of infertility in women under 35 and after 6 months in women over 35. Male fertility preservation strategies include weight control, avoidance of alcohol and nicotine, minimizing environmental toxin exposure, and awareness of drug effects on spermatogenesis.

Nutritional supplementation forms the cornerstone of preventive strategies. Universal folic acid prophylaxis (0.4–0.8 mg daily; up to 4 mg in high-risk groups) significantly reduces neural tube defects, while additional supplementation with iron, iodine, calcium, vitamin D, vitamin B12, and omega-3 fatty acids supports optimal maternal and fetal outcomes. Laboratory testing should include assessment of thyroid function, glycemic status, infectious diseases, and genetic carrier status where indicated. Vaccination against rubella, varicella, hepatitis B, influenza, and COVID-19 is recommended prior to pregnancy.

Management of chronic conditions such as diabetes, hypertension, thyroid disease, and epilepsy should be optimized before conception, with adjustments made to teratogenic medications. Psychological support is a vital aspect, as infertility treatments are associated with stress, anxiety, and depression, which may impair reproductive success. Environmental and occupational exposures, as well as partner violence, should also be addressed.

Conclusion:
Preconception care for infertile patients provides an opportunity to address modifiable risk factors, optimize medical conditions, and enhance fertility treatment outcomes. Its holistic approach—integrating lifestyle modification, nutritional support, vaccination, and chronic disease management—improves maternal and perinatal outcomes. For infertile couples, preconception care should be systematically incorporated into fertility counseling and assisted reproductive technology protocols. Strengthening awareness and implementation of preconception strategies can bridge the gap between infertility care and preventive reproductive health, ultimately contributing to healthier pregnancies and future generations.

Keywords: Preconception care; Infertility; Lifestyle modification; Nutritional supplementation; Fertility outcomes

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- **IVF Pregnancy Rate is over 90% when transferring a Single Euploid Embryo in Multiple Cycles.[1,2]**

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Current methodology of Next Generation Sequencing (NGS) very accurately determines whether a blastocyst is euploid, aneuploid, or mosaic. Methodology is based on the amount of DNA for each of the above. Accuracy is most evident when an embryo is initially transferred without knowledge of chromosomal status (non-selection). Pregnancy outcome is then determined later in gestation, for example 13 gestational weeks.

Transfer of a single euploid embryo can result in 60-65% pregnancy; transfer of a single aneuploid embryo result in essentially zero pregnancies (Tiegs et al; Fertility Sterility 2021). Assumption is often made that if transfer of a single euploid embryo does not result in pregnancy the explanation must not involve genetic etiology. However, transfer of a second euploid embryo in a second IVF cycle results in a pregnancy rate of 55%. If the second transfer still does not result in a pregnancy, transfer of a third single euploid embryo in a third cycle results cumulatively in over 90% pregnancy (Tiegs, Seli, Jabs, Scott; Fertil Steril 2021).

Explanations for needing multiple euploid transfers could be an unrecognized transfer of a mosaic embryo or stochastic impediments such as embryo not being placed on the optimal endometrial site.

- **Cesarean scar ectopic pregnancies: Natural evolution & management.**

Professor Eric JAUNIAUX, MD, PhD, FRCOG
EGA Institute for Women's Health, University College London (UCL), London, UK. Virtual.

Cesarean scar ectopic pregnancy (CSEP) is a relatively newly described complication of pregnancy, characterized by the development of a gestational sac in a previous lower uterine segment (LUS) cesarean delivery (CD) scar. [1]. Data on the outcomes of ongoing CSEP are limited to case reports and small cohort studies, but with mounting evidence that placentation inside a uterine scar can evolve into PAS [2]. The LUS is much thinner than the upper segment, contains fewer myofibers and more connective tissue, and is more vulnerable to the development of a cesarean scar defect (CSD) or niche. As pregnancy advances, the gestational sac in CSEP grows into the niche protruding progressively (bulging) outside the uterine cavity, behaving as an ectopic pregnancy. These permanent alterations of the uterine wall structure in CSD are associated with abnormally deep migration of extravillous trophoblast (EVT) cells close to the radial or arcuate arteries and the progressive changes in utero-placental circulation that are associated with PAS [3].

CSEPs are associated with a higher rate of clinical miscarriage (66%) than intrauterine pregnancies, compared to a normal intra-uterine pregnancy, which is probably due to the premature entry of high-velocity maternal blood flow from deep uterine arteries inside the intervillous space from early in the first trimester [4]. These data suggest that there is no need to precipitate treatment in asymptomatic patients at < 8 weeks of gestational age. A multitude of treatments for CSP have been reported in the published literature. All treatments described for CSP are equally effective in treating this condition, but the lack of a standard definition and outcome, particularly in the differential diagnosis between CSP and well-healed scar and CSEP (inside a CSD) [5]. Overall, in our experience, CSEP can be managed effectively with conservative surgery up to 15 weeks of gestation, preserving future fertility. Our preferred method is ultrasound-guided surgical evacuation with a Shirodkar cervical suture and with support of interventional radiology (IR), i.e., uterine artery embolization (UAE) if required.

Conclusion: Surgical evacuation with a Shirodkar cervical suture and selective uterine artery embolization is an effective treatment for live CSEP up to 15 weeks of gestation. Pre-surgical planning and collaboration between gynaecologists and interventional radiologists is key in managing these high-risk patients.

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- **Pregnancy outcome in patients with adenomyosis.**

Prof. El Sayed Elbadawy Awad, Egypt.

- **Maternal causes for repeated pregnancy losses.**

Dr. Omar Sefrioui, Morocco.

- **Clinical photography in Obstetrics and Gynecology**

Prof. Mohamed Kandil, Egypt.

Professor & Chairman, Department of Obstetrics & Gynecology. Armed Forces College of Medicine

Clinical photography was introduced into medicine more than 160 years ago, with Behrendt of Berlin, in 1852, being credited as the first surgeon to take pictures of his orthopedic patients. Medical photographic image capture & data processing has undergone a tremendous change in complexity over the last 25 years from 35 mm films to digital imaging. Digital imaging combines image data with patient information from computerized hospital information systems, transmits the images anywhere over the inter & intranet, and archives all information in minimal space & retrieves perfect originals at the touch of few Keys.

Indications for photography include treatment planning, patient progress monitoring, medical documentation that can be used for medico-legal purposes, medical consultation through telemedicine, and medical education. Other indications may include documentation of violence against women and stillbirth photography.

At all times, the ethics for good practice in clinicalical photography should be followed. Informed consent for each use_of the image must be obtained, the right for patient privacy should be respected, the minimum area of the body possible is photographed and images should be stored safely with controlled access. It is preferred that the images should be processed in a geographically distant processing Lab to print pictures or prepare slides.

It is the author's view that clinical photography should be part of the surgical routine for every obstetrician gynecologist and should be incorporated in the pre-operative consent form for each patient.

- **Role of pelvic packing in massive obstetric hge**.

Prof. Nahla Waer, Egypt.

- **C arm assisted HSG.**

Dr. Abdel Elah Awny, Egypt

- **Updates in Cervical Intraepithelial Neoplasia (CIN) Screening and Prophylaxis.**

Prof. Aly Abdel Bagy, Egypt

- **Blinking test (Faheem Approach).**

Dr. Hossam Faheem, Egypt.

- **Perception of Upper Egyptian Health Care Providers about FGM.**

Dr. Abdo El Sweisy, Egypt.

- **Adenomyosis surgery: state of the art in 2025.**

Prof. Alexander Popov, Russia. Virtual.

- **Regenerative therapy for ovarian recovery in oncology patients: A novel approach using PRP, MSCs, and exosomes.**

Prof. Nino Museridze, Georgia.

- **Transrectal Vs Transvaginal oocyte retrieval in patient requesting egg freezing for fertility preservation: case-controlled study.**

Dr. Nagwan Ahmed Bahgat, Egypt.

Mansoura University Faculty of Medicine

Fertility preservation has been an up-coming Assisted Reproductive Technologies (ART) procedure for patients with fertility decline due to medical or non-medical reasons. Fertility preservation could be through embryo freezing for patients with partners or oocyte cryopreservation for single patients. In 2013 the American Society for Reproductive Medicine (ASRM) approved oocyte freezing use for fertility preservation in oncology patients. But in 2018, the ASRM practice committee accepted non-medical egg freezing as ethically permissible and termed it as “planned oocyte cryopreservation”. The process of oocyte freezing starts with ovarian hyperstimulation using protocols that suit every patient individually. The next step is the oocyte collection which could be done vaginally in patients with partners, which is the standard way, or through other routes. However, virgin patients who requested to keep their hymen intact due to religious and cultural issues, especially in the Middle East area,posed a challenge for oocyte collection which led us to perform the procedurethrough the rectal route, as this way has been tested and deemed safe in testicular biopsy in males without any significant complications. In our study we compared the procedure of oocyte collection through vaginal versus rectal routes. This study was carried out in a large IVF center in Abu Dhabi, United Arab Emirates. In the period between January 2024 till February 2025, after approval from the ethical committee in Ferticlinic group. This case control study included 120 patients who requested egg freezing for fertility preservation. The patients were divided in to two groups, first group included patients with intact hymen requesting egg freezing without hymen disruption. The second group included patients without intact hymen asking for egg freezing through the traditional transvaginal way. We found that in the first group the average AMH was 0,4 while in the second group it was 0.785 and the P was 0,001. The follicles monitored

ranged from 1 to 20 follicles, with an average of 4 follicles in the first group while the follicles in the second group ranged from 1 to 20 with an average of 5 follicles and the P was 0.09. the oocytes collected ranged from 1 to 27 oocytes, with an average of 4 oocytes in the first group and ranged from 1 to 34 and average of 5 oocytes in the second group and the P was 0.430. Regarding the procedure itself--the anesthesia duration in the first group 3,27+_1.62 minutes while in the second group it was3,94+_1,85 minutes and the P was 0,038, the surgery duration in the first group was 6,23+_1,68 minutes while in the second group was 6,93+_1,84 and the P was 0, 003. Regarding accessibility of the ovaries in both group--we did not face any problem in both groups. In regards to intra-operative and post-operative complications we did not report any in both groups.

In conclusion, although trans-vaginal oocyte collection is the standard method for oocyte retrieval and is confirmed to be the safest and easiest way, yet for patients with intact hymen who are willing to keep their virginity due to cultural and religious considerations, trans-rectal oocyte collection is considered another safe and easy route.

- **AI in obstetrics: predict the unpredictable?**

Dr. Engy Abdelhaleem, Egypt.

Background: Artificial Intelligence (AI) is transforming modern medicine, offering new opportunities for early prediction and clinical decision-making. In obstetrics, where timely intervention can save two lives, AI has emerged as a powerful tool to predict complications before they become critical.

Objective: To present recent developments in AI applications in obstetrics, with a focus on predicting high-risk conditions such as pre-eclampsia, gestational diabetes, fetal growth restriction, and preterm labor.

Methods: A review of AI models and clinical algorithms published between 2020–2024, including supervised machine learning, deep learning, and decision-support tools. Selected examples include AI interpretation of CTG, automated Doppler analysis, and real-time risk stratification systems based on maternal data.

Results: AI tools have demonstrated significant accuracy in identifying patients at risk for obstetric complications. Notably, deep learning algorithms have shown over 85% sensitivity in predicting preeclampsia before clinical signs. AI-based CTG interpretation systems have outperformed traditional visual analysis in early detection of fetal distress.

Conclusion: AI is reshaping obstetric practice by enabling earlier diagnosis, improving clinical decisions, and potentially reducing maternal and neonatal

morbidity. As these technologies continue to evolve, their integration into daily obstetric care may lead to safer, smarter, and more personalized maternity services

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Role of Artificial Intelligence in Risk Prediction of Preterm Labor: Narrative Review ML, Deep Learning, Random Forest, SVM Neural Network Wearables.

- **Chasing unicorns: The allure and reality of newer trends in Assisted reproduction.**

Prof. Ameet Patki, India.

- **What you should avoid in infertility treatment.**

Prof. Mohamed Abolghar, Egypt.

- **IVF in advancing maternal and paternal age. What is new?**

Dr. Adel Boghdady, Egypt.

- **New strategy for the management of high responders in ART.**

Dr. Sherif Sobhy Menshawy Khalifa, Egypt.

Faculty of Medicine, Menoufia University, Egypt

A high ovarian response to conventional ovarian stimulation (OS) is characterized by an increased number of follicles and/or oocytes compared with a normal response (10–15 oocytes retrieved). Before oocyte pick-up, when >18–20 follicles ≥11–12 mm are observed on the day of ovulation triggering. After oocyte pick-up, when >18–20 oocytes have been retrieved. Women at risk of high response can be diagnosed before stimulation based on several indices, including. The ESHRE guidelines state that >18 oocytes confirm a high ovarian response, whereas the ASRM guidelines cite a figure of >20 oocytes. In high responder patients, response to controlled ovarian hyperstimulation varies according to many factors such as age, BMI, and FSH receptor polymorphism, so the day 7 strategy allows better evaluation to choose the best cost-effective protocol for the patients. •The freeze-all strategy and elective thawed ET with better endometrial status is the best cost-effective strategy when there is a high risk of OHSS. • Antagonist protocol and fresh embryo transfer may be the best cost-effective strategy when there is an average number of Oocytes that start to appear on day 7 of controlled ovarian hyperstimulation, to avoid the high cost of freezing and further thawing of embryos.

Keywords: high responders, ART, New strategy, ESHRE guidelines, OVARIAN STIMULATION PROTOCOL

- **Evaluation of dual trigger versus higher dose hCG trigger in antagonist protocol for patients with low number of oocytes retrieved per number of follicles.**

Dr. Bahy Abd El Hamid Zaki, Egypt.

ICPSR Al-Azhar University

Background: Controlled ovarian hyperstimulation is vital in the process of IVF&ET, it ensures the retrieval of a large number of oocytes of sufficient quality to be fertilized.

Aim and objectives: To evaluate the efficacy of dual trigger versus higher dosage hCG trigger in antagonist protocol in improving the number of oocytes retrieved per number of follicles > 17 mm on day of HCG - for patients with history of low number of oocytes retrieved per number of follicles.

Patients and methods: International Islamic Center for Population Studies and Research Assisted Reproductive Technology Unit (IICPSR) Al-Azhar University Egypt and Egyptian IVF&ET Center Maadi collaborated the conduct of this prospective clinical trial.

Two hundred (200) eligible women were selected from the infertility clinic and randomized into two groups.

Group (1): 100 women were triggered by an extra 5000 IU higher dose of hCG than that of the previous trial.

Group (2): 100 women were triggered by dual trigger (5000 iu hCG and two ampoules of decapeptile 0.1).

Result: Dual trigger can dramatically enhance number of retrieved oocytes, the number of MII oocytes and the number of top quality embryos (TQE) for individuals with low number of oocytes retrieved per number of follicles.

Conclusion: Dual trigger seems to improve number of oocyte retrieved per number of follicles, number of MII oocytes, quality and number of TQE for normal responders in GnRh antagonist ICSI cycles.

Dual group seems to improve the clinical pregnancy rate after frozen embryo transfer and cumulative pregnancy rate.

No difference in clinical pregnancy rate in fresh cycles in both groups.

- **Beyond contraception to fertility aid: Drospirenone's promising role in ART cycles- a paradigm shift.**

Prof. Ahmed Samy Abdelazim Saad, Egypt.

Professor of Ob & GYN

OBJECTIVE: Antagonist protocol is a safe option in PCOS in preventing OHSS & good pregnancy rate. The inconvenience about antagonist is that it's a costly daily used injection. The progestin-primed ovarian stimulation (PPOS) protocol was introduced using oral progesterones, such as medroxyprogesterone acetate and dydrogesterone, were used. Both have a good success rate but need to have multiple doses per day. Drospirenone is used in contraception as a single daily oral progesterone-only pill to inhibit ovulation. So, why don't we use it to prevent LH surge and hence ovulation in controlled ovarian stimulation in PCOS cases? that was the theory of our work. Can it prevent ovarian hyperstimulation syndrome? What about the oocytes, the embryos & pregnancy rate? that was the aim of our work.

MATERIALS AND METHODS: This study was conducted in a private Fertility center. This was a pilot study with an exploratory design from October 2024-February 2025 under trial reg. no. NCT06608186. Fifty cases of PCOS, with a decided freeze-all policy, were divided into 2 groups. Group 1 (25 cases): After 5 days of FSH stimulation from day 2 of the cycle, received drospirenone oral tablet / d from day 5 of stimulation till hCG trigger day. Group 2 (25 cases): After 5 days of FSH stimulation from day 2 of the cycle, received cetrorelix injection/d from day 5 of stimulation till hCG trigger day. In both groups, freeze-all policy was conducted, and frozen embryo transfer cycle was prepared in the next cycle.

RESULTS: Females undergoing Progestin-Primed Ovarian Stimulation (PPOS) required slightly more days of follicle-stimulating hormone (FSH) stimulation compared to those on the antagonist protocol (11 ±1 vs. 10 ±1 days, P = 0.16), though this difference was not statistically significant. The median number of cumulus-oocyte complexes retrieved was higher in the PPOS group than in the antagonist group (20 [8–47] vs. 18 [11–40], P = 0.232), but this was not statistically significant. Similarly, the number of metaphase II oocytes retrieved (17 [7–45] vs. 16 [9–38], P = 0.336) and the number of embryos obtained (12 [7–34] vs. 14 [7–33], P = 0.823) did not significantly differ between the two groups. The number of good blastocysts was comparable between the PPOS and antagonist groups (7 [2–15] vs. 7 [2–15], P = 0.268). Clinical pregnancy rates were slightly higher in the PPOS group compared to the antagonist group (64% vs. 56%, P = 0.564), but this difference was not statistically significant.

CONCLUSIONS: The lack of even a trend toward clinical significance suggests that a substantial difference is unlikely. This provided a useful insight that Drospirenone an oral friendly cheap daily used drug yielded a comparable clinical outcome to the gold standard, more expensive antagonist

injection. Drospirenone is an effective oral single daily dose drug that prevented LH & ovulation in controlled ovarian stimulation in PCOS with no cycle cancellation, no cases of OHSS & good clinical pregnancy rate.

IMPACT STATEMENT: This was a pilot study to use an oral cheap user friendly single daily tablet (Drospirenone) to suppress LH surge and prevent ovulation in ART cycles. We had promising results with good safety profile and a wide patient acceptance. Drospirenone is a good replacement for PCOS cycles with a freeze-all decision.

- **Network Meta-Analysis of Randomized Controlled Trials Comparing Safety and Efficacy of Pharmacological Treatments in Reducing Pain During Intrauterine Device Insertion**

Ahmed Ashour

[1] **Department of Obstetrics and Gynecology, College of Medicine and Health Sciences, Arabian Gulf University, Manama, Bahrain**

Background: Intrauterine devices (IUDs) are among the most widely used long-acting reversible contraceptives worldwide, yet pain during insertion remains a major barrier to uptake and continuation. While multiple pharmacological interventions have been evaluated, evidence regarding their effectiveness is inconsistent, creating uncertainty for clinical practice.

Objective: This study aimed to systematically evaluate and compare the safety and efficacy of pharmacological treatments for pain reduction during IUD insertion, using a network meta-analysis (NMA) framework to provide a comparative ranking of available options.

Methods: A comprehensive search of PubMed, Cochrane Library, Scopus, Web of Science, and Google Scholar was conducted. Eligible studies were randomized controlled trials (RCTs) assessing pharmacological interventions for pain reduction during IUD insertion. Primary outcomes included pain scores during IUD and tenaculum insertion; secondary outcomes included post-insertion pain, ease of insertion, patient satisfaction, and adverse effects. Effect estimates were reported as standardized mean differences (SMDs) or risk ratios (RRs) with 95% confidence intervals. A frequentist NMA was performed using the *netmeta* package in R, with treatments ranked by P-scores.

Results: A total of 71 RCTs including 10,870 women were identified, with 48 trials (n = 8,656) eligible for quantitative synthesis. Lidocaine 4% gel (5 mL) was the most effective agent for reducing pain during IUD insertion (SMD = –4.5; 95% CI: –5.9 to –3.0), followed by lidocaine 1% solution (10 mL; SMD = –3.20). Lidocaine 4% gel also ranked highest for minimizing pain during tenaculum placement. Misoprostol 400 mcg improved ease of insertion but

showed inconsistent analgesic benefit and was associated with side effects such as abdominal cramping and nausea. Nonsteroidal anti-inflammatory drugs (NSAIDs), including ibuprofen, demonstrated limited efficacy, while diclofenac and naproxen showed modest benefit. The overall quality of evidence was graded low to moderate due to study heterogeneity, imprecision, and risk of bias.

Conclusions: This NMA, the largest to date, highlights lidocaine 4% gel as the most effective intervention, with additional roles for lidocaine 1% solution, dinoprostone, and selected NSAIDs. Misoprostol improves ease of insertion but provides inconsistent pain relief. These findings support evidence-based approaches to optimize patient comfort and potentially enhance IUD acceptance. Further high-quality RCTs are required to confirm these results.

Keywords: Intrauterine Device, Pain Management, Lidocaine, Misoprostol, NSAIDs, Network Meta-Analysis.

-Luteal Phase Support in Assisted Reproduction.

Dr. Ahmed Mowafy, Egypt.

Affiliation: Consultant of Reproductive Medicine & Infertility, Qena Fertility Center and Assisted reproduction unit , Qena University hospital

Background: The luteal phase is critical for successful embryo implantation and maintenance of early pregnancy. In natural conception, this phase is hormonally regulated by endogenous LH and a functional corpus luteum. However, in IVF cycles, controlled ovarian stimulation, GnRH analog use, and follicular aspiration disrupt the natural luteal physiology, leading to luteal phase deficiency.

Objective: To review the physiology of the luteal phase, highlight the differences between natural and IVF-induced luteal environments, and summarize evidence-based strategies for luteal phase support (LPS) in assisted reproduction.

Methods: This presentation provides an evidence-focused overview of hormonal changes during the luteal phase, mechanisms of luteal insufficiency in ART, and current pharmacologic options for LPS. Key topics include timing of support, routes of progesterone administration (vaginal, IM, SC, oral), and the role of co-treatments such as estrogen, GnRH agonists, and hCG. The clinical utility of newer modalities like dydrogesterone and subcutaneous progesterone is also discussed.

Results: Literature supports that vaginal progesterone remains first-line in fresh ET cycles, while IM progesterone may be superior in programmed frozen ET. Oral dydrogesterone has shown non-inferiority in fresh cycles, and GnRH agonist co-administration can enhance outcomes, particularly after agonist triggering. Individualization of LPS based on serum progesterone monitoring is a promising approach.

Conclusion: Luteal phase support is essential for optimizing IVF outcomes. The choice of drug, route, and timing should be tailored to cycle characteristics and patient profiles. Emerging evidence supports the integration of novel routes and adjunctive therapies to personalize care and improve reproductive success.

- **Diagnosis and management of poor ovarian reserve**.

Prof. Amr Aly Sharaf Eldeen, Egypt.
Professor of obstetrics and gynecology

The document discusses the diagnosis and management of poor ovarian reserve, detailing key parameters such as age, anti-Müllerian hormone (AMH), and antral follicle count (AFC) that affect reproductive potential. It presents research findings on discordance among ovarian reserve tests and emphasizes the importance of personalized treatment protocols tailored to individual patient profiles. Additionally, it explores therapeutic strategies, including the role of androgens and dehydroepiandrosterone (DHEA) supplementation, to enhance ovarian response in these patients.

- **Ovarian dysfunction in young females: considerations, challenges, and Implications on future reproduction.**

Dr Mourad W Seif, Consultant Gynaecologist & Lead for Reproductive Endocrinology (Female), St Mary's Hospital. Manchester, UK

The diagnosis and management of ovarian dysfunction in younger females present unique challenges compared with adult women. Differences in diagnostic criteria, limited availability of longitudinal data, and the absence of standardized biochemical reference values complicate early identification and effective treatment.
Ovarian dysfunction during adolescence often impacts on reproductive outcomes later in life, underscoring the importance of accurate diagnosis and individualized care.
Obesity, particularly early-onset obesity, has been strongly linked to menstrual irregularities and earlier menarche, highlighting the complex interaction between metabolic and reproductive health. While many causes of ovarian dysfunction originate within the ovaries, evaluation of related endocrine disorders is essential, given the critical role of the hypothalamic–

pituitary–ovarian axis in maintaining reproductive function. Intrinsic ovarian disorders can impair ovulation and fertility potential, and although tests of ovarian reserve may
assist in assessing reproductive capacity, they should be applied cautiously in adolescents.
As survival rates for childhood cancers improve, premature ovarian failure has become more prevalent, emphasizing the need for specialized reproductive support services. Advances in assisted reproductive technologies offer hope for affected young women, yet access remains dependent on the availability of healthcare resources.

- **Update on NIPT- how many invasive procedures were saved by this new non-invasive technology?**

Prof. Wolfgang Holzgrave, Germany.

Objective: Despite progress in invasive prenatal procedures, a burden always was the risk of, therefore the search for a non-invasive test (NIPT), which became successful by looking at cell-free DNA (NIPT) in the maternal blood (1) So far, however, real-world data were missing how the shift from amniocentesis to NIPT really evolved and what the actual
numbers of the changes are.

Methods: In order to obtain this important information a multicentre study of different Prenatal Medicine Centers including our University Medical Center in Bonn was conducted in Germany (3) and followed up by the most recent data (so far
unpublished).

Results: It was found that from 2003to 2020 the number of amniocenteses has decreased from 54393 to 7182 whereas the CVS number has stayed constant between 4200 and 4500 and this trend continued into 2025, which means a reduction of AC and CVS per birth from 8.3 to 1,5%.up to this year.

Conclusion: We can now, for the first time, present the most recent data on NIPT and calculate how many fetal losses caused by invasive procedures were saved by NIPT. It does not happen too often in medicine that the introduction of a new technological offer to women can change the practice so much with a major risk reduction and ethical implications.

- **The IVF placenta: the only evidence-based obstetric complication of ART?**

Professor Eric JAUNIAUX, MD, PhD, FRCOG
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Except for a slight increase in the incidence of congenital heart defects (CHD) associated with in-vitro fertilization (IVF)/intracytoplasmic sperm injection (ICSI) techniques compared with those conceived spontaneously (pooled OR, 1.45; 95% CI, 1.20-1.76; P = 0.0001), there is no evidence of other issues 47 years after the birth of the first IVF baby and this finding deserves further investigation due to heterogeneity of both ART procedures and cardiac defects [1]. By contrast, IVF is strongly and directly associated with a higher incidence of placenta praevia, abnormal placental shape (bilobata, succenturiate lobe) and velamentous cord insertion (VCI) and indirectly of vasa previa (VP) [2]. These data are independent of the high rate of multiple pregnancies and the technique of transcervical embryo transfer (ET). Even if the catheter is routinely inserted high within the uterine cavity, the physiological changes, particularly the direction of intrauterine flows after ovulation will impact the interaction between the blastocyst (Day 3-5) and the endometrium and can explain low implantation, placentation, and blastocyst malrotation [2]. Overall, the risk of placenta previa in singleton pregnancies is higher after fresh blastocyst transfer (BT) compared to those born after fresh cleavage stage transfer (CT) or spontaneous conception [3]. IVF twins have higher risks of the above complications but overall, their perinatal risks are similar to those of spontaneous twin pregnancies.

The association between IVF and accreta placentation remains controversial, as it is based on poor-quality data. A prior caesarean delivery (CD) and IVF are the most common risk factor for placenta previa in subsequent pregnancies [4]. There is no evidence to support a direct link between different additional procedures to IVF, such as operative hysteroscopies, or endometrial scratching, and the development of placenta accreta spectrum (PAS). Theoretically, any permanent damage to the uterine wall can lead to PAS. Prior CD and placental location in the lower uterine segment are the main risk factors for the development of placenta accreta, and IVF only indirectly increases the risks of accreta placentation by increasing the risk of low placentation. Overall, the risks of accreta placentation in nulliparous patients with an unscarred uterus and an in vitro fertilization pregnancy are low and have been overestimated by including cases complicated by uterine atony and placental retention [4].

Conclusion: IVF pregnancies require specialist ultrasound examination at 20 weeks to exclude the above anomalies and specialist care and follow-up when identified [5,6].

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- **A simple and effective ICSI pathway, what does it involve?**

Prof. Yakoub Khalaf, UK.

- **Regenerative Stem Cell Therapy in the Management of Premature Ovarian Insufficiency and Low Ovarian Reserve: A Novel Frontier in Fertility Restoration.**

Dr. Sama Yasser Abdelazim, Egypt

Cairo University Faculty of Medicine

Background: Premature ovarian insufficiency (POI) and low ovarian reserve (LOR) significantly impact fertility and quality of life in reproductive-age women. Current treatments—mainly hormone replacement therapy (HRT) and oocyte donation—do not restore intrinsic ovarian function and are often constrained by cost, availability, and, in Egypt, religious and legal barriers to donor oocyte use. Recent advances in regenerative medicine have introduced autologous stem cell therapy as a potential strategy for restoring ovarian activity (Singh et al., 2023; Cakiroglu et al., 2020).

Objective: This study finds out the therapeutic potential of intra-ovarian injection of bone marrow-derived stem cells (BMSCs) and mesenchymal stem cells (MSCs) for POI and LOR, with a focus on outcomes from Phase I and Phase II clinical trials (Herraiz et al., 2018; Edessy et al., 2016).

Methods: A literature review of ClinicalTrials.gov, PubMed, and Scopus identified Phase I/II trials assessing stem cell therapy in POI/LOR. Key outcomes included menstruation resumption, hormonal changes (FSH, AMH, estradiol), folliculogenesis, pregnancy rates, and safety (ClinicalTrials.gov, 2025). Inclusion and exclusion criteria to be discussed in the main paper.

Results: Phase I trials primarily assessed safety and tolerability, showing no significant adverse effects. They demonstrated early hormonal improvements, including increased estrogen and AMH, and the return of menstruation in some patients (Edessy et al., 2016). Phase II trials expanded on these findings, reporting improved IVF outcomes, higher oocyte yield, better embryo quality, and cases of spontaneous ovulation and natural pregnancy (Cakiroglu et al., 2020).

Conclusion: Autologous stem cell therapy shows promise as a safe and potentially effective intervention for POI and LOR, warranting further investigation in large-scale randomized trials.

- **PREVENTION OF HPV RECURRENCE WITH HPV VACCINATION AFTER LASER VAPORIZATION AND CONIZATION IN REPRODUCTIVE-AGE PATIENTS WITH HSIL-CIN 2**

Nino Museridze, MD, PhD[2]; Madona Jugeli, MD, PhD[1]; Ana Chokhonelidze[2]; Bela Jugeli, MD[1]**; Nani Tatishvili[2]**

- **Caraps Medline Clinic, Tbilisi, Georgia**
- **Georgian-German Reproductive Center, Tbilisi, Georgia**

Background: Persistent infection with high-risk human papillomavirus (HPV) after surgical management of high-grade squamous intraepithelial lesions (HSIL-CIN 2) is recognized as a major driver of recurrence and progression to cervical cancer. Despite advances in screening and surgical techniques, recurrence rates remain clinically significant, placing women at risk of further interventions and long-term morbidity. Globally, cervical cancer continues to be one of the most common cancers affecting women, particularly in low- and middle-income countries. Although prophylactic HPV vaccines such as Gardasil® and Gardasil 9® were originally developed for primary prevention, emerging evidence suggests that they may also serve a secondary preventive role when administered after surgical treatment by reducing reinfection and supporting clearance of residual viral particles.

Objective: This study aimed to assess whether postoperative administration of the quadrivalent HPV vaccine (Gardasil®) in reproductive-age women treated with CO_2 laser conization and vaporization for HSIL-CIN 2 could reduce recurrence of HPV infection and associated cytological abnormalities, thereby improving recurrence-free survival.

Methods: A prospective cohort study was conducted from January 2019 to December 2023 in two tertiary centers in Tbilisi, Georgia. A total of 145 women aged 20–45 years with histologically confirmed HSIL-CIN 2

underwent CO_2 laser conization and vaporization. Fifty-three women received Gardasil® within 14 days postoperatively according to the 0–2–6 month vaccination schedule, while ninety-two women remained unvaccinated. Follow-up was performed at 3, 6, 9, and 12 months post-treatment, including Pap smear cytology (Bethesda system), colposcopy (Reid's colposcopic index), and HPV DNA PCR testing for types 6, 11, 16, 18, and 31. Histological reassessment with p16 immunohistochemistry was performed when clinically indicated. Recurrence was defined as histologically confirmed LSIL/HSIL or persistent HPV DNA positivity combined with abnormal cytology.

Results: At 12 months, recurrence-free survival was 90.6% among vaccinated women compared with 75.0% in the unvaccinated cohort. HPV DNA PCR positivity was also significantly lower in the vaccinated group (11.3% vs. 28.3%, p=0.01). Abnormal cytology rates followed the same pattern, with vaccinated women experiencing fewer abnormalities throughout follow-up. Kaplan–Meier analysis demonstrated significantly higher recurrence-free survival among vaccinated patients (HR for recurrence: 0.41, 95% CI 0.20–0.85).

Conclusions: Postoperative HPV vaccination significantly reduces recurrence of HPV infection and intraepithelial lesions after CO_2 laser conization for HSIL-CIN 2. These findings support the inclusion of HPV vaccination as part of standard postoperative protocols in reproductive-age women. Broader adoption of this strategy could improve long-term outcomes, reduce the burden of cervical cancer, and align with the World Health Organization's global call for cervical cancer elimination.

Keywords: HPV vaccination, HSIL-CIN 2, CO_2 laser conization, recurrence prevention, Gardasil, reproductive-age women, cervical cancer

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- **Ano-genital warts in pregnancy: clinical perspectives**

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Ano-genital warts in pregnancy is a challenge for diagnosis and management. Genital warts are caused by certain strains of HPV. HPV is the most common of all STIs. Not all HPV infections cause genital warts, though some strains cause warts, while others can cause cancer in both men and women. Every gynecologist should know how to diagnose and how to treat. The role of

vaccination, vertical transmission and mode of delivery are questionable. In this article all these questions will be answered according to the latest guidelines.

Keywords: HPV, Genital warts, Pregnancy, STDs, Vertical transmission, CS

- **Beyond fertility: comprehensive management of premature ovarian insufficiency – insights from the latest ASRM & ESHRE guidelines.**

Dr. Yasser Younis, Egypt.
Engab Fertility Center

Premature Ovarian Insufficiency (POI), characterized by the cessation of ovarian function prior to age 40, is emerging as a critical and increasingly prevalent challenge in women's health. The recently published 2024 ASRM and ESHRE guidelines underscore this shift, revealing a prevalence of 3.5%—a significant increase that redefines POI from a rare condition to a more widespread concern.

This presentation will meticulously examine the profound implications of these comprehensive guidelines, which offer 145 recommendations spanning diagnosis, etiology, sequelae, and therapeutic interventions for POI.

Notably, the updated diagnostic criteria, including the acceptance of a single FSH measurement and a refined understanding of AMH's role, streamline clinical assessment. Crucially, the guidelines advocate for a holistic management paradigm, addressing the extensive long-term health ramifications such as cardiovascular disease, skeletal integrity, neurological function, and psychological well-being.

Hormone therapy (HT) is unequivocally endorsed as a cornerstone of management, recommended until the typical age of menopause for primary prevention of morbidity and mortality, with detailed guidance on optimal dosing and regimens. Furthermore, this discourse will illuminate the imperative of personalized care, robust genetic counseling, and proactive fertility preservation strategies.

These landmark guidelines signify a transformative moment, fostering a more efficient diagnostic pathway, promoting integrated care, and championing a multidisciplinary approach to profoundly enhance the lifelong health and quality of life for women affected by POI.

- **Recurrent implantation failure: a comprehensive evidence-based analysis.**

Dr. Raouf Roshdy, Egypt.

Egypt Health Foundation

This report provides a synthesized, evidence-based analysis of recurrent implantation failure (RIF), integrating the latest research and guidelines with a focus on practical clinical utility. Based on systematic review of recent literature, this analysis prioritizes high-quality evidence from the past five years, including the landmark ESHRE 2023 guidelines and recent meta-analyses.

RIF affects approximately 10-15% of couples undergoing IVF and represents a significant challenge in reproductive medicine. Despite recent advances in definition standardization, considerable heterogeneity persists in diagnostic criteria and management approaches. This report aims to clarify current best practices while highlighting areas of ongoing debate and research needs.

Key findings include: - Evolution toward age-stratified RIF definitions with emphasis on embryo quality - Strong evidence supporting uterine cavity assessment and lifestyle optimization - Moderate evidence for personalized embryo transfer timing and intrauterine hCG perfusion - Insufficient evidence for routine immunomodulatory treatments and microbiome profiling - Significant methodological limitations in existing research requiring cautious interpretation

This analysis emphasizes the importance of individualized assessment and management, with treatment decisions guided by identified etiological factors rather than empiric multi-intervention approaches.

- **Prediction and Prevention of Ovarian Hyperstimulation Syndrome (OHSS): An Evidence-Based Approach.**

Prof. Mohamed Shehata,
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Ovarian hyperstimulation syndrome (OHSS) is one of the most serious and potentially life-threatening complications of assisted reproductive technology (ART). It arises as an exaggerated systemic response to ovarian stimulation, leading to cystic ovarian enlargement and fluid shifts into the third space, with clinical manifestations ranging from mild abdominal discomfort to severe hemodynamic and respiratory compromise. Although self-limiting in most cases, severe OHSS requires hospitalization and intensive management. Importantly, there is no definitive treatment; thus, prevention remains the cornerstone of management.

Epidemiology and Pathogenesis: Mild OHSS occurs in up to 20% of cycles, moderate in 3–7%, and severe in 0.1–2%. The syndrome results from vasoactive mediators such as VEGF, cytokines, and prostaglandins, leading to endothelial dysfunction, vascular hyperpermeability, and third-space fluid loss.

Prediction: Risk factors are divided into primary (patient-related) and secondary (ovarian response-related). Primary factors include high AMH (>3.36 ng/mL), elevated AFC (>14), age <33 years, previous OHSS, and polycystic ovary syndrome (PCOS). Secondary factors include high estradiol levels (≥5000 pg/mL), elevated inhibin-B, and excessive follicular development (≥18 follicles).

Prevention Strategies: OHSS prevention follows a stepwise approach: identifying high-risk patients, optimizing stimulation protocols, close monitoring, and modifying treatment to limit follicular response and prevent conception in high-risk cycles.

- **Primary prevention:** Individualized stimulation protocols are crucial. GnRH antagonist regimens are strongly recommended for PCOS and predicted high responders due to comparable efficacy and reduced OHSS risk compared with long GnRH agonist protocols. Progestin-primed ovarian stimulation (PPOS) is an emerging alternative with similar outcomes and lower OHSS risk. Avoidance of hCG triggers,

reduced gonadotropin dosing, and freezing all embryos further minimize risk.

- **Secondary prevention:** Techniques include coasting, cycle cancellation, reduced-dose hCG, and cryopreservation of all embryos ("freeze-all"), which has been shown to eliminate late-onset OHSS without compromising cumulative live birth rates.
- **Adjunctive measures:** Cabergoline, intravenous albumin, and hydroxyethyl starch have shown benefit in select settings, while routine use of metformin, coasting, or volume expanders is not recommended in antagonist cycles.

Guideline-Based Recommendations: ESHRE and ASRM guidelines emphasize the GnRH antagonist protocol as first-line for PCOS and high responders, GnRH agonist triggers for oocyte maturation, and freeze-all strategies in high-risk cases. Cabergoline may be considered as an adjunct. Strong emphasis is placed on patient counseling, individualized dosing, and careful monitoring.

Conclusion: OHSS is largely preventable through risk stratification, protocol optimization, and evidence-based interventions. The use of AMH and AFC as predictive tools, GnRH antagonist protocols, agonist triggers, and freeze-all strategies represents the current best practice. Implementation of these measures can significantly reduce OHSS incidence without compromising ART outcomes.

- **Comparison of sperm parameters using sequential ejaculates with short abstinence period from Oligoasthenoteratozoospermic men**

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Background: Infertile couple defines as being unable to conceive following a year or more of regular, unprotected sexual activity. It is affected 15–20% of couples globally, and male factors are present in about half of the cases. Standardized semen analysis, according to the World Health Organization (WHO), remains the initial screening and cornerstone for the evaluation of male fertility. most laboratories analyzing semen samples use the latest sixth edition of the manual, which recommends abstinence from ejaculation for two to seven days before producing an examination sample.

Oligoasthenoteratozoospermia (OAT) is a common male infertility condition, according to WHO 2010, its characterized by low sperm concentration (< 15 million/ml), reduced motility (progressive motility < 32%), and abnormal morphology (normal form ≥ 4%).
Objective: To compare the average routine abstinence time (3–4 days) with the short time (1–4h) on sperm parameters (volume, concentration, motility and morphology) on oligo-asthenoteratozoospermia (OAT) men.
Methods: This study was a prospective observational study from February to July 2025, involving 113 men diagnosed with OAT. Participants asked to provide two semen samples, collected within 4 hours apart, after a period of routine abstinence time (3–4 days). The study conducted at Al-safwa hospital, Misrata, Libya, accessed to a well-equipped laboratory for semen analysis**.**
Results: Paired semen samples collected within a 4-hour interval revealed a statistically significant reduction in volume (mean difference = +1.08 mL, $p < .001$) and motility (mean difference = – 4.27%, $p < .001$) in the second ejaculate. Other parameters—including sperm count, G1 and G2 phases, and normal morphology—showed no significant changes ($p > .05$). Despite the limited temporal interval, strong and significant correlations ($r > .66$, $p < .001$) were observed across most parameters, indicating stability in relative individual performance.
Conclusion: Collecting a second semen sample within a short abstinence interval (1–4 hours) in OAT-diagnosed men results in a significant reduction in semen volume and motility, while other parameters remain unaffected. These findings highlight the importance of standardized abstinence periods in semen analysis and suggest that short-interval sampling may not be suitable for accurate assessment in men with OAT.
Keywords: Abstinence period, sperm parameters, volume, concentration, motility, morphology.
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- **Does endometrial aging affect fertility?**

Hossam F. Abdel Rahim, Egypt.

- **The Endometrium in IVF/ICSI and the Live Birth.**

Prof. Mahmoud Abdelaleem, Egypt.

- **Recurrent implantation failure: unveiling the impact of missed findings!**

Dr. Waleed Hamed Abu Yousef, Egypt.

Founder and chairman of Dar Al Nokhba IVF center and clinics since 2021 till present.
Founder, senior Gynaecologist and IVF consultant at Omomaty fertility clinics.

Recurrent implantation failure (RIF) remains a major challenge in assisted reproductive technology, particularly in intracytoplasmic sperm injection (ICSI) cycles. This presentation highlights how overlooked or "missed" clinical, laboratory, and diagnostic findings can significantly contribute to implantation failure. It explores factors such as uterine pathology, embryo quality, endometrial receptivity, genetic abnormalities, and immunological influences. Emphasis is placed on the importance of comprehensive patient evaluation, advanced diagnostic tools, and individualized treatment strategies. Recent research and case studies illustrate how early detection of subtle abnormalities can improve outcomes. By identifying gaps in current protocols, this session aims to raise awareness and enhance clinical practice. The ultimate goal is to optimize implantation rates and achieve higher success in ICSI treatments.

- **Repeated Pregnancy Loss in The Dilemma of Guidelines**

Dr Tamer Borg,

Ain Shams University

Repeated pregnancy loss represents a dramatic psychological and physical burden on couples and a stressful pressure on all Obstetricians.

With the advanced spread of evidence-based guidelines, several controversial issues arose. The role of PGTA in fertile couples with RPL is a hot topic. The value of endoscopic surgeries to treat uterine congenital and acquired uterine anomalies is another one. Of course, the growing practice of immunotherapy and various medications aiming to avoid implantation failure is a very hot topic.

These and other recommendations vary between various countries and practice governing organization

WHAT IS THE EVIDENCE BEHIND THE CURRENT EVIDENCE-BASED MEDICINE IN RPL

- **Chronic endometritis and infertility.**

Prof. Salah Rasheed, Egypt.

- **Crafting Better Science: Essential Writing Skills for Academics.**

Dr Mohamed Farag, UNESCO Laureate Life Sciences 2024

Journal of Advanced Research, Managing Editor, Faculty of Pharmacy, Cairo University

https://www.researchgate.net/profile/Mohamed-Farag-20

Are you eager to elevate your research writing skills and transform your ideas into impactful proposals and scientific publications? This short 20-minute talk is designed for researchers and academics who want to publish high-quality scientific papers. Guided by over 25 years of academic experience and editorial insight, the talk provides practical techniques and strategies to help you communicate your research with clarity and confidence. Participants will explore how to avoid common writing pitfalls. Emphasis will also be placed on enhancing the clarity, conciseness, and overall impact of academic writing. Whether you're just starting or looking to sharpen your skills, this dynamic presentation will empower you to take your writing from idea to impact.

- **Debunking Myths About Endometriosis: Separating Fact from Fiction in Diagnosis, Surgery, and Infertility Management**

Professor Moamar Al-Jefout, MD, JBOBGYN, MMed, PhD

CMHS, UAEU, UAE |

Chair, Jordanian Endometriosis & Adenomyosis Group (JEAG); Past President, Asian Society of Endometriosis & Adenomyosis (ASEA); Senior Ambassador, World Endometriosis Society (WES) Email: drmoamar@yahoo.co.uk

Despite major advances in our understanding of endometriosis, outdated myths continue to shape public perception and clinical decision-making. This presentation identifies and debunks six of the most prevalent myths using current clinical evidence and guideline-based recommendations. By correcting these misconceptions, we aim to improve patient care, reduce diagnostic delays, and promote individualized treatment strategies.

Myth 1: Endometriosis is just a painful period.

Endometriosis is not confined to menstruation. It is a chronic inflammatory disease that may cause pelvic pain throughout the menstrual cycle, as well as dyspareunia, dysuria, dyschezia, fatigue, and infertility. Misunderstanding these symptoms contributes to long diagnostic delays and inadequate management.

Myth 2: Pregnancy cures endometriosis.

Pregnancy may temporarily alleviate symptoms due to hormonal changes, but does not cure the disease. Lesions often persist or recur postpartum, and relying on pregnancy as a therapeutic option may delay effective treatment and mislead patients, particularly those dealing with infertility or in adolescence.

Myth 3: Hysterectomy is the only cure.

Hysterectomy may relieve symptoms in select cases, but endometriosis frequently persists if lesions on the ovaries, bowel, or pelvic peritoneum are not fully excised. Pain can continue even after the uterus and ovaries are removed. Hysterectomy should not be considered a universal or first-line treatment.

Myth 4: Endometriosis only affects older women.

This condition can begin in adolescence, often soon after menarche. Teens may present with severe dysmenorrhea, non-cyclical pain, gastrointestinal symptoms, or fatigue. Due to age bias, their symptoms are often minimized or dismissed, leading to delays in diagnosis and care.

Myth 5: Endometriosis is a progressive disease.

Only about 30% of cases show actual progression over time. Many lesions remain stable or regress, particularly when estrogen exposure is limited. Overestimating disease progression can result in overtreatment, including unnecessary surgeries or hormonal suppression in asymptomatic patients.

Myth 6: Endometriosis always causes infertility.

While endometriosis can reduce fertility, many women conceive naturally or with medical assistance. Up to 70% of women with the condition eventually become pregnant. Treatment options, including surgery, ovulation induction, and assisted reproductive technologies, offer high success rates when tailored to the individual.

Conclusion:

Debunking myths about endometriosis is essential to delivering high-quality, personalized care. Misinformation fosters stigma, delays diagnosis, and may lead to unnecessary interventions. An evidence-based understanding—

rooted in clinical experience, international guidelines, and patient-centered care—empowers clinicians to offer more accurate diagnoses, effective treatment, and compassionate communication. Early education and awareness efforts among healthcare providers and the public are vital to changing the narrative around endometriosis.

- **Current status of biomarkers in endometriosis.**

Dr. Ghassan Lotfy, UAE.

For plenary: The current status of Biomarkers in Endometriosis. Diagnosis of endometriosis, particularly at the early stages of adolescence and in more severe cases, has always and still is a challenge for practicing clinicians and medical societies. This lecture will go through recent updates in the available biomarkers that could help in resolving this problem.

- **Diagnosis and management of adolescent endometriosis.**

Prof. Charles Chapron, France.

Society of Endometriosis and Uterine Disorders (SEUD), President. Head and Chair, Université Paris-Cité, Faculté de Santé, Faculté de Médicine Paris Centre, Assistance Publique – Hôpitaux de Paris (AP-HP), Hôpital Universitaire Paris Centre (HUPC), Centre Hospitalier Universitaire (CHU) Cochin, Department of Gynecology Obstetrics II and Reproductive Medicine (Professor Chapron), Paris, France

Endometriosis, histologically defined as functional endometrial glands and stroma developing outside of the uterine cavity is a common gynecologic disorder. Pathogenesis of endometriosis is enigmatic and remains controversial, even if retrograde menstruation seems the most probable mechanism for the development of the disease.

Concerning the endometriotic lesions clinical appearance, there are three phenotypes: peritoneal superficial endometriosis (SUP), ovarian endometriosis (OMA) and deep infiltrating endometriosis (DIE).

In this lecture we will demonstrate that adolescent endometriosis is a reality. As for adults, questionnaire screening of adolescents and/or young age women (YAW) can identify markers associated with endometriosis. Well-conducted questionnaire-based interviews allow young patients at risk of endometriosis to be selected and immediately directed to a referral center, where a non-surgical imaging diagnosis of the disease can be made. This strategy will help to reduce the diagnostic delay, provide appropriate treatment and improve the quality of life of these young patients.

- **Results of Dienogest Treatment and Its Discontinuation in Patients with Symptomatic Adenomyosis**

Prof. Sun-Wei Guo, USA
Research Institute

Shanghai Obstetrics and Gynecology Hospital

Fudan University, Shanghai, China

The prevailing view in the management of adenomyosis is that lifetime medication should be used or at least after menopause since the discontinuation of the medication would result in recurrence. However, long-term medication can pose a great challenge due to non-compliance, inconvenience, and increased healthcare cost. Few, if any, studies have investigated the results of treatment with a particular medication and its discontinuation. In this study, we investigated to evaluate factors, if any, in patients with symptomatic adenomyosis that contribute to the greater alleviation of dysmenorrhea and heavy menstrual bleeding (HMB) after treatment with dienogest and, if so, the risk factors for recurrence if the dienogest treatment is discontinued. We recruited 125 premenopausal patients diagnosed with adenomyosis by TVUS and/or MRI. All patients underwent an ultrasound elastographic (TVESG) examination and the lesional stiffness was measured. All patients took dienogest for 6 months and then were instructed to stop the medication for 3 months. Every 3 months after the start of the treatment till 3 months after the discontinuation of medication, TVUS/TVESG examination and symptom evaluation were made. Uterine size, lesional stiffness, and hemoglobin levels were also measured. Treatment with dienogest effectively resulted in symptom relief. Patients with more severe dysmenorrhea and co-existing endometrioma had greater improvement in dysmenorrhea, but those with diffuse adenomyosis and co-existing fibroids responded less prominently. Discontinuation of the treatment causes relapse in some patients, and more severe symptoms and higher lesional stiffness were identified to be risk factors for symptom recurrence. Adenomyosis patients with more severe dysmenorrhea and HMB may benefit most from dienogest treatment, but they also face higher recurrence risk if the treatment is discontinued, especially when their lesions are highly fibrotic. Thus, it seems that only patients with severe dysmenorrhea and severe HMB as well as higher lesional stiffness may require long-term medication while others might get a break from daily medications.

- **Endometriosis, infertility, or pain?**

Prof. Khattab Omar Abdelhaleem, Egypt.

Dealing with endometriosis as a disease of pain or as the single most frequent risk factor for infertility draws variable clinical profile and management approach.

- **AMH for ovarian reserve estimation; Is it accurate or misleading?**

Prof. Yasser Abo Taleb, Egypt.

- **How to reduce the cost of an IVF cycles.**

Prof. Abdulmagid Sarhan, Egypt.

- **Endometriosis: classification and impact on IVF outcome.**

Prof. Tarek El-Hussieni, Egypt.

- **Recurrent pregnancy loss; Evidence to accelerate action**

Prof. Ahmad Ezz, Egypt.

- **New Technologies for The Management of Ovarian Ageing**

Prof. ABOUBAKR ELNASHAR

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The process of decline in oocyte quantity & quality from birth until menopause is called ovarian aging. This can be part of the normal biological clock. It may occur prematurely leading to early ovarian ageing & premature ovarian insufficiency. In recent years there have been many research developments in the field of ovarian ageing, although as yet very little can be offered clinically. Most of the techniques involving follicular activation thus

far have succeeded in improving ovarian reserve, but age-related deterioration in oocyte quality is still a major setback.

Introduction of therapeutics focusing on preservation of DNA integrity & repair of DNA damage, such as mitochondrial DNA replacement, Seno therapeutics and Gene editing, presents an exciting era of development in the field of ovarian ageing. Before translation to clinical practice, further research including high-quality clinical trials is necessary

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- **Why not screen for germline autosomal dominant cancer susceptibility and arrhythmias?**

Prof. Joe Leigh Simpson, USA.

Why not screen for Germline Autosomal Dominate Cancer Susceptibility or Arrythmias?

Joe Leigh Simpson, MD [1,2] , Svetlana Rechitsky, PhD [1,2]

Florida International University
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For decades since the 1970s, autosomal recessive carrier screening was available to identify selected disorders (e.g., B-thalassemia; sickle cell anemia). Screening was intended for couples whose offspring were at risk. At present one can sequence all 20,000 genes. Commercial vendors can generate results for all genes, or report results of a single gene present in an affected first degree relative, or report genes relevant to a single organ system such as breast cancer or arrythmias. Typically, up to 100 different genes are placed on a single gene panel.

Ability to perform Whole Generation Sequencing has resulted in expanded carrier screening for adult-onset disorders amenable to PGT-Monogenic. The number of PGT-M cases for heritable cancer susceptibility is increasing at our until, now over 200 cases yearly for 60 different genes. The most common cancer gene in our cohort is BRCA1/2. Adult -onset BRCA 1/2 requires a germline mutation present at birth but not usually recognized until a second somatic mutation arises later in life.

If such a woman aged 55 years has BRCA1, her offspring are at 50% risk for inheriting that mutation. If her adult offspring have already had their family, grandchildren should be tested. If a family is not complete, the couple now has a different option than traditional amniocentesis that could identify an affected fetus. At risk couples can now undergo IVF, even if fertile. A cohort of blastocysts can be generated and subjected to PGT-M as well as PGT-A. An embryo unaffected with heritable cancer can be transferred.

- **Egg Freezing; an update on current data of the Egyptian IVF Center.**

Prof. Mona Aboulghar Egypt.

- **Comprehensive integration of artificial intelligence along the ICSI journey: from patient interaction to embryo selection**.

Prof. Ashraf Abo Ali, Egypt.

Madina Fertility Center[1], Madina Women Hospital, Alexandria, Egypt

The integration of artificial intelligence (AI) into the intracytoplasmic sperm injection (ICSI) workflow is redefining contemporary assisted reproductive technologies (ART) by introducing data-driven precision, minimizing inter-observer variability, and enabling real-time decision support across the entire therapeutic continuum.

This paper delineates the multifaceted applications of AI within the ICSI cycle, encompassing preclinical patient interaction, gamete selection, stimulation monitoring, and embryological evaluation.

At the pre-treatment stage, AI-powered natural language processing (NLP) platforms-operating through conversational agents- facilitate scalable, consistent, and personalized patient counseling, thereby improving informed consent, treatment adherence, and patient engagement beyond conventional clinical settings.

In cases of severe male factor infertility, particularly non-obstructive azoospermia, AI-enhanced computer vision systems enable high-resolution, frame-by-frame sperm detection and morphological assessment in testicular aspirates, markedly increasing the likelihood of viable sperm identification.

During ovarian stimulation, supervised machine learning algorithms integrate endocrine markers (e.g., estradiol, LH), ovarian reserve indicators (AMH, AFC), and follicular dynamics to individualize gonadotropin dosing and accurately predict the optimal timing for ovulation trigger administration—key determinants of mature oocyte (MII) yield.

In the embryology laboratory, deep learning models are employed to perform quantitative, non-subjective oocyte and embryo grading using morphokinetic and high-resolution imaging data, enhancing the precision of embryo selection and reducing reliance on manual assessments.

Conclusion: These AI applications converge to create an intelligent, adaptive ecosystem that augments clinical and embryological decision-making, improves operational efficiency, and holds the potential to increase cumulative live birth rates. While further prospective validation and regulatory frameworks are essential, the systematic integration of AI across the ICSI journey represents a foundational advancement in personalized reproductive medicine.

Keywords: Artificial Intelligence; ICSI; Embryo Morphology; Azoospermia; Ovarian Stimulation; Ovulation Trigger Timing; Machine Learning; Reproductive Bioinformatics; Patient-Centered AI; IVF Decision Support.

- **Management of difficult embryo transfers**

Professor Preye Owen FIEBAI

Professor of Obstetrics and Gynaecology, University of Port Harcourt

Embryo transfer (ET) is a pivotal step in in vitro fertilization (IVF), yet difficult ETs, occurring in approximately 8-10% of cases, pose significant challenges to achieving successful pregnancies. This presentation explores the causes, impacts, and management strategies for difficult ETs, defined by procedural challenges such as patient discomfort, prolonged duration, or the need for additional instruments.

Anatomical factors like cervical stenosis, tortuous cervical anatomy, and extreme uterine positions, alongside physiological factors such as endometriosis, contribute to these difficulties.

Difficult ETs are associated with a ~30% reduction in clinical pregnancy and live birth rates due to trauma-induced uterine contractions, potential embryo damage, and suboptimal placement.

Preventive measures include mock transfers, uterine evaluations via hysteroscopy or ultrasound, and pharmacological aids like oxytocin antagonists. Management during difficult transfers involves ultrasound guidance, soft catheters, and advanced techniques such as stylet assistance or cervical stabilization. For refractory cases, interventions like cervical

dilation (using Hegar dilators or hygroscopic rods) or operative hysteroscopy significantly improve outcomes, with dilation converting 64-80% of cases to easy transfers.

- **"Mitochondrial Replacement Therapy and the Three-Parent Baby Debate" (hot ethical and clinical topic)**

ABDULMAGID SARHAN
MD, FRCOG,
Zagazig University, Egypt

Mitochondrial Replacement Therapy (MRT) stands at the cutting edge of reproductive medicine, offering new hope for families affected by mitochondrial diseases, a group of often fatal and currently incurable disorders. By replacing faulty mitochondria in an egg or embryo with healthy mitochondria from a donor, MRT enables the birth of a child free from mitochondrial defects. However, this technique introduces DNA from three individuals; the mother, the father, and the mitochondrial donor leading to the now-famous term, the "three-parent baby."

While scientifically groundbreaking, MRT has ignited intense ethical, legal, and societal debates. Questions swirl around genetic identity, germline modification, consent for future generations, and the potential slippery slope toward genetic enhancement. Clinically, MRT challenges traditional ART protocols and demands rigorous safety and long-term follow-up studies.

Diving deeper into this topic, we will explore how MRT works, review the current clinical outcomes, examine global regulatory approaches, and critically assess the ethical dilemmas that have captured the world's attention.

- **Protecting one's fertility- Preservation and rejuvenation.**

Prof. Ameet Patki, India.

- **Advances in Fertility Preservation in Young Women**

Prof. Ahmed Elbohoty, MSc, MD, MIGSC, EFRM, FRCOG
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Background: Fertility preservation (FP) has evolved from an experimental field into an essential component of comprehensive reproductive care. Advances in cryobiology, stimulation protocols, and surgical techniques have expanded options for both oncological and non-oncological patients.

Objective: To summarize current evidence and clinical experience in fertility preservation strategies among young women, including oncological, medical, and social indications.

Methods: A review of recent literature (ESHRE 2020, ASCO 2025, ASRM 2019) and analysis of institutional experience from Trust Fertility Clinic between October 2024 and July 2025 involving 142 FP consultations (80.3% elective, 19.7% oncology).

Results: Oocyte and embryo cryopreservation remain the gold standard, achieving >90% post-thaw survival and >80% cumulative live-birth rates when ≥15 mature oocytes are preserved before age 35. Random-start and double-stimulation protocols allow urgent FP within days without delaying chemotherapy. Letrozole-based stimulation provides a safe option for estrogen-sensitive malignancies. Ovarian tissue cryopreservation (OTC) now offers endocrine restoration and natural pregnancies, with >200 live births globally. Five OTC cases were performed in Trust fertility clinic, all after multidisciplinary oncology–fertility consultation.

Conclusion: Fertility preservation should be integrated early in cancer and reproductive care pathways. Multidisciplinary counseling and individualized selection of FP methods are key to maximizing success and safety. Future directions include in-vitro follicle growth, artificial ovaries, and stem-cell–derived gametes.

Keywords: Fertility preservation, oncofertility, ovarian stimulation, ovarian tissue cryopreservation, oocyte vitrification, Trust Fertility Center.

- **Fertility issues in cancer survivors**.

Prof. El Said Abdel Hady, Egypt.
Fertility issues in cancer survivors
El Said Abdel Hady, PhD, FRCOG
Professor in Obstetrics and Gynecology.
Former Dean of Mansoura School of Medicine
President of Horus University

Cancer is more frequently diagnosed in young males and females.

Fertility-sparing techniques and assisted reproductive techniques have made it possible to preserve fertility in cancer survivors.

Cancer treatments like surgery, chemotherapy, and radiotherapy can remove or damage the reproductive organs, leading to infertility or subfertility.

The severity of the injury to reproductive organs varies widely depending on the age and cancer type and stage at diagnosis, the treatment received, and the availability of multidisciplinary teams who can cure cancer and preserve fertility.

- **Egg Freezing a Social Trend or Fertility Preservation Salvation.**

Dr. Bohaira Elgeyoushi, UAE.

Egg freezing, once a niche intervention for women facing cancer therapies, has now evolved into both a medical necessity and a social trend, reflecting profound changes in reproductive planning. The technique of oocyte cryopreservation has advanced significantly with vitrification, which has transformed survival and fertilisation rates. These scientific developments have redefined egg freezing as a realistic option for both medical and non-medical fertility preservation use.
The success of egg freezing, however, remains age-dependent, with optimum outcomes achieved in the late twenties to early thirties, while diminishing returns are observed in women over 40. This presentation evaluates the clinical indications, including oncology and premature ovarian insufficiency risk, alongside non-medical drivers such as career progression, delayed partnerships, cultural expectations, and social influence. It also addresses the ethical debates, legal restrictions, and cultural sensitivities that shape access and acceptance globally. Ultimately, egg freezing represents more than a social trend: it is a strategic form of reproductive insurance, balancing science, autonomy, and society's evolving views on motherhood.

- **Fertility preservation in endometrial carcinoma of the reproductive years**

Amr El-Shalakany, MBBCh MSc MD FRCOG
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Uterine corpus cancer is the sixth most common female cancer 417,000 new cases and 97,000 deaths in 2020. Incidence rates vary 10-fold across world regions (highest rates seen in Northern America, Europe, Micronesia/Polynesia, and Australia/New Zealand and the lowest incidence rates in most African regions and South-Central Asia. Less regional variation was seen in terms of mortality rates. Incidence rates have increased or stabilized since the late 1990s in many countries across regions (South Africa and several countries in Asia showing the fastest increase reflecting increases in the prevalence of risk factors (eg, excess body weight, physical inactivity).

Incidence of endometrial cancer (EC) has increased across all age categories over the past three decades 14-60 folds. Between 5-14% of the cases occur within the reproductive years. With the global delay in fertility fulfillment, many women will be looking for fertility preservation options. Fertility-preserving therapies (hormonal, LNG-IUS, hysteroscopic) for endometrial cancer are advancing, but no RCTs have been reported yet.

The Cancer Genome Atlas Research Network (TCGA) classified endometrial cancers into four categories: POLE ultramutated, microsatellite instability hypermutated, copy-number low (P53 wild), and copy-number high (P53 mutated). There is a dire need to implement the new endometrial cancer molecular characterization for better selection of those suitable for fertility preserving treatments. Multidisciplinary involvement and coordination between gynecological oncologists, clinical oncologists and reproductive medicine specialists is essential to achieve the desired fertility outcomes.

- **Fertility Preservation.**

Prof. Diaa Abdel Aal El Nashar, Egypt

- **Effect of caesarean section on fertility**

Prof. Hassan Sallam, Egypt

- **Environmental pollution and reproductive health: and ongoing health disruptor.**

Prof. Abdel-Maguid Ramzy, Egypt.

- **Psychological and Social Impact of Infertility.**

Prof. Soad Elwarshafany, Libya.

- **The midlife: does it have to be a crisis?**

Prof. Mervat Sheikh El Arab, Egypt.

- **Non-Hormonal Medical Management of the Menopause.**

Dr. Mourad Seif, UK.

Non-Hormonal Medical Management of the Menopause.
Dr Mourad W Seif, Consultant Gynaecologist & Lead for Reproductive Endocrinology (Female), St Mary's Hospital. Manchester, UK

Although hormone replacement therapy (HRT) remains the most effective treatment for menopausal symptoms and plays an important role in maintaining bone health, it is contraindicated in some women and avoided by others. Menopausal symptoms are complex, but the most common presentations are those of vasomotor and
urogenital nature. Vasomotor symptoms, such as hot flushes and night sweats, are particularly prevalent in women with a history of breast cancer and may be more severe and persistent than in the general population. Because systemic HRT is generally avoided after breast cancer, non-hormonal treatment options are often
required. Similarly, women who discontinue HRT for various reasons may experience a resurgence of vasomotor symptoms, necessitating alternative nonhormonal management. Many women seek advice about menopause management from the internet or from friends and family, often leading to confusion due to the abundance of conflicting information. Furthermore, the scarcity of direct comparisons between hormonal and non-hormonal treatments and inconsistencies across clinical guidelines have collectively complicated the evidence base and clinical decision-making in this area.

- **Premature ovarian insufficiency in adolescent and young women: a holistic approach.**

Amal M. Elshahat, MD

Professor of Obstetrics and Gynecology Suez Canal University

Premature Ovarian Insufficiency (POI), also known as premature ovarian failure, is a condition characterized by the cessation of ovarian function before the age of 40. It is defined by amenorrhea (absence of menstruation), elevated gonadotropin levels (FSH and LH), and hypoestrogenism (low estrogen levels). POI affects approximately 1% of women under 40 and 0.1% of women under 30. The etiology of POI is diverse and often remains idiopathic.

The clinical manifestations of POI are primarily related to estrogen deficiency , The diagnosis of POI is based on a combination of clinical symptoms and laboratory findings and Management focuses on hormone replacement therapy (HRT) to alleviate symptoms of estrogen deficiency and mitigate the long-term health risks,will be discussed in this presentation .

Psychological support is a critical component of care, as a diagnosis of POI can be emotionally distressing, particularly due to the loss of fertility. While POI is associated with infertility, spontaneous pregnancies can occur in a small percentage of cases. Assisted reproductive technologies, such as egg donation, are often the primary option for women with POI who wish to conceive. Research into the underlying mechanisms of POI and potential new therapeutic approaches, such as ovarian tissue transplantation and stem cell therapy, is ongoing. Understanding and managing POI requires a multidisciplinary approach involving endocrinologists, gynecologists, and mental health professionals to address both the physical and psychological aspects of the condition.

- **Fertility options in women with premature ovarian insufficiency.**

Prof. Emer. Basil C. Tarlatzis, MD, PhD, FRCOG (Ad Eundem)
School of Medicine
Aristotle University of Thessaloniki, Greece

In poor responders undergoing IVF, ovarian stimulation with adjuvant co-administration of DHEA, CoQ10, or, to a lesser extent GH, seems to improve clinical pregnancy and live birth rates with lower amounts of gonadotropins needed.

No beneficial effect on pregnancy rates after IVF was detected in poor responders treated with testosterone, aromatase inhibitors, recLH, HCG, estrogens before or during ovarian stimulation, or PRP.

In poor responders undergoing ovarian stimulation for IVF, the use of mild stimulation (low-dose gonadotropins with or without CC or letrozole) is associated with similar pregnancy outcomes but lower amounts of gonadotropins needed.

Fertility declines with age >35 years. Hence, infertility investigation should start after 6 months for women >35 and, possibly, even less >40 years. IVF chances decrease with age and depend on the number of oocytes retrieved. Over 46 years of age chances of LBR are close to 0%. In these cases, oocyte donation is an option with good chances of live birth rate. However, oocyte donation is associated with increased risk of preeclampsia.

Severe endometriosis and infertility - latest evidence on surgical management.

- **Severe endometriosis and infertility - latest evidence on surgical management.**

Prof. Hassan Morsi, PhD FRCOG

Professor of Obstetrics & Gynaecology

Ain Shams University Egypt.

The latest evidence on the surgical management of severe endometriosis in infertility emphasizes the role of laparoscopic surgery as a key method for improving fertility outcomes by restoring pelvic anatomy and potentially enhancing natural conception rates. Laparoscopic excision is preferred over ablation due to its association with lower recurrence and better fertility results. In severe cases, such as deep infiltrating endometriosis (DIE) involving structures like the rectum and bladder, surgery is more complex and recommended primarily for symptomatic patients with fertility desires. Surgery for ovarian endometriomas improves pregnancy rates but risks reducing ovarian reserve, particularly with cystectomy, which necessitates ovarian reserve assessment and careful surgical technique to preserve ovarian function. The benefit of surgery before assisted reproductive technologies (ART) like IVF remains debated, with recommendations favouring surgery mainly for symptom relief or improving access during oocyte retrieval rather than directly enhancing fertility outcomes. Fertility preservation methods are increasingly considered for women at high risk of ovarian damage. Current guidelines stress individualized surgical decisions based on patient factors, lesion severity, and fertility goals. We discuss the latest evidence in this presentation.

- **Does myomectomy improve fertility?**

Dr. Maryam Al Shukry, Oman.

- **Endometriosis As an Endless Problem.**

Prof. Mohamed Salama Gad, Egypt

- **How can we be sure that our recent obstetrics and gynecology consultants are sufficiently competent?**

Prof. Ahmed Makhlouf, Egypt.

- **Niche repair.**

Prof. Anton Fedorov, Russia. Virtual.

- **Effectiveness and safety of viability sperm selection for patients undergoing ICSI with immotile sperm.**

Dr. Yasmin Magdi,

Al-Yasmeen Fertility and Gynecology Center, Benha, Egypt

Background

Lack or sever impairment of sperm motility is a major cause of poor ICSI outcomes. Numerous viability sperm methods have been suggested to identify viable sperm for ICSI and improve the outcomes. Although this is a priority topic, to our knowledge only narrative reviews of viability sperm selection of immotile sperm are available, with no published systematic review. We aimed to perform a systematic review to evaluate the effectiveness and safety of these techniques and address gaps exist in evidence.

Methods

In our systematic review and meta-analysis, we searched PubMed, Cochrane Library, Scopus and Web of Science for original research articles published from January 1990 to April 2025. Studies with a control group evaluating viability sperm selection for patients with immotile sperm were included. The study was registered a prior in PROSPERO ID: CRD420251017288.

Results

Sixteen studies were included in the analysis; of them 13 studies evaluated live birth rate with 2066 patients. Pooled estimates showed increased rate of live birth after using viability sperm selection, compared to control (RR 1.19; 95% CI, 1.04-1.35; P=0.01, I^2=5.1%). A sensitivity analysis yielded similar results. A subgroup analysis noted improved live birth rate after using theophylline (RR 1.45; 95% CI, 1.09-1.92; P=0.01; I^2 =66.4%), compared to control.

We found improved clinical pregnancy rate after using viability sperm selection, compared to control (RR 1.13; 95% CI, 1.01-1.26; P=0.04, I^2=38.2%). No difference was found between both groups in regard to other pregnancy, embryological, neonatal and obstetric outcomes.

Conclusion

Viability sperm selection did improve live birth compared with unselected control. Among selection methods available, **t**heophylline is more preferred and effective method. Viability sperm selection does not appear to increase the chance of adverse neonatal and obstetric and outcomes after ICSI. Our data should be interpreted with caution due to low to moderate certainty of evidence presented. Further high-quality clinical trials are needed to validate our findings.

Funding

This study received no funding.

Keywords

Sperm viability; Immotile sperm; Hypo-osmotic test, theophylline; tail flexibility test, azoospermia, complete asthenozoospermia

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