



AHMEDABAD OBSTETRICS AND GYNAECOLOGICAL SOCIETY

AOGS TIMES

VIHAAN

JANUARY 2024 | VOLUME 10

MOTTO : REDEFINING WOMEN HEALTH

THEME : CATCH THEM YOUNG

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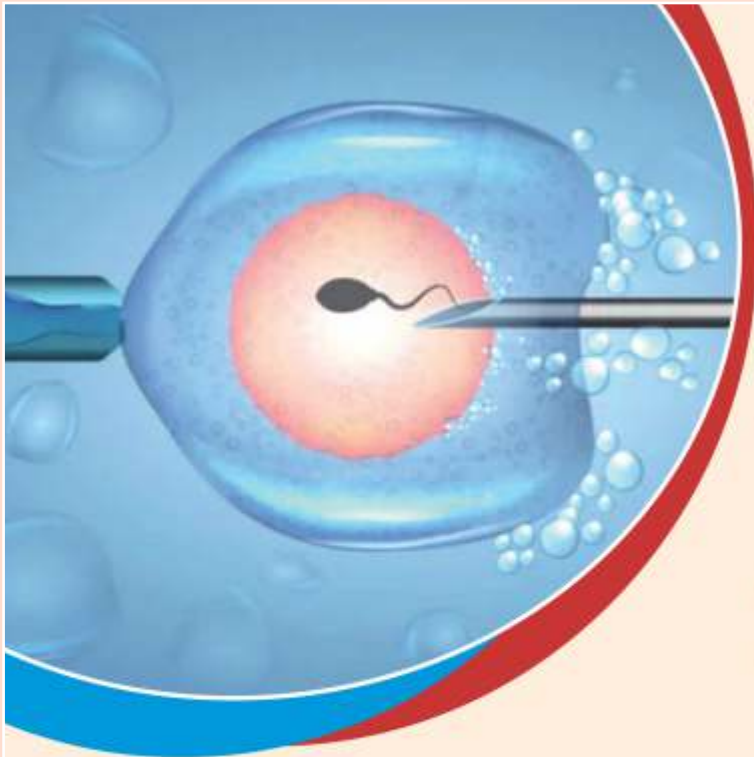
Dr. Azadeh Patel

ॐ त्र्यम्बकेश्वराय नमः ।



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Dr. Mukesh Savaliya
President

TEAM AOGS
MESSAGE



Dr. Mukesh Patel
Hon. Secretary

Dear Members,

As the year 2024 starts, it brings in new hope and adds up newer and better goals to our life. The winter is gradually receding.

We have 2 Orations by 2 Stalwarts Dr. Mahesh Gupta and Dr. Sunita Tandulwadkar lined up on 11th February, details of which are attached.

We have lost a great valiant soul in the last week of this month, Dr. Mukul Shah sir; the irreparable loss for our fraternity. We wish his soul peace and we offer the family our condolences and courage to bear the loss.

Wishing everyone a life full of health and happiness!

God bless everyone!

Mesh Controversies : Complications to Conclusions

- At least 50% of parous women: At least minor degree of Pelvic Organ Prolapse
- Women's lifetime risk of undergoing pelvic reconstructive surgery: Around 11%

Surgical repair for prolapse:

- Traditionally by Native tissue: More risk of recurrence
- Over Past 2 Decades:
 - TVM (Transvaginal Mesh) implant procedures to reduce risk of recurrence
 - Complications in form of Mesh exposure, infection, voiding dysfunction, dyspareunia are reported
- 2008: USFDA produced public health notification highlighting increasing complications with use of surgical mesh specifically for POP procedures
- 2011: Safety update by USFDA informing public that serious complications associated with synthetic mesh for transvaginal repair of POP were more common
- 2012: Post-marketing survey was performed to monitor its safety
- 2016: Many products were withdrawn from American Market as premarket approval became necessary
- 2019: USFDA announced executive summary
 - Advocated that TVM usage offered no consistent benefit in terms of effectiveness compared to native tissue repair
 - Raised concern over safety using TVM for pelvic floor reconstruction in complicated POP patients
 - Synthetic, non-absorbable polypropylene mesh outperformed biological grafts, based on anatomical outcomes

UK:

- The clinical transvaginal surgical insertion of PP mesh for POP has been banned in the UK by NICE due to safety concerns.
- Transabdominal PP mesh surgery is still available and offered to patients for the management of vaginal vault prolapse and uterine prolapse, as a last resort if conservative measures have failed (Maher C, 2019)
- For both anterior and posterior wall

prolapse, NICE has banned all forms of PP mesh surgery, due to the growing body of evidence that PP mesh does not improve symptomatic rates of success, including a cohort study involving nearly 19,000 women undergoing POP surgery (Morling J, 2016)

- Since PP mesh was already commonly used for hernia repair, thorough testing of the product was not required, under the FDA 510 (k) clearance rule.
- The FDA 510 (k) pathway provides rapid clearance to products, allowing them to bypass further clinical trials and extra safety regulation processing if they are deemed substantially equivalent to a product already approved and in use in the healthcare market.
- It is for these reasons that, initially, the long-term implications of pelvic PP mesh may not have been fully known.

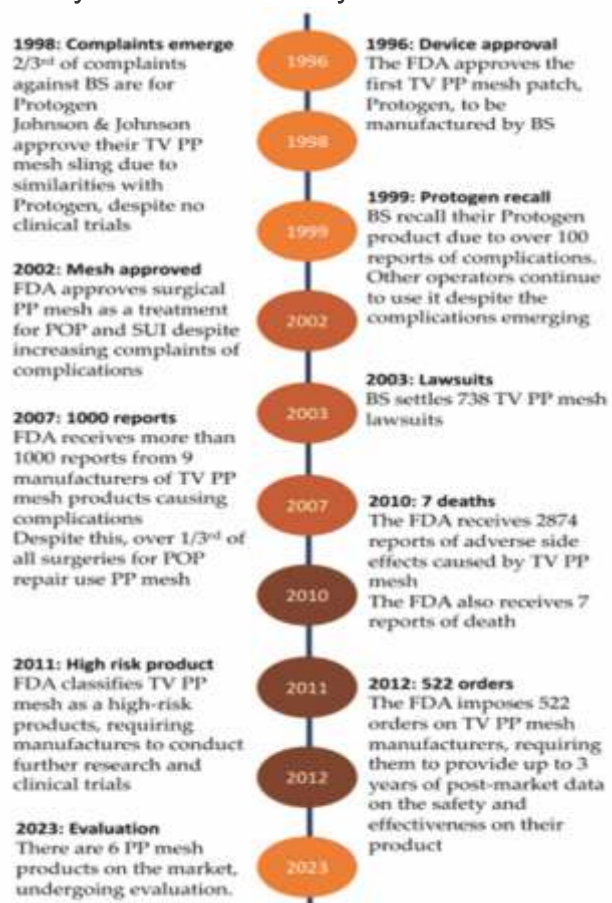


Figure 1. Timeline depicting major events that have taken place since the first introduction of the polypropylene pelvic mesh. Boston Scientific (BS), Polypropylene (PP), transvaginal (TV).

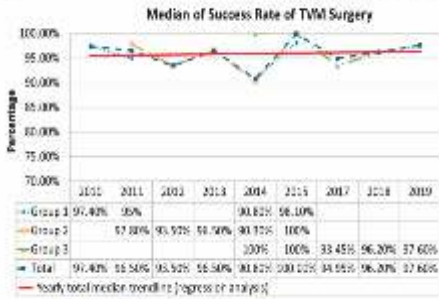


Fig. 1. The median of the yearly success rates according to the different TVM types, and the median trend line with a regression analysis.



Fig. 2. The median of the yearly mesh complication rates according to the different TVM types, and the median trend line with a regression analysis.

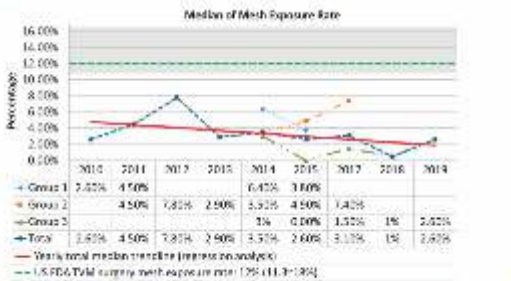


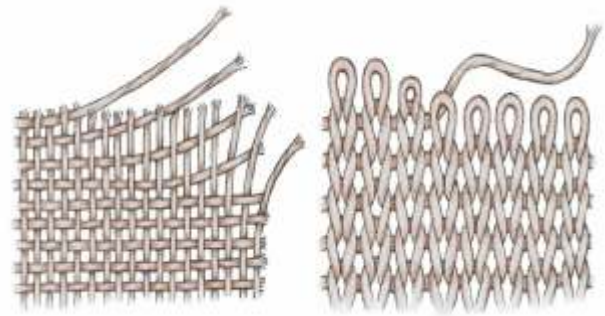
Fig. 3. The median of the yearly mesh exposure rates according to the different TVM types, and the median trend line with a regression analysis.



Fig. 4. The dyspareunia rate following TVM surgery according to the yearly data and the median trend line with the regression analysis.

Table 1. Materials that have been used clinically to augment pelvic organ prolapse (POP) compared against. Draw a range of the biological materials in their lack of mechanical properties, especially long-term post-proliferation.

Type	Sub-Type	Material	Advantages	Disadvantages
S	Collagen	Formaldehyde	• Stable in vivo in the patient's body	• Expensive
		Formaldehyde	• High tensile strength	• Tissue integration requires long-term follow-up
		Formaldehyde	• Stable in vivo	• Risk of infection and integration
S	Allografts	Collagen (animal-derived)	• High tensile strength	• Lack of mechanical properties
		Formaldehyde	• High tensile strength	• High rate of infection
		Formaldehyde	• High tensile strength	• High rate of infection
S	Synthetic	Formaldehyde	• High tensile strength	• High rate of infection
		Formaldehyde	• High tensile strength	• High rate of infection
		Formaldehyde	• High tensile strength	• High rate of infection
M	Polypropylene	Formaldehyde	• High tensile strength	• High rate of infection
		Formaldehyde	• High tensile strength	• High rate of infection
		Formaldehyde	• High tensile strength	• High rate of infection
M	Polyethylene terephthalate	Formaldehyde	• High tensile strength	• High rate of infection
		Formaldehyde	• High tensile strength	• High rate of infection
		Formaldehyde	• High tensile strength	• High rate of infection
M	Polyethylene glycol	Formaldehyde	• High tensile strength	• High rate of infection
		Formaldehyde	• High tensile strength	• High rate of infection
		Formaldehyde	• High tensile strength	• High rate of infection



- **Knitted mesh** has a higher porosity and is much more flexible than woven mesh.
- Greater flexibility: More resilience, so it can absorb large bursts of energy and deform elastically, providing a longer lifespan in the high-pressure environment of the pelvic cavity.
- Increased porosity: lower mesh burden and less native tissue in contact with the PP material
- Dampens the immune response as less tissue is reacting to the foreign body PP mesh, reducing the risks of treatment failure and complication.
- Main benefit of PP, over biologic alternatives: Resistance to enzyme degradation
- PP: Greater ultimate tensile strength compared to native pelvic tissue
- Far more elastic than native pelvic tissue. Therefore, it can withstand greater force and stress without breaking or failing
- Elastic deformation in line with surrounding pelvic tissue is a healthy response to a sudden rise in stress that takes place in the pelvic cavity
- There are reports of PP mesh causing an adverse immune reaction resulting in inflammation and deposits of fibrotic tissue. Large pore size is an important feature in the design of pelvic mesh. This is to reduce the risk of infection by allowing cell infiltration and integration with the mesh implant (Feola A, 2013)
- The significance of this is related to the different sizes of the smaller pathogens and larger immune cells (Kelly M, 2017)
- In relevance to pore size, plastic deformation and the natural strain experienced by the mesh, in vivo, results in pore deformation and, ultimately, mesh shrinkage.

Table 5: Prolapse and Incontinence Repair with Mesh: Surgical Techniques, Complications, and Highlights		
Condition and Surgical Technique	Complications	Highlights
Rectal prolapse		
Abdominal approach	Mesh detachment with recurrence	Mesh erosion into a viscus requires surgical repair
Open surgery	Septic and infected fluid collection	If erosion cannot be seen at radiography, direct visualization (cystoscopy or proctoscopy) allows diagnosis of the erosion
Laparoscopic surgery	Fistula and erosion of mesh into rectum or adjacent bowel	
Robotic surgery	Ductitis or osteomyelitis Rectal stricture	
Female urinary incontinence		
Midurethral sling	Intraoperative bleeding and bladder injury	Use of transobturator tape allows retropubic space to be avoided, which lowers risk of bladder injury
Transvaginal approach	Infection	
Retropubic approach	Vaginal extrusion	
Transobturator tape	Mesh erosion into bladder or lower gastrointestinal tract	
Inside-out approach	Urinary obstruction	
Outside-in approach		
Pubic floor prolapse		
Sacrospinous*	Failure due to mesh detachment (rare)	Visibility of Y mesh and apparatus at imaging are variable
Open approach	Recurrent hernias or abscesses (common)	
Laparoscopic approach	Fluid collection (seroma, hematoma, or abscess)	Radiologists may still encounter complications from vaginal mesh placed before its removal from the market
Vaginal mesh†	Osteomyelitis or ductitis Vaginal mesh has a high rate of erosion, which leads to dyspareunia, infection, pain, and urinary symptoms	
Postprostatectomy urinary incontinence		
Bulbourethral sling	Infection	For bone-anchored sling: repair can fail because of bone anchor detachment
Transobturator sling	Erosion	For adjustable retropubic sling: risk of bladder perforation due to retropubic approach
Bone-anchored sling	Urethral injury	
Quadratic sling	Urgency and bladder overactivity	
Adjustable retropubic sling		

*The vagina and cervix are suspended by Y-shaped mesh attached to the sacral promontory.
†In April 2019, the U.S. Food and Drug Administration ordered the manufacturers of all remaining surgical mesh products indicated for transvaginal repair of pelvic organ prolapse to stop selling and distributing their products in the United States immediately.

Box 1. Severe complications arising from the use of polypropylene mesh.

- Chronic infection
- Chronic pain
- Dyspareunia
- Mesh exposure—display of mesh at or near the site of insertion
- Mesh extrusion—where the mesh passes out of a body structure
- Perforation of neighbouring organs secondary to erosion
- Mesh shrinkage
- Recurrence of prolapse with treatment failure and further surgery

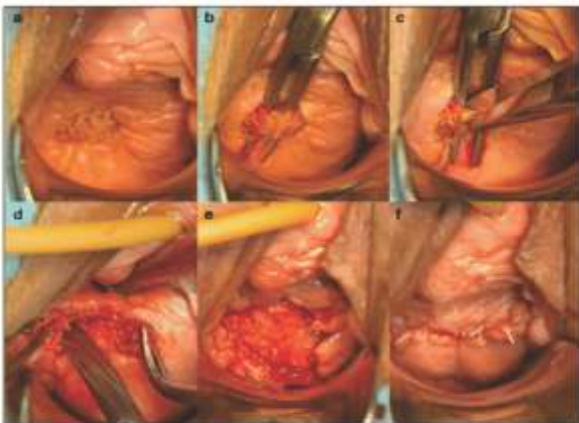


Figure 4. Photograph showing vaginal mesh exposure with steps taken for the partial removal of the mesh. (a,b) depict the exposure; (c) depicts sectioning and removal; (d,e) dissection of the surrounding tissue; (f) depicts wound closure following partial removal of mesh [30].

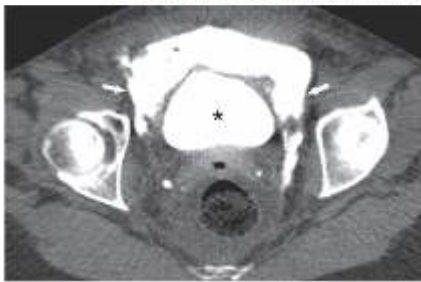


Figure 23. Urine leak after placement of a midurethral sling in a 58-year-old woman. Axial CT cystogram shows the urinary bladder (*) with adjacent extravasated contrast material in the space of Retzius (arrows), an appearance referred to as the “molar tooth sign.”



Figure 2. (a) Vaginal approach of mesh extrusion; (b) the appearance of vagina after mesh extrusion; (c) excised mesh pieces.



Figure 4. IFT 2019, 1303406.

Risk Factors:

- Patient Related
- Mesh Related
- Procedure Related
- Type of Mesh:
- Lighter mesh had lower

exposure rate than heavier ones (Dykes et al, 2020)

- Type 1 microporous polypropylene had better efficacy and lower complication rates than usage of other non-absorbable mesh (Nazemi TM et al, 2007)
- Newer the mesh-Lighter its weight-lower exposure rate
- 2017: Cohort study focused on adverse events associated with mesh procedure and non-mesh colporrhaphy; concluded that a vaginal or abdominal mesh procedure is NOT recommended for primary prolapse repair.
- TVM is only recommended in advanced complicated prolapse, such as more than POP-Q stage III or recurrence cases, as it may benefit from advantage of fewer recurrences and a balance of acceptable complications (Marling JR, 2017)

Key to safe and justified use of TVM operations:

- Well-informed consent
- Well-designed training programmes
- Post-operative audit systems

Ideal Mesh Material

- Nontoxic and biocompatible
- Chemically inert
- Lightweight with low density
- Low stiffness
- Large pores and high porosity
- Mechanically strong
- Nondegenerative
- Noncarcinogenic
- Noninflammatory and nonallergenic
- Affordable
- Sterile
- Resistant to mesh shrinkage

Box 2. The ideal properties of an implant for the augmentation of surgical pelvic organ prolapse repair.

Dr. Munjal Pandya

Associate Professor, NMMC, Ahmedabad

Dr. Azadeh Patel

Clinical Leader & Senior IVF Specialist,
ART Fertility Clinics



AHMEDABAD OBSTETRICS AND GYNAECOLOGICAL SOCIETY

GOLDEN & SILVER JUBILEE ORATION OF AOGS

Chairpersons

DATE : 11.02.2024, SUNDAY

TIME : 08.30 AM - 12.30 PM

VENUE :

**ITC NARMADA,
VASTRAPUR, AHMEDABAD.**



Dr. Mukesh Savaliya
President, AOGS



Dr. Mukesh Patel
Hon. Secretary, AOGS



Dr. Kamini Patel
Past President, AOGS

PROGRAMME DETAILS

Time	Subject
08.30 am to 09.30 am	Registration & Breakfast
09.30 am to 10.15 am	Managing Committee Members Felicitation & Felicitation of the following Dignitaries IMS Ahmedabad - President : Dr. Vijay Shah Secretary : Dr. Janki Desai Gujarat Chapter ISAR - President : Dr. Nimish Shelat Secretary : Dr. Dharmesh Kapadia Gujarat Chapter IAGE - President : Dr. Mahesh Gupta Secretary : Dr. Dipak Limbachiya ICOG Chairperson - Dr. Parul Kotdawala ART & Surrogacy- National Board Member Dr. R. G. Patel

SILVER JUBILEE ORATION OF AOGS

10.15 am to 10.30 am	Introduction of Dr. Sunita Tendulwadkar Dr. Jignesh Shah Dr. Geetendra Sharma Dr. Sejal Naik
10.30 am to 11.15 am	Endometrium in Endometriosis Orator : Dr. Sunita Tendulwadkar

GOLDEN JUBILEE ORATION OF AOGS

11.15 am to 11.30 am	Introduction of Dr. Mahesh Gupta Dr. Phagun Shah Dr. Jitu Prajapati Dr. Kiran Desai
11.30 am to 12.15 pm	Topic : Be Self Reliant in Tackling PPH Dr. Mahesh Gupta
12.30 pm Onwards	Lunch
12.30 pm Onwards	MCM of AOGS (Only for MC Members of AOGS) Master of Ceremony : Dr. Monika Patel

REGISTRATION FOR THE EVENT IS COMPLIMENTARY BUT COMPULSORY

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Dr. Mukul Shah

Senior Gynaecologist
Former Vice-Chancellor of Gujarat University
Deputy Mayor, Ahmedabad - 1988-89 | Standing Committee Chairman - 1990
Mayor, Ahmedabad City - 1991-92 | Chancellor of IGNTU, Amarkantak (M.P.)

OBITUARY

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Dr. Leelaben B. Trivedi

(M.D. OB & Gyn, Retd. HOD, Civil Hospital)

1997-98 President of AOGS

PCOS-THE ROAD AHEAD



Dr. Aastha Mashkaria
MBBS MS Gynaec FILS

Polycystic ovary syndrome (PCOS) is a complex condition characterized by elevated androgen levels, menstrual irregularities, and/or small cysts on one or both ovaries.¹ The disorder can be morphological (polycystic ovaries) or predominantly biochemical (hyperandrogenemia). Hyperandrogenism, a clinical hallmark of PCOS, can cause inhibition of follicular development, microcysts in the ovaries, anovulation, and menstrual changes.²

PCOS is a heterogeneous disorder that affects at least 7% of adult women.³ According to the National Institutes of Health Office of Disease Prevention, PCOS affects approximately 5 million women of childbearing age in the U.S. Costs to the U.S. health care system for the identification and management of PCOS are approximately \$4 billion per year.⁴

Research suggests that 5% to 10% of females 18 to 44 years of age are affected by PCOS, making it the most common endocrine abnormality among women of reproductive age in the U.S.⁵ Women seeking help from health care professionals to resolve issues of obesity, acne, amenorrhea, excessive hair growth, and infertility often receive a diagnosis of PCOS. Women with PCOS have higher rates of endometrial cancer, cardiovascular disease, dyslipidemia, and type-2 diabetes mellitus.⁶ This article explores the pharmacotherapeutic management of PCOS.

ETIOLOGY

PCOS can be described as an oligogenic disorder in which the interaction of a number of genetic and environmental factors determine the heterogeneous, clinical, and biochemical phenotype.⁷ Although the genetic etiology of PCOS remains unknown, a family history of PCOS is relatively common; however, familial links to PCOS are unclear. A lack of phenotypic information prevents a formal segregation analysis. Nonetheless, the current literature suggests that the clustering of PCOS in families resembles an autosomal dominant pattern.⁸

Environmental factors implicated in PCOS (e.g., obesity) can be exacerbated by poor dietary choices and physical inactivity; infectious agents and toxins may also play a role.⁸ The reproductive and metabolic features of PCOS are sometimes reversible with lifestyle modifications such as weight loss and exercise.⁹

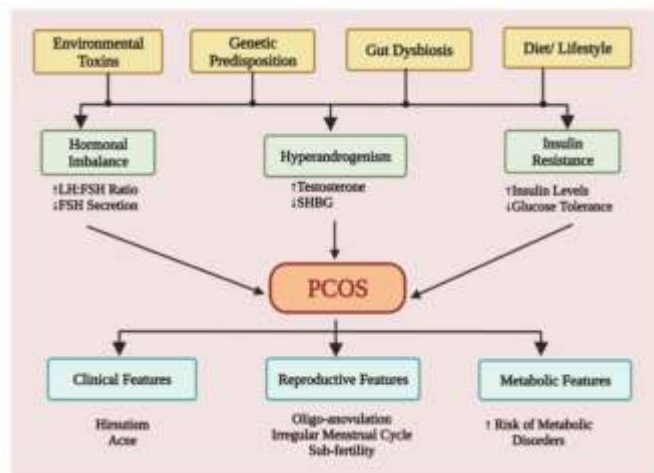
PATHOPHYSIOLOGY

The pathophysiology of PCOS involves primary defects in the hypothalamic–pituitary axis, insulin secretion and action, and ovarian function.^{8,9} Although the cause of PCOS is unknown, PCOS has been linked to insulin resistance and obesity. The association with insulin function is expected; insulin helps to regulate ovarian function, and the ovaries respond to excess insulin by producing androgens, which can lead to anovulation.⁸ Follicular maturation arrest is a hallmark sign that an ovarian abnormality exists.

Clinical signs of PCOS include elevated luteinizing hormone (LH) and gonadotropin–releasing hormone (GnRH) levels, whereas follicular-stimulating hormone (FSH) levels are muted or unchanged. As a result of the increase in GnRH, stimulation of the ovarian thecal cells, in turn, produces more androgens.¹⁰ Follicular arrest can be corrected by elevating endogenous FSH levels or by providing exogenous FSH.⁹ Some studies suggest that PCOS is a primary defect in

young girls who are entering puberty and who have a family history of the disorder. Approximately 25% of patients with PCOS have elevated prolactin levels.¹¹

Therapeutic interventions are designed to reduce insulin levels and ovarian androgen production, ultimately correcting sex hormone-binding globulin (SHBG) levels. This increase in SHBG levels can be used to effectively manage the symptoms of PCOS. Studies have reported that thecal cells in patients with PCOS produce higher amounts of testosterone, progesterone, and 17-hydroprogesterone than in normal patients. These cells have been altered in PCOS patients whose cytochrome P450 (CYP) 11A, 3-HSD2, and CYP17 genes exhibit elevated levels.¹² Obesity is a common comorbidity of PCOS but is not required for diagnosis.



Signs and Symptoms of Polycystic Ovary Syndrome

Enlarged ovaries with numerous small cysts
Irregular menstrual cycles
Pelvic pain
Hirsutism
Alopecia
Acne
Acanthosis nigricans
Skin tags

DIAGNOSIS

Diagnostic Tools for Polycystic Ovary Syndrome

NICHD/NIH Criteria (1990)	ESHRE/ASRM Rotterdam Criteria (2003)	Androgen Excess Society (AES) Criteria (2006)
<ul style="list-style-type: none"> Hyperandrogenism Oligo-ovulation/anovulation Exclusion of other related disorders 	<ul style="list-style-type: none"> Hyperandrogenism Oligo-ovulation/anovulation Polycystic ovaries 	<ul style="list-style-type: none"> Hyperandrogenism Oligo-ovulation/anovulation Polycystic ovaries Exclusion of other related disorders

Modified from criteria of the National Institute of Child Health and Human Development (NICHD)/National Institutes of Health (NIH)/European Society of Human Reproduction and Embryology (ESHRE)/American Society for Reproductive Medicine (ASRM).

TREATMENT

Nonpharmacological Approaches

Because the primary cause of PCOS is unknown, treatment is directed at the symptoms. Few treatment approaches improve all aspects of the syndrome, and the patient's desire for fertility may prevent her from seeking treatment despite the presence of symptoms.¹⁶ Treatment goals should include correcting anovulation, inhibiting the action of androgens on target tissues, and reducing insulin resistance.

Weight reduction for obese patients with PCOS is beneficial in many ways. Weight loss helps to decrease androgen, luteinizing hormone (LH), and insulin levels. It also helps to regulate ovulation, thereby improving the potential for pregnancy.¹⁷

2018 PCOD GUIDELINES SUGGESTS >150 MINS WALK OF MODERATE OR >75 MINS PER WEEK OF VIGOROUS EXERCISE FOR GAIN GAIN PREVENTION.

Laparoscopic ovarian drilling is an outpatient surgical intervention in which multiple perforations are created in the ovarian surface and stroma.¹⁸ It is thought that this intervention destroys androgen-producing tissue, which should lead to decreased androgen levels. It has been found to be as effective as medical interventions without increasing the risk of multiple pregnancies.

Avoid alcohol and smoking .

Pharmacological Approaches

Before heading to pharmacological approaches, healthy lifestyle advice must be given to all women diagnosed with PCOS regardless of their weight, complaint, or anything else. This is because, in most cases, and especially in mild to moderate forms, women can solely benefit from diet and exercise . However, the treatment would rely mainly on the patient's choices and condition in others. If the patient does not want to get pregnant and complains mostly about her menstruation irregularity, combined oral contraceptives (COCs) or progestins are the drugs of choice. The physician can choose the best oral contraceptive with a look on other symptoms rather than menstruation irregularity; for example, Yasmin®, Yaz®, or some other agents can show antiandrogenic effects and can, on the other hand, result in the reduction of androgen production. As a result, they might be helpful in those with hirsutism and/or acne complications.

Metformin, from the biguanides category, is usually prescribed along with the first-choice drugs (COCs) to restore the ovulation cycle in PCOS women because of its insulin sensitivity-increasing properties. Metformin has an antihyperandrogenic effect in the short term too.

In other patients who just want relief from dermatological manifestations due to hyperandrogenism, agents such as aldosterone receptor antagonists (e.g., spironolactone) and 5-alpha reductases (e.g., finasteride) would be more beneficial. Therapy options change for those with infertility who should take agents for ovulation induction like clomiphene citrate and/or aromatase inhibitors

Anovulation

Clomiphene.

The drug of choice for inducing ovulation in PCOS is clomiphene citrate (Clomid, Sanofi), although the precise mechanism of action is unknown. Initially, a dose of 50 mg/day for 5 days is given. If ovulation occurs but no pregnancy results, 50 mg/day for 5 days is continued for the subsequent cycles. However, if ovulation does not occur after the first cycle, the dose may be increased to 100 mg daily for 5 days at least 30 days after the previous course of therapy.

Further treatment is not usually recommended after three courses of therapy; however, up to six cycles may be attempted before further therapy is considered. Clomiphene results in successful pregnancies approximately 30% of the time; however, 20% of these pregnancies result in spontaneous abortions or stillbirths. Adverse effects may include ovarian enlargement; ovarian hyperstimulation syndrome (OHSS); multiple pregnancies; hot flashes; and gastrointestinal (GI) distention, bloating, and discomfort.

CONCLUSION

Polycystic ovary syndrome is a complex disorder for which multiple treatment approaches are required, depending on the reason a patient seeks treatment. Clomiphene has shown the best results in treating infertility, whereas data are limited regarding the pharmacological treatment of androgenic symptoms. Long-term consequences of PCOS, which include type-2 diabetes and cardiovascular disease, can be treated with antidiabetic drugs and statins.

AMNION RUPTURE SEQUENCE IN A MONO-AMNIOTIC TWIN GESTATION AFFECTING BOTH FOETUSES - A RARE CASE REPORT

Accepted and presented at the 17th ISUOG Approved Course Singapore, November 2023



DR. VIRAL MAHESH PANDYA

Specialist in Foetal Medicine and Foetal Therapy

FOETUS - Foetal Evaluation & Therapy by UltraSonography

Ambawadi-Nehrunagar and Maninagar, Ahmedabad

Clinical Photos Credit:

Dr. Jayneel Vishal Shah, Asst. Professor, **Dr. Akash J Patel**, Senior Resident
Dept. of ObGyn, Narendra Modi Medical College, LG General Hospital, Ahmedabad

INTRODUCTION

Physical disruption of foetal growth can manifest across a range of disorders. The most profound is the body stalk anomaly (BSA) or limb body-wall complex. This condition affects multiple foetal organs, and the resulting deformities typically preclude postnatal survival. On the opposite end of the spectrum, amniotic band entrapment can affect smaller body parts such as digits of the hands or feet. This condition can lead to isolated amputations in an otherwise healthy foetus and neonate. Various causative factors have been proposed, including embryonic maldevelopment, vascular disruption, and early amnion rupture. Some authors have also suggested a genetic predisposition to this structural defect.

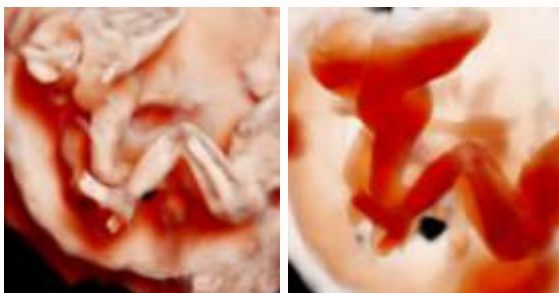
Fortunately, these abnormalities are rare, occurring in approximately 1 in 7500 singleton pregnancies during the first trimester. The incidence is even lower in twin pregnancies. To date, only six cases of monoamniotic twin pregnancies involving one foetus with BSA have been documented. This case marks the seventh such occurrence, and notably, it is the first instance where various levels of affliction are observed in both foetuses.

CASE SUMMARY

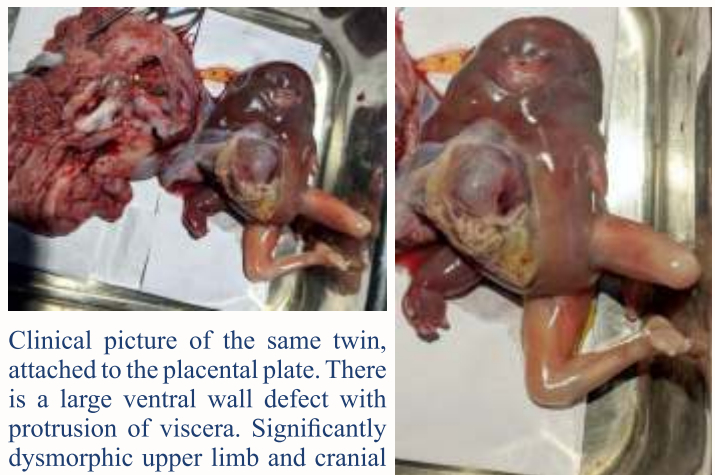
A 29-year-old patient was referred for specialist foetal evaluation due to suspicion of Twin Reversed Arterial Perfusion (TRAP) sequence in a monoamniotic twin pregnancy. The patient, a primigravida, had conceived spontaneously and was at 19+5 weeks of gestation based on her menstrual history.

Upon ultrasound assessment, a monoamniotic twin gestation was confirmed. TRAP sequence was ruled out as two distinct foetal cardiac rhythms were detected and documented. The first foetus was observed tethered to the placental plate with a notably short umbilical cord. Multiple structural deformities were noted, including an open cranial vault. A ventral wall defect encompassing the thorax and abdomen resulted in the extracorporeal protrusion of foetal viscera, including the heart. A kyphoscoliotic posture was also evident. While the lower limbs appeared normal, the upper limbs showed a shortened and deformed appearance. These findings were indicative of a Body Stalk Anomaly (BSA).

The second foetus exhibited growth parameters corresponding to the menstrual age, and the overall foetal structural development appeared appropriate



3D ultrasound rendering in Tissue Render Mode (above, left) and Transparency Mode (above, right), depicting the foetus with BSA on the left, with its limbs close to the limbs of the second fetus located to the lower right.



Clinical picture of the same twin, attached to the placental plate. There is a large ventral wall defect with protrusion of viscera. Significantly dysmorphic upper limb and cranial portions are noted.



(from Left to Right) 2D image, MicroVascular Flow Doppler image, 3D Tissue Render mode image and clinical picture of second twin with amniotic band entrapment of right lower limb/ foot.



Scan the QR code to view the ultrasound clips on YouTube.

upon initial screening. Further scrutiny, however, revealed an abnormality in the right lower limb. The right foot was edematous, though mobility could still be observed. Microvascular Doppler assessment showed intact vascular supply in the peripheral vasculature of the leg and foot. These findings led to suspicion of amniotic band entrapment affecting the right foot, causing non-critical constriction of foetal vasculature.

The suspected ultrasound diagnosis was explained to the couple, accompanied by comprehensive information and counselling. The grave prognosis for the foetus with BSA was explained, along with the potential for progressive vascular compromise in the second foetus due to amniotic band entrapment. Foetal intervention in the form of foetoscopic surgery was offered as a two-step procedure during a single foetoscopic intervention. A foetoscopic amniotic band dissection for the healthy twin was planned, followed by foetoscopic bipolar cord coagulation and laser transection of the umbilical cord for the twin with BSA. All associated risks and benefits of the intervention were thoroughly explained. Alternatively, a conservative expectant approach with close monitoring was also offered, alongside the option of pregnancy termination.

After careful consideration, the couple opted for termination of the pregnancy. Their primary concern was the risk of residual disability or amputation for the healthy twin affected by amniotic band entrapment. The risks and costs associated with foetal surgery rendered it unacceptable to them.

Pregnancy termination was induced using prostaglandins, and postnatal macroscopic evaluation closely aligned with the ultrasound diagnosis. A single placental plate was delivered with two closely situated cord insertions. One foetus was tethered to the placenta with an extremely short umbilical cord and displayed the classical features of BSA. The second foetus looked morphologically normal, barring significant congestion and edema over the right foot. A ring-like, constrictive attachment of the amniotic

membrane over the right lower leg and ankle region confirmed the underlying cause.

CONCLUSION

Currently, embryonic maldevelopment is the most widely accepted theory for foetal body stalk anomaly. This case presents an argument to the contrary. The distinct involvement of both foetuses, each presenting pathologies from opposite ends of the spectrum, strongly suggests a shared underlying cause. Amniotic rupture and subsequent disruption of foetal growth can cause a variety of abnormalities. The type and severity of fetal defects can depend on the stage of pregnancy at the time of rupture, size of involvement, and the foetal position and location.

Despite the notable advancements in foetal surgery offering avenues for prenatal management, patient acceptance remains limited due to low awareness regarding the available interventions, concerns regarding the intervention costs and fetomaternal risks associated with the procedure itself.

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PRESENTING THE FIRST EVER STUDY FROM INDIA ON CARCINOMA ENDOMETRIUM

SURGICOPATHOLOGICAL OUTCOMES AND SURVIVAL IN CARCINOMA BODY UTERUS: A RETROSPECTIVE ANALYSIS OF CASES MANAGED BY LAPAROSCOPIC STAGING SURGERY IN INDIAN WOMEN

Objectives: The context of this article is based on two main titles those being Gynecologic Oncology and Minimal invasive surgery. **The aim of this study was to report the laparoscopic management of a series of cases of endometrial carcinoma managed by laparoscopic surgical staging in Indian women.**

Materials and Methods: This study was conducted in a private hospital (referral minimally invasive gynecological center). This was a retrospective study (Canadian Task Force Classification II-3). Eighty-eight cases of clinically early-stage endometrial carcinoma staged by laparoscopic surgery and treated as per final surgicopathological staging. All patients underwent laparoscopic surgical staging of endometrial carcinoma, followed by adjuvant therapy when needed. Data were retrieved regarding surgical and pathological outcomes. Recurrence-free and overall survival durations were measured at follow-up. Survival analysis was calculated using Kaplan–Meier survival analysis.

Results: The median age of presentation was 56 years, whereas the median body mass index was 28.3 kg/m². Endometrioid variety was the most commonly diagnosed histopathology. There were no intraoperative complications reported. The median blood loss was 100 cc, and the median intraoperative time was 174 min. There were a total of 5 recurrences (5.6%). The outcome of this study was comparable to studies conducted in Caucasian population. **The predicted 5-year survival rate according to Kaplan–Meier survival analysis is 95.45%, which is comparable to Caucasian studies.**

Conclusion: Laparoscopic management of early-stage endometrial carcinoma is a standard practice worldwide. However, there is still a paucity of data from the Indian subcontinent regarding the outcomes of laparoscopic surgery in endometrial carcinoma. The Asian perspective has been highlighted by a number of studies from China and Japan. **To our knowledge, this study is the first from India to analyze the surgicopathological outcomes following laparoscopic surgery in endometrial carcinoma.** The outcome of this study was comparable to studies conducted in Caucasian population.

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