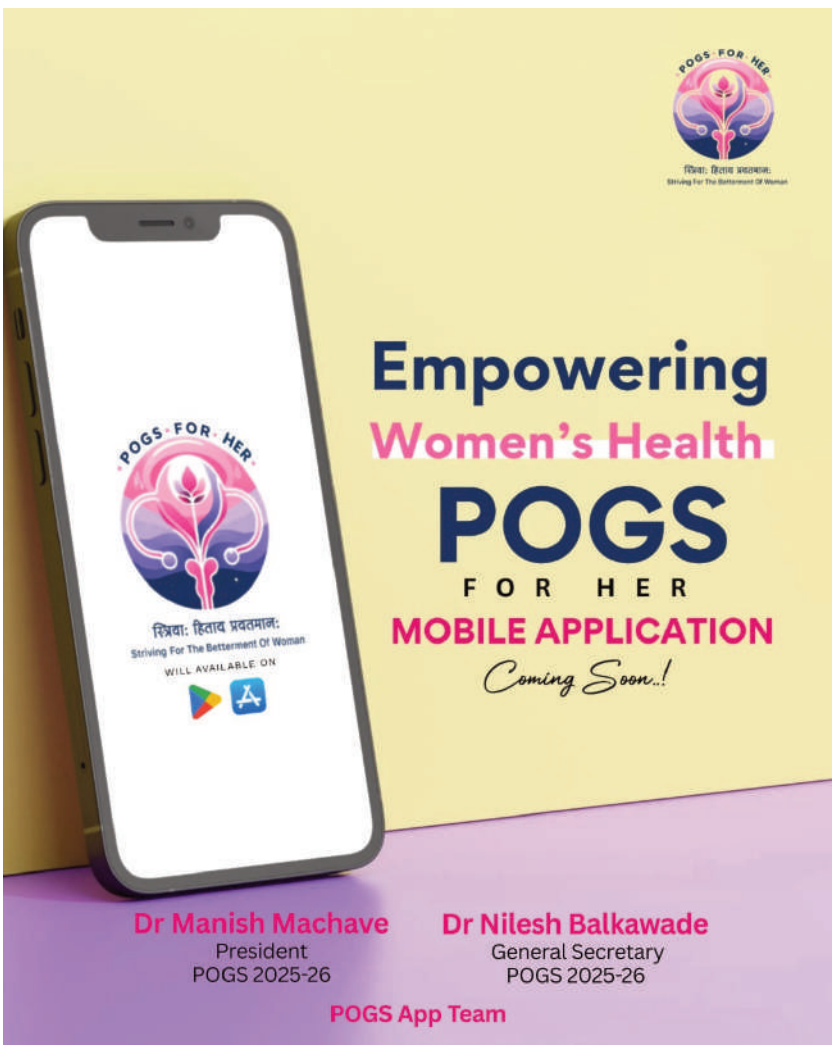

Pune Ob-Gyn Society
Estd. 1953
Womb & Wellness
The POGS Chronicle ♦ Issue 8, November 2025
POGS FOR HER
स्त्रिया: हिताय प्रवतमाल:
Striving For The Betterment Of Woman

POGS App

On the auspicious occasion of Gudi Padwa, we are thrilled to announce the launch of the brand-new POGS App, set to debut at our 40th POGS Installation CME!
For the very first time, POGS is bringing you a state-of-the-art mobile application available on both Android and iOS. This app is designed to centralize all POGS-related information, making it easier than ever to stay connected and engaged.
Overview:
• Seamless New Member Registration: Join our community with just a few taps.
• Easy Conference Registration: Book your spots for upcoming events right at your fingertips.
• Monthly Quiz: Test your knowledge and win exciting prizes!
• Digital Library: Access monthly newsletters, a video library, and recordings of past conference lectures

Get ready to experience the convenience and innovation of the POGS App. Stay tuned and be prepared to take your POGS experience to the next level!

Dr Manish Machave
President POGS 2025-26
Dr Nilesh Balkawade
General Secretary
POGS 2025-26
POGS App Team
Dr Mahima Lalwani
Dr Mrinmayee Dharmadhikari



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Presidential Address

Dr Manish Machave
President, POGS

Dear esteemed member of POGS,
Greetings from the team,
This is our EIGHTH, theme based, dedicated and all-encompassing newsletter of POGS. I begin with enriching words,
"Some people want it to happen, some wish it would happen, others make it happen." —Michael Jordan.

I am proud to be at the helm of our society where we have make it happen people.
Gynaecological oncology has emerged as a specialized branch of medicine that focuses on the diagnosis, treatment, and research of cancers that originate in the female reproductive system. These include cancers of the ovary, uterus, cervix, vulva, and vagina. It combines the principles of obstetrics and gynaecology with oncology, aiming to provide comprehensive care to women affected by these malignancies.

The management of gynaecological cancers involves a multidisciplinary approach, including surgery, chemotherapy, radiotherapy, and targeted therapy. Surgical intervention plays a crucial role, and gynaecological oncologists are specially trained to perform complex cancer surgeries while preserving as much normal function as possible. Advances in minimally invasive techniques, such as laparoscopy and robotic-assisted surgery, have improved recovery and outcomes.

Beyond physical treatment, gynaecological oncology also emphasizes psychological support, rehabilitation, and palliative care. Research continues to explore genetic factors, molecular pathways, and novel therapies to improve survival and quality of life.

Readers shall find in here a perfect amalgamation of topics where protocols and decision making along with research and future prepositions are discussed.

Do take out time and post us a feedback. Happy reading.
Looking forward to see you all soon. Till Then, "Ha det"
NAMASKAR…..

Dr Manish Machave
President, POGS

Dr Nilesh Balkawade
Secretary, POGS

Secretary's Address

"Where there is light, there is learning —
Where there is hope, there is healing."

As the festival of lights illuminated our homes, October illuminated our organization with brilliance, achievements, and togetherness.

What a Phenomenal Journey — The Fertility Carnival Goa 2025! (3rd–5th October)
The month began with one of the most vibrant academic and social gatherings of the year — the **Fertility Carnival Goa 2025**, a joint effort of **POGS, AMOGS, and ISAR.**

It was not just a conference — it was a celebration of science, spirit, and synergy!

Highlights of the Carnival:
• Engaging orations by legends Dr. Ameet Patki, Dr. Jatin Shah, and Dr. Kamini Rao — each session was a beacon of wisdom and inspiration.
• Insightful invited lectures by Dr. Pratap Kumar and Dr. Hemant Deshpande enriched the academic tapestry.
• Eminent national faculty, including Dr. Sunil Jindal and colleagues from across India, shared their expertise with unmatched enthusiasm.
• The conference saw enthusiastic participation from societies of Goa, Kolhapur, Belgaum, and Sindhudurg, adding color, warmth, and energy.
• From thought-provoking scientific sessions to engaging cultural evenings, every moment echoed teamwork, learning, and joy.
• The Organizing Chairpersons and Co-Organizing Secretaries worked tirelessly to create an event that blended academic depth with Goan spirit — truly, a dream turned dazzling reality!

A thunderous applause to our dynamic **President, Dr. Manish Machave,** whose vision and boundless energy made this Carnival unforgettable.

Together, as a team, we once again proved that when passion meets purpose — magic happens!

Fertility Carnival Goa 2025 — Memories for a Lifetime!

16th October – Diwali Celebration & Carnival Triumph

We rejoiced in the **Diwali celebrations** coupled with the **Carnival Success Meet** and **MCM**.
It was an evening glowing with laughter, gratitude, and the warmth of achievement.

Past Presidents Dr. CharuChandra Joshi and Dr. Arati Nimkar graced the event and applauded the team's outstanding efforts in conducting a truly grand destination conference — a milestone in POGS history, filled with many firsts.

The lights of Diwali shone not just in our homes, but also in the heart of POGS — symbolizing progress, prosperity, and togetherness.

Public Awareness Initiative
POGS President Dr. Manish Machave once again led by example with his **Akashwani talk on "Law in Relation to Women's Health."**
The program reached thousands, promoting awareness, empowerment, and respect for women's health rights.

As the month of October ends…
We carry forward the light of knowledge, the warmth of camaraderie, and the joy of achievement — stepping into the next chapter with renewed energy and shared purpose.

"Hope is the flame that never fades,
Even when nights are long and shade invades.
It whispers softly — rise once more,
There's always light beyond the door."

For every dawn that breaks the sky,
Tells us — dream again, don't ask why.
With courage and care, our paths align,
POGS shall glow — in purpose divine."

Wishing the entire POGS family a season of light, learning, and lasting inspiration.

Warm regards,
Dr. Nilesh Balkawade
General Secretary, POGS

Editorial

Dr Kalyani Ingale
Editor

Seasons greetings!

Pune city stands out for its rich history, cultural diversity, and educational institutions. It is often referred to as the "Oxford of the East" due to its numerous educational facilities. Pune's commitment to education has contributed to its status as dynamic & influential city. Being an active participant in spreading the knowledge & regularly update our fellow members, Team POGS has followed the culture of Pune city religiously through these monthly newsletters.

This month the chronicle is compiled by the Gynaecological Oncology committee of POGS. It is my distinct pleasure to introduce this edition of our newsletter, a testament to the power of collaboration & shared purpose in the field of gynaecological oncology.

More than a million women are diagnosed with a form of Gynaecological cancer each year, making our collective efforts more vital than ever.
This issue highlights the significant strides made in research & innovative clinical practices that are improving patients outcome daily. From updates on new screening methods for cervical cancer to advancements in targeted therapies for ovarian & uterine cancers, the progress is undeniable.

Together we continue our mission to improve women's healthcare, striving for a future where these cancers are detected earlier, treated more effectively & ultimately prevented.
We extend our gratitude to the stalwarts & seniors practicing in the field of Gynaecological Oncology who have brought to you the guidelines & important take home messages which will be very important in day to day practice. This issue of the November 2025 newsletter is a treasure to be possessed for the kind of wisdom incorporated into it.

Wish you all a healthy preventive reading ahead….

Dr Kalyani Ingale
Editor

Co-Editorial

Dr. Swapnali Sansare
Member of the Onco-Gynaec Committee

As Managing Committee Member of the Onco-Gynaec Committee of the Pune Obstetric & Gynaecological Society, my vision for this year is to enhance awareness, education, and collaboration in the field of gynaecological oncology. Cancer care today is not only about early diagnosis and effective treatment but also about prevention, timely referral, and holistic support for women at every stage of their journey. Through academic sessions, interactive case discussions, and evidence-based updates, we aim to empower our members with the latest knowledge and practical skills in managing common as well as rare gynaecological cancers.

We will also focus on strengthening preventive strategies such as HPV vaccination, screening programmes, and patient education, ensuring that our collective efforts extend beyond the clinic into the community. By fostering teamwork, research orientation, and compassionate care, I hope our committee can contribute meaningfully to improving outcomes and quality of life for women facing oncological challenges.

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President, POGS

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Secretary, POGS

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Vice President
Dr Vaishali Chavan

Ex Vice President
Dr Vaishali Korde Nayak

Clinical Secretary
Dr Kalyani Ingale

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Dr Samidha Dalvi

Jt Secretary
Dr Sandhya Meshram

Jt Clinical Secretary
Dr Meghana Argade

Jt Treasurer
Dr Anagha Pai Raiturkar

POGS MANAGING COMMITTEE

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President, POGS

Dr Nilesh Balkawade
Secretary, POGS

Dr Uma Wankhede
President Elect

Vice President
Dr Vaishali Chavan

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Clinical Secretary
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Dr Samidha Dalvi

Jt Secretary
Dr Sandhya Meshram

Jt Clinical Secretary
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Jt Treasurer
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Dr Akash Thube

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Dr Charuta Jogalekar

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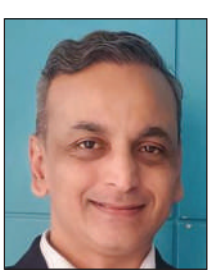

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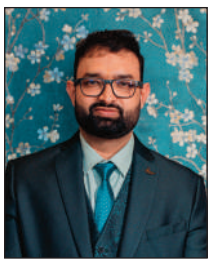
Dr Hemant Deshpande

Dr Manjiri Valsangkar

Dr Kanchan Durugkar

Dr Laxmikant Behele



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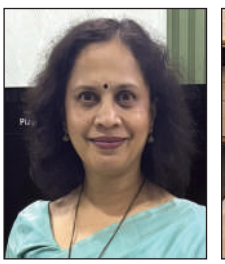
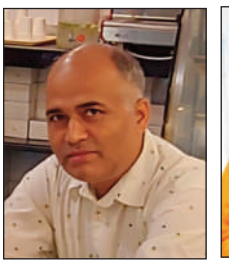
Dr Pandurang Burute

Dr Tanuja Joshi



Dr Vaishali Biniwale



Dr Sanjay Sharma

Dr. Swapnali Sansare

What a Phenomenal Journey — THE FERTILITY CARNIVAL GOA 2025!

A Celebration of Science, Spirit, and Synergy
The Fertility Carnival Goa 2025 was not just a conference — it was an unforgettable journey of learning, leadership, and laughter. Hosted amidst the serene beaches and vibrant energy of Goa, this academic extravaganza was a seamless blend of knowledge, creativity, and camaraderie.
From the moment delegates stepped into the beautifully adorned venue, there was a palpable sense of excitement — the anticipation of what was to unfold over the next three days. The halls resonated with meaningful conversations, cutting-edge scientific discourse, and genuine fellowship among clinicians, embryologists, and academicians from across India.

Gratitude Beyond Words
A heartfelt thank you to every single person who made this conference an astounding success.
The Fertility Carnival Goa 2025 was the result of months of meticulous planning, teamwork, and an unrelenting commitment to excellence.
• To our Organizing Chairpersons and Co-Organizing Secretaries, your dedication and precision turned a dream into a dazzling reality. Every session, every detail, and every experience bore the stamp of your passion.
• To ISAR and AMOGS, thank you for your wonderful association and partnership. Together, we truly demonstrated that collaboration between organizations can elevate academic standards and strengthen our fraternity. The combined efforts of POGS, ISAR, and AMOGS showcased how synergy between societies creates academic brilliance and unity of purpose.

Academic Highlights — Knowledge That Enlightened and Inspired
Inspiring Orations That Lit Up the Stage
The academic sessions began with stellar Orations that left an indelible mark on every attendee.
Our deepest appreciation to Dr. Ameet Patki, Dr. Jatin Shah, and Dr. Kamini Rao for their inspiring, thought-provoking, and visionary orations. Each oration was a masterclass — blending clinical insight with futuristic perspectives on fertility care, ethical challenges, and technological evolution.
Their talks set the tone for the rest of the conference — bold, reflective, and deeply educational.

Invited Lectures — The Pillars of Learning
The invited lectures by Dr. Pratap Kumar and Dr. Hemant Deshpande were academic gems that enriched every participant. Their sessions offered fresh perspectives, distilled wisdom, and clinical pearls for everyday practice. From complex case discussions to practical management insights, their talks exemplified clarity, precision, and depth of knowledge.

Eminent National Faculty — Sharing Brilliance
A big thank you to Dr. Sunil Jindal and all our eminent national faculty who shared their expertise and clinical experience with such generosity. Their contributions made the Fertility Carnival an academic powerhouse. The sessions spanned the entire spectrum of reproductive medicine — from advanced stimulation protocols, endometrial receptivity, and male infertility, to ethics, counseling, and the evolving ART regulations. Each speaker brought a unique perspective, turning every session into a vibrant discussion rather than a monologue.

Delegates — The Heart of the Conference
To all our speakers and delegates who travelled from across the country — your presence truly made the difference. The interactive discussions, the enthusiasm during Q&A sessions, and the eagerness to learn were

the driving forces behind the Carnival's success.
We missed all those who couldn't make it, but their wishes and spirit were felt throughout the event.

Workshops — Where Learning Came Alive
The pre-conference workshops were a major highlight of Fertility Carnival Goa 2025 — meticulously designed, brilliantly executed, and enthusiastically attended. Each workshop was a hands-on journey into specific domains of fertility practice, empowering participants with practical skills and insights.

1. GEN ALPHA — The Future of Ovulation Induction
Conducted by Dr. Kundan Ingale, Dr. Samidha Dalvi, Dr. Ashish Gude, and Dr. Kedar Padte, this workshop brought a futuristic outlook to ovulation induction. With evidence-based protocols, algorithmic approaches, and live discussions on difficult-to-manage cases, it gave participants a comprehensive understanding of modern ovulation strategies.
It truly reflected the "next generation" thinking in fertility medicine — personalized, data-driven, and patient-centric.

2. USG IN INFERTILITY — The 3rd Eye
Moderated and conducted by Dr. Kalyani Ingale, Dr. Nilam Bhise, and Dr. Archana Baser, this workshop was a visual and academic delight. The sessions emphasized the art and science of reproductive ultrasound — from follicular monitoring to endometrial assessment and guided interventions. The hands-on demonstrations and case-based approach helped bridge the gap between imaging and clinical decision-making.
Ultrasound, indeed, became the "third eye" of fertility practice through this session.

3. AMOGS MI MANASVI PROGRAM
Curated and conducted by Dr. Chaitanya Shembekar, Dr. Nilesh Balkawade, and Dr. Revati Rane, this unique program focused on emotional wellness, mindfulness, and the psychological dimension of reproductive care. A signature AMOGS initiative, "Mi Manasvi" addressed the often-overlooked human aspect of fertility practice — the wellbeing of doctors, patients, and staff. The session was an eye-opener, encouraging self-awareness, empathy, and holistic patient care.

4. ANDROFERT — Mastering Sperm Retrieval
This power-packed workshop, led by Dr. Sunil Jindal, Dr. Chaitanya Ganapule, and Dr. Indraneel Jadhav, provided an in-depth look at the andrology side of fertility management. From micro-TESE techniques to sperm selection strategies, it combined surgical precision with laboratory excellence.
The participants left equipped with new skills and greater confidence in managing male infertility cases — an area gaining growing importance in reproductive medicine.

MCOG Convocation — A Proud Moment for POGS
The MCOG Convocation Ceremony was one of the most memorable and dignified moments of the conference. It marked the formal handover of Fellowships of ABCDI and ABCD-AG Programs, recognizing academic excellence and commitment to reproductive health.
The ceremony was gracefully conducted by Dr. Revati Rane and Dr. Samidha Dalvi, whose poise and precision made the event truly special.
The Chief Guest, Dr. Kiran Kurtkoti, President of AMOGS, graced the occasion with his insightful address, emphasizing the role of continuing education in elevating clinical standards.
Our Guests of Honour, Dr. Ameet Patki and Dr. Manish Machave, inspired the fellows with words of motivation and vision for the future of fertility medicine in India.
The convocation was not merely ceremonial — it was a celebration of learning, perseverance, and the spirit of mentorship that defines MCOG and POGS.

A Grand Inauguration — Innovative and Inspirational
The Inaugural Ceremony of Fertility Carnival Goa 2025 was a spectacle of creativity and emotion. Designed and executed by the dynamic duo Dr. Amey Chugh and Dr. Mahima Lalwani, the inauguration blended tradition with innovation, setting a vibrant tone for the days ahead.
From the rhythmic beats of Goan culture to the inspiring addresses by dignitaries, every element of the inauguration was meticulously curated. It celebrated the diversity of Indian fertility practice — from metros to smaller cities — symbolizing unity in scientific pursuit.

Regional Society Collaboration — Strength in Togetherness
A special note of gratitude goes to our partner societies from Goa, Kolhapur, Belgaum, and Sindhudurg. Their strong support, enthusiasm, and participation added regional depth and vibrancy to the Carnival.
The local teams worked tirelessly behind the scenes, ensuring smooth logistics, warm hospitality, and perfect coordination. Their contribution exemplified the

spirit of teamwork that lies at the heart of POGS's success.

Team POGS — You Are Unstoppable!
No words can truly capture the spirit and energy of Team POGS. From planning and promotions to registrations and on-ground coordination, every member contributed selflessly and passionately.
• A thunderous applause to our visionary leader, Dr. Manish Machave, President POGS, whose energy, passion, and commitment inspired everyone. His leadership infused the event with a unique identity — dynamic, inclusive, and forward-looking.
The seamless organization, the vibrant academic content, and the emotional connect with every delegate bore testimony to the unshakeable bond within the POGS family.
Together, we celebrated academics, camaraderie, and creativity — proving once again that when passion meets purpose, magic happens.

Beyond Academics — Celebrating Connections and Creativity
While academics formed the backbone of Fertility Carnival Goa, the evenings brought out the joy of togetherness. The cultural evenings, team performances, and informal interactions created lifelong memories.
Delegates networked not just as professionals but as friends — united by shared purpose and mutual respect. The "Carnival" truly lived up to its name, blending science with soul.

A Vision Forward
Fertility Carnival Goa 2025 was more than an event — it was a milestone. It reflected how academic medicine, when combined with teamwork and innovation, can create an unforgettable experience.
The take-home message for every participant was clear:
• Keep learning,
• Keep collaborating, and
• Keep inspiring change in reproductive medicine.
POGS reaffirmed its commitment to nurturing excellence and creating platforms where clinicians can evolve, exchange ideas, and collectively raise the standards of fertility care in India.

Fertility Carnival Goa 2025 — Memories for a Lifetime!
As the curtains fell on this magnificent academic festival, the smiles, laughter, and applause lingered in every heart.

Fertility Carnival Goa 2025 will be remembered not just for its academic brilliance but for its warmth, unity, and the spark it reignited in all of us — the spark to serve, to innovate, and to excel.
To everyone who made this journey possible — thank you.
To everyone who believed in the dream — this success is yours.
And to the future of fertility care — the best is yet to come.
POGS — Passion. Purpose. Progress.
Together, let's continue creating academic magic and cherished memories in the years to come.

DAY 2: SESSION(CORAL HALL)





DAY 2 : SESSION(PEARL HALL)








DAY 2 : EVENING (GRADUATION)

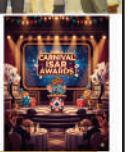





DAY 2 : EVENING (AWARDS NIGHT)







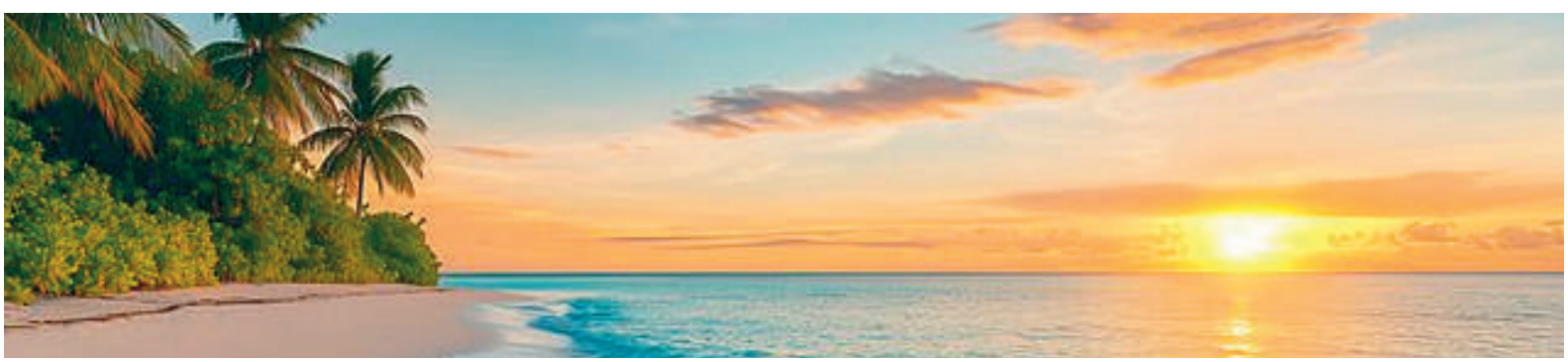

DAY 2 : EVENING (BOOK LAUNCH)


DAY 3: SESSION(CORAL HALL)









Cervical Cancer and HPV vaccine awareness sessions at the community level

POGS Onco committee is working hard on spreading awareness of preventable cancer in female. i.e. Cervical cancer, so as to achieve the WHO target of 90%-70%-90% thru' HPV vaccination and Cx screening. We have taken different sessions starting from grass root level like different residential societies in Pune, Schools & colleges, corporate offices, medical-paramedical students through both online and offline mode. Dr. Swapnali Sansare being a National Master Trainer for HPV Vaccination thru' FOGSI and American Cancer Society had trained more than 200 IMA members through different webinars under collaborative program of FOGSI Presidential Project 2025 "Do Teeke Zindagi ke" and IMA. She has addressed more than 400 medical students in National Youth summit by IMA in Goa Medical College, Goa in Sept'2025.



Cervical cancer awareness for public on Akashwani, Pune.



As FOGSI representative at the National Youth Leadership Summit, at Goa Medical College.


Sessions at different colleges in Pune


Different corporate offices in Pune

Stage-wise Surgical management of Epithelial Ovarian Cancer

Dr Harshad Parasnis
MD, DNB, FCPS, DGO, FICOG, FICS
Consultant Gynecologic Oncologist,
President, Pune Obst-Gyn Soc, 2020-2021
Head of Gynec Oncology Unit & Hon Professor, Bharati Medical College, Pune
Visiting Gynecologic Oncologist BJGMC & Sassoon General Hospital, Pune
Chairperson, Oncology Committee, FOGSI (2009-2011) Chairperson,
Chairperson, Oncology Committee, AMOGS (2020-2022)

The FIGO staging system requires that surgery be performed to confirm the histological diagnosis and to determine the true extent of the disease. Hence surgical staging is the Key stone in the management of ovarian cancer.

General Principles

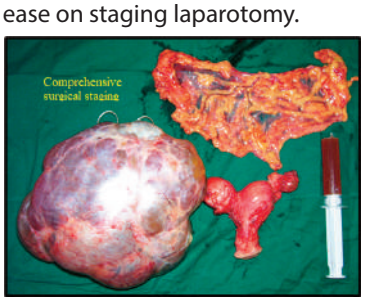
1. It is recommended that all patients should undergo surgery by an experienced gynecologic oncologist.
2. Whenever a surgical staging procedure, a primary debulking procedure, an interval debulking procedure, or secondary cytoreduction is planned, an open Laparotomy with Liberal vertical midline abdominal incision is taken.
3. For select patients, a minimally invasive surgical approach may be used by an experienced surgeon
a. To manage early-stage disease.
b. Laparoscopy may be useful to evaluate whether optimal cytoreduction can be achieved in patients with newly diagnosed advanced-stage or recurrent disease.
c. Patients who are unable to be optimally debulked using minimally invasive techniques should be converted to an open procedure
4. Intraoperative pathologic evaluation with frozen sections is helpful
5. If intraperitoneal (IP) chemotherapy is being considered, counsel patients about port placement before surgery.
6. Operative notes should describe and define
a. The extent of initial disease before debulking the pelvis and abdomen
b. Amount of residual disease after debulking
c. If incomplete resection define site, size and number of residual lesions

Early stage ovarian cancer (Disease apparently confined to Ovaries, Fallopian Tubes & Uterus- stage IA–IIA)

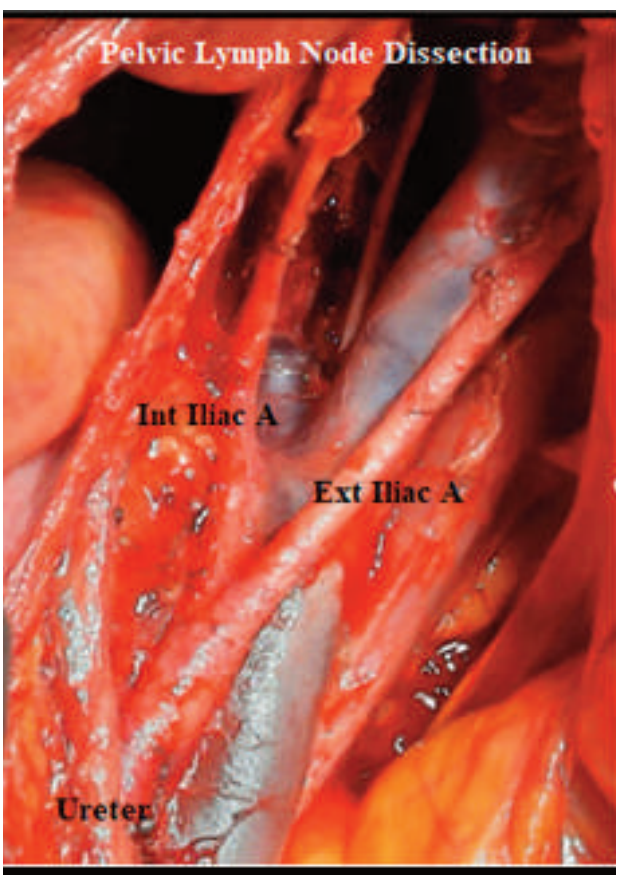
Surgery is performed with the following two aims:
1) To establish the correct FIGO stage in order to determine choice of adjuvant therapy (chemotherapy vs. observation) and prognosis.
2) To perform effective surgical removal of tumor.

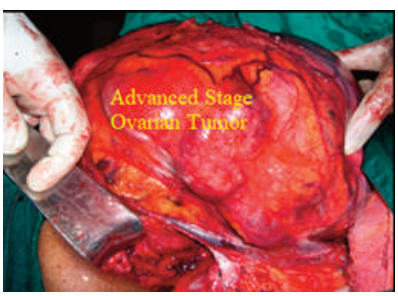
Principles of surgery in early stage disease:

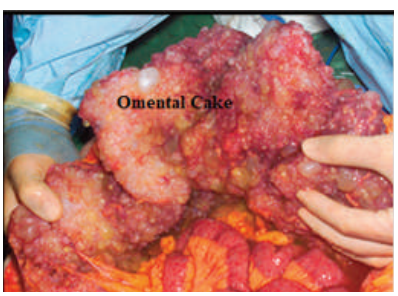
Every effort should be made during a primary cytoreduction procedure to achieve maximum cytoreduction of all pelvic disease and to evaluate for occult disease in the upper abdomen or retroperitoneum
1. Open Laparotomy with Liberal midline vertical abdominal incision
2. Collect Ascites fluid or peritoneal lavage for cytology
3. Systematic inspection, palpation, and scrapings/biopsies of suspicious areas or peritoneal surfaces clockwise from right paracolic gutters, Liver, diaphragm, omentum, Pelvic exploration including palpation of opposite ovary, bladder, and cul-de-sac peritoneum, pelvic and para aortic lymph nodes etc.
4. BSO and hysterectomy should be performed with every effort to keep an encapsulated mass intact during removal. For selected patients desiring to preserve fertility, USO or BSO with uterine preservation may be considered. Uterine preservation allows for potential future assisted reproductive approaches.
5. Omentectomy should be performed.
6. Pelvic Lymph Node Dissection should be performed to bilaterally remove lymph nodes overlying and anterolateral to the common iliac vessel, overlying and medial to the external iliac vessel, overlying and medial to the hypogastric vessels, and from the obturator fossa at a minimum anterior to the obturator nerve.
7. Para-aortic lymph node dissection should be performed by stripping the nodal tissue from the vena cava and the aorta bilaterally to at least the level of the inferior mesenteric artery and preferably to the level of the renal vessels.
Both the pelvic and infrarenal para-aortic lymph nodes provides important prognostic and staging information for patients and highlights the need for adjuvant chemotherapy.
About 33% of previously thought stage I or II tumors will be found to have advanced stage disease on staging laparotomy.



Advanced Epithelial Ovarian Cancer (Disease Involving the Pelvis and Upper Abdomen (stage >IIB):
In advanced stage disease, cytoreductive surgery reduces tumor bulk to a point where subsequent chemotherapy or irradiation will exert a maximal effect. Every effort should be made during a primary cytoreduction procedure to achieve maximum cytoreduction of all abdominal, pelvic, and retroperitoneal disease. Residual disease <1 cm defines optimal cytoreduction; however, maximal effort should be made to remove all gross disease since this offers superior survival outcomes.
1. Open Laparotomy with Liberal midline vertical abdominal incision
2. Aspiration of ascites (if present) should be performed for peritoneal cytologic examinations.
3. All involved omentum should be removed
4. BSO with Hysterectomy
5. Pelvic / Paraaortic Lymph node dissection







It is helpful to stratify patients with advanced cancer as having either low- and high-volume disease intraoperatively because different surgical strategies are associated with each classification.
Patients with advanced ovarian cancer but low-volume disease should have comprehensive staging, including a total abdominal hysterectomy, bilateral salpingo-oophrectomy, and infragastric omentectomy between the hepatic flexure and the splenic hilum. If the patient can be rendered macroscopically disease free, a pelvic and high para-aortic lymph node dissection is reasonable. Select patients with low-volume residual disease after surgical cytoreduction for invasive epithelial ovarian or peritoneal cancer are potential candidates for IP therapy.
Patients with advanced ovarian cancer and high-volume disease usually have extensive tumor burden in the pelvis with encasement of the reproductive organs and sigmoid colon. This requires a modified posterior exenteration, an en bloc resection of the tumor-studded bladder, peritoneum, uterus, sigmoid colon, and proximal rectum, as well as ovarian/fallopian tube masses, cul-de-sac tumors, and possibly the appendix.
A low colorectal anastomosis should follow; a colostomy is rarely required in patients with serous cancers because serous cancers grow above the peritoneal reflection. The current practice in advanced ovarian cancer is to remove enlarged/suspicious lymph nodes as part of tumor debulking.
Procedures that may be considered for optimal surgical cytoreduction (in all stages) include bowel resection and/or appendectomy, stripping of the diaphragm or other peritoneal surfaces, splenectomy, partial cystectomy and/or ureteroneocystostomy, partial hepatectomy, partial gastrectomy, cholecystectomy, and/or distal pancreatectomy.

Neo-adjuvant Chemotherapy:
Neo-adjuvant platinum-containing chemotherapy followed by interval debulking surgery is a reasonable choice in cases of high volume abdominal ovarian cancer cases. This reduces the complicated extensive surgeries resulting into less blood loss, less complications. Overall morbidity is reduced for the advanced ovarian cancer cases. Usually 3 cycles of chemotherapy are given before surgery and remaining three cycles are given after the surgery. Before initiation of neoadjuvant chemotherapy, histologic confirmation of ovarian cancer should be obtained (by FNA, biopsy, or paracentesis) in this group of patients; a core biopsy is preferred.

Interval Debulking surgery after Neoadjuvant chemotherapy:
As with a primary debulking procedure, every effort should be made to achieve maximum cytoreduction dur-

ing an interval debulking procedure.
1. Maximal effort should be made to remove all gross disease in the abdomen, pelvis, and retroperitoneum.
2. IDS, including completion hysterectomy and BSO with staging, should be performed after 3–4 cycles of neoadjuvant chemotherapy for women with a response to chemotherapy or stable disease.
3. Hyperthermic intraperitoneal chemotherapy (HIPEC) with cisplatin (100 mg/m2) can be considered at the time of IDS for stage III disease or stage IV patients post NACT.
4. All peritoneal surfaces should be visualized, and any peritoneal surface or adhesion suspicious for harbouring metastasis should be selectively excised or biopsied.
5. Omentectomy should be performed.
6. Suspicious and/or enlarged nodes should be resected, if possible. Removal of lymph nodes noted to have potential metastasis at the time of initial diagnosis should be considered, even if not currently suspicious or enlarged.
7. Procedures that may be considered for optimal surgical debulking include bowel resection and/or appendectomy, stripping of the diaphragm or other peritoneal surfaces, splenectomy, partial cystectomy and/ or ureteroneocystostomy, partial hepatectomy, partialgastrectomy, cholecystectomy, and/or distal pancreatectomy.

Risk-Reducing Salpingo-Oophorectomy (RRSO) Protocol
1. Perform minimally invasive laparoscopic surgery.
2. Survey upper abdomen, bowel surfaces, omentum, appendix (if present), and pelvic organs.
3. Biopsy any abnormal peritoneal areas.
4. Obtain pelvic washing for cytology using 50 cc normal saline.
5. Perform total BSO, removing 2 cm of proximal ovarian vasculature/ IP ligament, all tube up to the cornua, and all peritoneum surrounding the ovaries and tubes, especially peritoneum underlying areas of adhesion between tube and/or ovary and the pelvic sidewall. The fallopian tube from the fimbria to its insertion into the uterus should be removed.
6. Engage in minimal instrument handling of the tubes and ovaries to avoid traumatic exfoliation of cells.
7. Both ovaries and tubes should be placed in an endobag for retrieval from the pelvis.

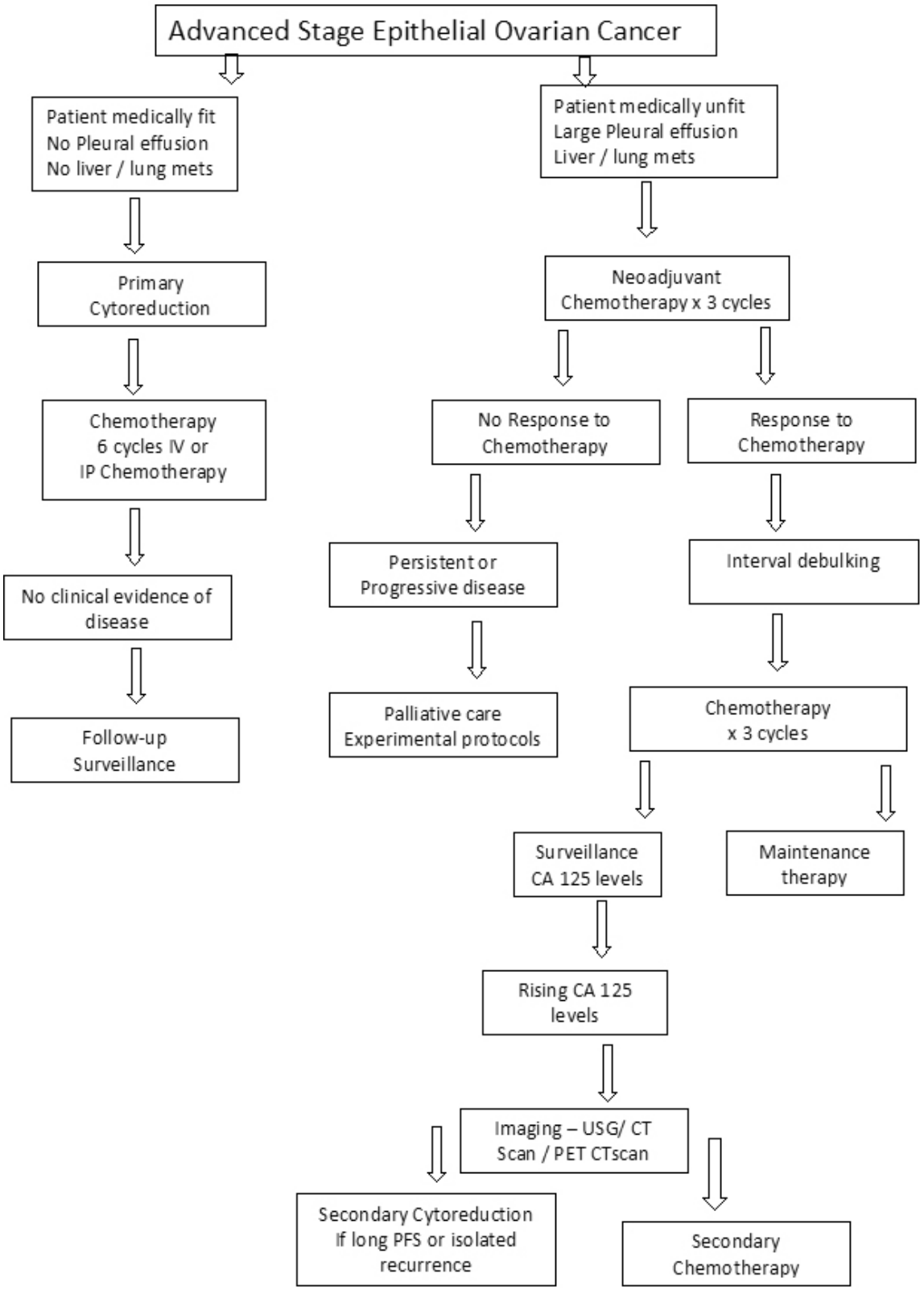
Special Circumstances
1. Fertility-sparing surgery:
Fertility-sparing surgery with USO (preserving the uterus and contralateral ovary) or BSO (preserving the uterus) can be considered for patients with apparent early-stage disease and/or low-risk tumors (early-stage invasive epithelial tumors, LMP lesions, malignant germ cell tumors, mucinous, or malignant sex cord-stromal tumors) who wish to preserve fertility.
Evaluation by reproductive endocrinologist should be done if clinically indicated. Comprehensive surgical staging should still be performed to rule out occult higher stage disease but may be omitted in paediatric/adolescent patients with clinically apparent early-stage malignant germ cell tumors based on the paediatric surgical literature.
2. Mucinous Tumors
As primary invasive mucinous tumors of the ovary are uncommon, upper and lower GI tract should be carefully evaluated to rule out an occult GI primary with ovarian metastases, and an appendectomy need only be performed in patients with a suspected or confirmed mucinous ovarian neoplasm if it appears to be abnormal. A normal appendix does not require surgical resection in this setting. If mucinous histology is confirmed by intraoperative frozen section analysis and there are no suspicious lymph nodes, consider omitting lymphadenectomy.

3. Ovarian borderline epithelial (LMP) tumors:
Although data show upstaging with lymphadenectomy, other data show that lymphadenectomy does not affect overall survival. However, omentectomy and multiple biopsies of peritoneum (the most common sites of peritoneal implants) may upstage patients in approximately 30% of cases and may affect prognosis.

Secondary cytoreduction:

A secondary cytoreduction procedure can be considered in patients with recurrent ovarian cancer who develop a recurrence more than 6 months since completion of initial chemotherapy, have a good performance status, have no ascites, and have an isolated focus or limited foci of disease amenable to complete resection. In addition to preoperative imaging, laparoscopy may be used to determine if complete resection can be achieved. Secondary cytoreduction can be performed with either open or minimally invasive
approaches. Consider using validated scoring methods to assess suitability for secondary cytoreduction.

Palliative surgery
A malignant bowel obstruction is the most common reason for a hospital admission for patients with ovarian cancer during the last year of life. Management options are a percutaneous endoscopic gastrostomy (PEG) tube, parenteral nutrition, palliative chemotherapy, stents for gastric outlet obstruction or single-site colonic obstruction, and as last resort palliative surgery. Initial treatment for a malignant bowel obstruction should be conservative and may include bowel rest and hydration to correct metabolic abnormalities. Because the purpose of palliative surgery is to improve the quality of life, the procedure must be short and limited, with the lowest possible complication rate.


Advanced Stage Epithelial Ovarian Cancer
Patient medically fit
No Pleural effusion
No liver / lung mets
Patient medically unfit
Large Pleural effusion
Liver / lung mets
Primary
Cytoreduction
Neoadjuvant
Chemotherapy x 3 cycles
Chemotherapy
6 cycles IV or
IP Chemotherapy
No Response to
Chemotherapy
Response to
Chemotherapy
No clinical evidence of
disease
Persistent or
Progressive disease
Interval debulking
Follow-up
Surveillance
Palliative care
Experimental protocols
Chemotherapy
x 3 cycles
Surveillance
CA 125 levels
Maintenance
therapy
Rising CA 125
levels
Imaging – USG/ CT
Scan / PET CTscan
Secondary Cytoreduction
If long PFS or isolated
recurrence
Secondary
Chemotherapy

Management of Cervical Cancer

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Cervical cancer is one of the most successfully treatable forms of cancer, as long as it is detected early and managed effectively. Cancers diagnosed in late stages can also be controlled with appropriate treatment and palliative care. The WHO global strategy of '90–70–90' targets by 2030 to eliminate cervical cancer proposes, 90% of women identified with cervical pre-cancer/cancer should receive treatment1. Diagnosis and staging: Diagnosis has to be confirmed by histopathology as per recent WHO histopathological classification especially mentioning HPV-associated and HPV-independent cervical cancer. Proper clinical evaluation including per speculum and bimanual examination is mandatory to stage the disease. Documentation of tumour measurements on examination and correlation with imaging needs to be done. Staging is done as per FIGO staging system revised in 2018. Management should be done by trained gynaecologist/ oncologist.

Investigations

• Biopsy: Diagnosis of microinvasion can be accurately assessed if the entire lesion is presented to the pathologist. If the diagnosis of microinvasion is made or suspected on biopsy, for definitive diagnosis the entire transformation zone with a sufficient margin of normal tis¬sue should be excised in one piece as a cone biopsy (e.g. LLETZ, cold-knife conization)[2]. It will also be evident on a trachelectomy or hysterectomy specimen. Management options of fertility preservation and conservative surgical approach for microinvasive cancer (Stage IA1 and IA2) depend on the findings on cone biopsy.

• Routine investigations including hemogram, liver and kidney function tests and HIV status.

• Chest radiograph.

• Magnetic resonance imaging (MRI) or contrast-enhanced computed tomography (CECT) abdomen and pelvis is preferred to tailor treatment.

• Ultrasonography as a basic imaging modality for cervical cancer, if MRI/CECT not available.

• For early lesion, MRI is superior over CECT in identifying tumour size and parametrial invasion, with equivalent performance in identifying nodal disease. This helps to decide conservative versus radical surgery and to plan brachytherapy.

• Positron emission tomography–computed tomography (PET-CT) may be used in advanced cases.

• Cystoscopy and/or proctosigmoidoscopy are recommended only if clinically or radiologically indicated or mucosal invasion is suspected.

Management: FIGO Stage-wise management options are given below

FIGO 2018 Stage	Cervical Cancer Management[3,4]
Stage IA1	• **Type I/Class A (Extrafascial) hysterectomy** • For fertility preservation - **Conization** /Trachelectomy may be an alternative for stage IA1 squamous cell and adenocarcinoma. Close follow-up. • If LVSI positive - Sentinel lymph node (SLN) mapping/pelvic lymphadenectomy. • Brachytherapy (BT) with a dose of up to 65 Gy equivalent dose in 2Gy fractions to point A is an alternative for medically inoperable patients. • For cone margins cancer positive - Type B radical hysterectomy with pelvic lymphadenectomy
Stage IA2	• **Type II / Class B radical hysterectomy** and pelvic lymphadenectomy is recommended. • Fertility preserving options: (1) Conization with pelvic lymphadenectomy (open or minimally invasive surgery (MIS); or (2) radical trachelectomy with pelvic lymphadenectomy by abdominal, vaginal, or MIS route[5]. • **Ovarian preservation** may be considered in young patients with squamous histology. Salpingectomy is done along with hysterectomy. Young patients with non-HPV-related adenocarcinoma should be counselled carefully for shared decision-making regarding bilateral oophorectomy, due to the higher risk of metastases and/or relapse in the adnexa compared to squamous cell histology. • Brachytherapy alone or external beam radiation therapy (EBRT) and brachytherapy to a dose of up to 70 Gy to point A should be considered for medically inoperable patients.
Stage IB1	• **Type III/Class C radical hysterectomy** with or without bilateral salpingo-oophorectomy with bilateral pelvic lymphadenectomy is recommended. • In patient desirous of fertility, radical trachelectomy with SLN mapping/bilateral pelvic lymph node dissection (BPLND) may be considered. • Open abdominal route is the standard of care. MIS is currently not recommended. • or Radical Pelvic EBRT+BT +/- concurrent chemotherapy (platinum based) if surgery not possible

Stage IB2 and Stage IIA1	• **Abdominal Type III/C1 radical hysterectomy** with bilateral pelvic lymphadenectomy +/-bilateral oophorectomy is the preferred modality of treatment.	
	• Patients unfit or unwilling for surgery: Radical radiotherapy (RT) - EBRT and BT with or without concurrent cisplatin chemotherapy with total dose of 75-80 Gy to Point A.	
Stage IB3, IIA2 to Stage IVA	• Definitive **Concurrent platinum-based chemoradiotherapy** (CCRT) and brachytherapy is the standard of care.	
	• Treatment strategy should aim to avoid the combination of radical surgery and postoperative EBRT, due to a significant increase of morbidity and no impact on survival.	
	• Pelvic exenteration is an option in selected cases with stage IV A disease. This should be especially considered when need for symptom control applies, e.g. for fistulae.	
	• Neoadjuvant chemotherapy is not indicated to downstage the disease.	
	• For positive para-aortic nodes (Stage IIIC2) - Extended field RT + Concurrent weekly cisplatin	
Stage IVB	• Treatment should be individualized.	
	• **Palliative systemic therapy** (chemotherapy and/or immunotherapy (e.g. pembrolizumab, cemiplimab) and/ or targeted therapy (e.g. Bevacizumab- anti-angiogenic)) and/or palliative radiation therapy should be considered.	
	• Haemostatic radiotherapy can be given to control intractable bleeding. • Radical chemoradiation and systemic chemotherapy and Ablative Radiation to Metastatic Sites	
	• **Comprehensive palliative care** including symptom-directed care and pain relief. • Psychosocial support must be incorporated in patient management.	
Inadvertent simple hysterectomy with postop diagnosis of cervical cancer	• Patients with stage IA1 without LVSI should be kept under regular follow-up.	
	• Rest all should be evaluated for revision surgery (radical parametrectomy/vaginectomy and/or lymphadenectomy) or radiation therapy with or without chemotherapy.	
	According to postoperative histopathology report, patients regrouped in the following:	
Adjuvant treatment after surgery	**High-risk** (Any one factor): • Positive pelvic/para-aortic lymph nodes • Parametrial involvement • Positive surgical margin(microscopic)	→ Adjuvant concurrent chemoradiotherapy.
	Intermediate-risk (Any two factors) • LVSI positive • Tumour maximum diameter >4 cm at final pathology • Deep stromal invasion	→ Adjuvant radiotherapy.
	Low risk • All other patients (none of the above risk factors)	→ Observation and follow-up as per schedule
Follow up	• Every 3–4 monthly for 2-3 years, • Every 6 monthly for next 5 years and • Every yearly thereafter for life[5]	
	• At each follow-up visit, a detailed history should be taken, clinical examination should be done including the assessment of vault/cervix, vagina, and vulva.	
	• Investigations including imaging should be tailored according to clinical findings. Pap smear or biopsy should be taken if a lesion is suspected.	
	• No routine cervical smear should be taken if the patient has received RT.	
	• Routine imaging is not indicated except special circumstances, such as interval imaging of the abdomen for involved high PLN[5]	
Recurrent cervical cancer	Post-surgery recurrence: ○ Re-surgery, if possible ○ Else- Concurrent chemoradiation	
	Post-radiation therapy recurrence:	
	Central recurrence ○ Extrafascial hysterectomy ○ Exenteration in suitable patients ○ Else-palliative chemotherapy	Pelvic side-wall OR Extra-pelvic recurrence ○ Palliative chemotherapy +/- Targeted therapy ○ Palliative RT
	○ Immunotherapy ○ BT/Stereotactic RT/EBRT	○ Para-aortic nodal recurrence -RT/ chemoradiation[5]
	Treatment plan will depend on the patient's performance status, site, and extent of recurrence and/or metastases, and prior treatment received. Confirmation of recurrence with a pathologic specimen obtained by biopsy is essential before proceeding with therapy. Palliative care	

Definitive Chemoradiotherapy & Brachytherapy

• Definitive management consists of concomitant pelvic radiotherapy (platinum based) and brachytherapy

• Overall treatment time for the definitive treatment should not exceed 7–8 weeks. Overall treatment time for EBRT should not exceed 5–6 weeks.

• There is evidence that overall treatment time (OTT) including brachytherapy, should be as short as possible and should not exceed 56 days.

Conservative surgical approaches may be a feasible option for select patients with early-stage, low-risk cervical carcinoma, according to the findings of recent studies like SHAPE trial7. In stage IA1 with LVSI, IA2 and IB1, low risk patients meeting all conservative criteria like no LVSI, negative cone margins, squamous cell (any grade) or usual type adenocarcinoma (grade 1 or 2) or adenosquamous carcinoma, tumour size ≤2 cm, depth of invasion <10 mm on cone/ cervical stromal invasion <50% on MRI, negative imaging for metastatic disease, can be treated with type A hysterectomy with SLN mapping or pelvic lymphadenectomy[5,6]

In FIGO Stages IB2 and IIA1 cervical cancer, surgery or radiotherapy can be chosen as the primary treatment depending on other patient factors (nodal status on imaging, tumour characteristics, patient comorbidity, and preference) and local resources, as both have simi-

lar outcomes. The advantages of surgical treatment are: - (1) precise postoperative stage assessed by histopathology enables individualization of postoperative treatment; (2) possibility of treating radio-resistant cancers; and (3) preservation of ovarian and sexual function makes it preferrable in younger women[5].

Sentinel lymph node mapping: The role of sentinel lymph node (SLN) mapping in cervical cancer is finding increasing acceptance in early-stage cervical cancer, i.e. FIGO Stages IA, IB1, and IB2. In SENTICOL-2 randomized trial of SLN resection alone versus SLN plus pelvic lymphadenectomy in early cervical cancer, lymphatic morbidity and rate of postoperative neurological symptoms was significantly lower in the SLN arm while 3-year recurrence free survival was not significantly different. Currently, the SENTICOL-III study is ongoing5.

Colposcopy: Colposcopy is useful to note the extent of the tumour in the vagina and the presence of vaginal intraepithelial neoplasia[2]. In addition to the cervical examination, colposcopy assessing the vaginal cuff, lesion extent and multifocality, is an integral part of preoperative assessment to decide vaginal incision area for trachelectomy and hysterectomy.

PD-L1 testing and immunotherapy: PD-L1 immunohistochemistry testing helps identify patients (high risk locally advanced cervical cancer (LACC), recurrent/metastatic) who may benefit from immune checkpoint inhibitors (ICIs), such as pembrolizumab. PD-L1 scoring is primarily calculated using the Combined Positive Score (CPS), which calculates the percentage of PD-L1 positive tumour + immune cells (lymphocytes and macrophages) relative to the total number of viable tumour cells. A CPS of ≥1 is considered PD-L1 positive, eligible for ICI therapy. A CPS of ≥10 suggests a higher likelihood of response to ICIs. In KEYNOTE-A18 trial, the addition of pembrolizumab to chemoradiotherapy was found significantly improving progression free and overall survival in patients with high-risk LACC, establishing this combination as a new standard of care5.

MIS vs Open Surgery: Several ongoing clinical trials on laparoscopic/robotic approach are evaluating safety measures in radical hysterectomy for cervical cancer to determine whether MIS can be performed without compromising oncologic outcomes. Some ongoing clinical trials evaluate the safety of certain strategies like avoidance of tumour manipulation, prior cervical conization, vaginal closure techniques, etc. that aim to improve oncologic outcomes by mitigating the risks associated with MIS in radical hysterectomy for cervical cancer. The outcomes of these studies will be crucial in determining the future role of MIS in the surgical management of early-stage cervical cancer5.

Cervical cancer in pregnancy: Multidisciplinary team should undertake the management and the plan must be discussed with the patient and her partner. Broadly, the management of cervical cancer in pregnancy follows the same principles as in non-pregnant patients. Patients with early-stage disease (IA) may safely undergo fertility-sparing treatments, including cervical conization or radical trachelectomy, as indicated. The optimal timing for this procedure is in the second trimester, before foetal viability.

Invasive cervical cancer in pregnancy[3,5]

↓ <20 weeks, No desire to continue pregnancy		↓ >20 weeks / <20 weeks & wants to continue pregnancy	
↓ Stage IB1-2, IIA1	↓ Stage IB3, IIA2-IVA	↓ Consider Neoadjuvant Chemotherapy	
↓ Radical Hysterectomy+PLND With foetus in situ	↓ EBRT + Concurrent CT	↓ Follow till maturity (~34 weeks)	
	↓ Spont. Abortion or Hysterotomy	↓ Caesarean section (classical)	
	↓ Brachytherapy	↓ Stage IB1-2, IIA1	↓ Stage IB3, IIA2-IVA
		↓ Radical Hysterectomy+lymphadenectomy Along with caesarean section	↓ Concurrent CT+RT

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Ovarian Cancer: Staging and Diagnosis – A Comprehensive Overview

Introduction

Ovarian cancer remains one of the most lethal gynecologic malignancies worldwide. Despite advances in imaging and molecular testing, the disease is often diagnosed at an advanced stage due to its vague symptomatology and lack of effective screening methods. The cornerstone of optimal management lies in accurate staging—which dictates prognosis and guides therapeutic decisions—and diagnosis, which involves integrating clinical, radiologic, and pathologic findings.

This article provides a comprehensive overview of ovarian cancer staging and diagnostic approaches, emphasizing practical aspects relevant to obstetricians and gynecologists, while aligning with the latest FIGO (International Federation of Gynecology and Obstetrics) 2021 classification.

Epidemiology and Overview

Globally, ovarian cancer ranks as the eighth most common cancer among women and the fifth leading cause of cancer-related deaths. In India, the incidence is approximately 8–10 per 100,000 women per year, with notable regional variations. The high mortality-to-incidence ratio underscores the importance of early detection and appropriate staging.

Ovarian malignancies are broadly classified into:

- **Epithelial tumors** (≈90%) – Serous, endometrioid, mucinous, clear cell, transitional.
- **Germ cell tumors** (≈5%)
- **Sex cord–stromal tumors** (≈5%)

Among these, high-grade serous carcinoma (HGSC) is the most frequent and aggressive subtype.

Pathophysiology and Spread

Ovarian cancer spreads primarily through:

1. Transcoelomic dissemination – exfoliation of malignant cells into the peritoneal cavity, leading to widespread peritoneal implants.

2. Lymphatic spread – via pelvic and para-aortic nodes.

3. Hematogenous spread – less common; may involve liver parenchyma or lungs.

Understanding the natural pattern of spread is critical for surgical staging and planning.

Clinical Presentation

The symptoms of ovarian cancer are insidious and often nonspecific:

- Abdominal bloating, distension, or discomfort
- Early satiety or loss of appetite
- Pelvic pressure or pain
- Urinary urgency or frequency
- Unexplained weight loss
- Ascites or abdominal mass on examination

These subtle signs often mimic benign conditions such as irritable bowel syndrome or ovarian cysts, leading to delayed diagnosis.

Approach to Diagnosis

A structured diagnostic approach integrates clinical assessment, tumor markers, imaging, and pathological confirmation.

1. Clinical Evaluation

- History: Menstrual, reproductive, and family history (particularly BRCA1/2, Lynch syndrome).
- Examination: Abdominal and pelvic examination to detect mass, ascites, nodularity, or fixed adnexal lesion.

2. Tumor Markers

Table 1.: Tumor markers with applications

Marker	Associated Tumor Type	Clinical Use
CA-125	Epithelial ovarian carcinoma	Monitoring, not screening
HE4	Epithelial ovarian carcinoma	Used in Risk of Ovarian Malignancy Algorithm (ROMA)
AFP	Yolk sac tumor	Diagnosis and monitoring
β-hCG	Choriocarcinoma, germ cell tumor	Diagnosis
LDH	Dysgerminoma	Diagnosis
Inhibin, AMH	Sex cord–stromal tumor	Diagnosis and follow-up

CA-125 remains the most commonly used marker but is elevated in many benign conditions (endometriosis, fibroids, PID), limiting specificity.

HE4 has improved specificity, especially in postmenopausal women.

3. Imaging Modalities

a. Transvaginal and Transabdominal Ultrasound

• First-line imaging for adnexal masses.
• Features suggestive of malignancy:
o Solid components
o Papillary projections
o Thick septations
o Bilaterality
o Presence of ascites
o High color Doppler flow (low resistance index)

b. CT Scan (Abdomen and Pelvis)

• Essential for staging and surgical planning.
• Detects peritoneal disease, omental caking, and lymph node involvement.

c. MRI

• Superior for characterizing indeterminate adnexal lesions.
• Helpful for differentiating benign cysts from malignant masses.

d. PET-CT

• Useful in recurrent disease or to identify occult metastasis.

4. Diagnostic Algorithms

Two widely used risk assessment tools:

a. RMI (Risk of Malignancy Index)

[
RMI = U \times M \times CA125
]

• **U:** Ultrasound score (0–3)
• **M:** Menopausal status (1 = premenopausal, 3 = postmenopausal)
• **CA125:** Serum level (U/mL)
• **RMI** > 200 suggests high likelihood of malignancy.

b. ROMA (Risk of Ovarian Malignancy Algorithm)

Incorporates CA125, HE4, and menopausal status; enhances diagnostic accuracy.

5. Cytology and Biopsy

• **Ascitic fluid cytology:** May reveal malignant cells but not always diagnostic.
• **Image-guided biopsy:** Indicated when primary cytoreductive surgery is not feasible and neoadjuvant chemotherapy is being considered.
• **Surgical staging biopsy:** Performed during laparotomy or laparoscopy for diagnosis and staging.

Histopathological Diagnosis

Definitive diagnosis requires histopathological confirmation.:

Table 2: **Immunohistochemistry (IHC)** in different histologic subtypes

Marker	Positive in	Helps Differentiate From
WT1	Serous carcinoma	Endometrioid, mucinous tumors
PAX8	Müllerian origin tumors	Metastatic GI tumors
Napsin A	Clear cell carcinoma	Serous carcinoma
CK7/CK20	Ovarian vs GI origin	Colorectal metastasis
p53, p16	High-grade serous carcinoma	Low-grade tumors

Molecular testing for **BRCA1/2** mutations and **HRD (Homologous Recombination Deficiency)** has therapeutic implications (e.g., PARP inhibitors).

FIGO Staging of Ovarian Cancer (2021 Revision)

The FIGO staging system is surgical–pathologic and remains the gold standard for assessing disease extent. It applies to epithelial ovarian, fallopian tube, and primary peritoneal carcinomas, recognizing their shared origin in the Müllerian epithelium.

Table 3 : FIGO Staging for Ovarian, Fallopian Tube, and Primary Peritoneal Cancer (2021)
Principles of Surgical Staging

Stage	Extent of Disease
I	Tumor confined to ovaries or fallopian tubes
IA	Limited to one ovary/tube, capsule intact, no tumor on surface, negative washings
IB	Both ovaries/tubes involved, capsule intact, no surface tumor, negative washings
IC	Tumor confined to ovaries/tubes with surface involvement or rupture
IC1	Surgical spill
IC2	Capsule ruptured before surgery or tumor on surface
IC3	Malignant cells in ascites/peritoneal washings
II	Pelvic extension (below pelvic brim)
IIA	Extension and/or implants on uterus and/or fallopian tubes/ovaries
IIB	Extension to other pelvic organs (e.g., bladder, rectum)
III	Peritoneal metastasis outside pelvis and/or regional lymph node involvement
IIIA1	Positive retroperitoneal lymph nodes only
IIIA1(i)	Metastasis =10 mm
IIIA1(ii)	Metastasis >10 mm
IIIA2	Microscopic extrapelvic peritoneal metastasis ± lymph node involvement
IIIB	Macroscopic peritoneal metastasis =2 cm ± nodal involvement
IIIC	Macroscopic peritoneal metastasis >2 cm ± nodal involvement (includes omentum)
IV	Distant metastasis beyond peritoneal cavity
IVA	Pleural effusion with positive cytology
IVB	Parenchymal metastases and/or extra-abdominal lymph nodes (inguinal, supraclavicular)

Accurate staging requires meticulous surgical exploration by an experienced gynecologic oncologist.
Standard surgical staging for epithelial ovarian carcinoma includes:

1. Peritoneal washings
2. Inspection and palpation of all peritoneal surfaces
3. Total abdominal hysterectomy with bilateral salpingo-oophorectomy
4. Infracolic omentectomy
5. Peritoneal biopsies from suspicious and normal-looking areas
6. Pelvic and para-aortic lymph node sampling
7. Appendectomy (for mucinous tumors)
8. Diaphragmatic scrapings and biopsies

In young patients with stage IA grade 1 tumors desiring fertility preservation, unilateral salpingo-oophorectomy with comprehensive staging is acceptable.

Role of Imaging in Staging

Imaging plays a complementary role in preoperative assessment but cannot replace surgical staging.
• CT/MRI helps evaluate resectability and predict the need for neoadjuvant chemotherapy.
• PET-CT aids in identifying distant metastasis, especially when non-pelvic disease is suspected.
• Diffusion-weighted MRI can detect small peritoneal implants.

Staging in Special Scenarios
1. Borderline Ovarian Tumors (BOTs)
• Exhibit epithelial proliferation without stromal invasion.
• Staged similarly to invasive carcinomas, but fertility-sparing surgery is often considered.
2. Germ Cell Tumors
• Staged per FIGO system; typically confined to one ovary and occur in young women.
• Serum markers (AFP, β-hCG, LDH) guide diagnosis and follow-up.
3. Sex Cord–Stromal Tumors
• Include granulosa and Sertoli–Leydig cell tumors.
• Stage I disease predominates, with surgery as mainstay.

Prognostic Implications of Stage
• Stage I: 5-year survival >90%
• Stage II: ~70%
• Stage III: 30–50%
• Stage IV: <20%
Survival decreases sharply with advancing stage, reinforcing the need for early detection and optimal cytoreductive surgery.

Modern Diagnostic Advances
1. Laparoscopic Staging
• Minimally invasive approach feasible in early-stage disease or when assessing operability.
2. Cytoreductive Assessment Scoring
• Fagotti score during diagnostic laparoscopy helps predict likelihood of optimal debulking.
3. Molecular and Genetic Profiling
• BRCA1/2, HRD status: Predict response to PARP inhibitors.
• p53, WT1, ARID1A mutations: Help in histotype confirmation.
4. Liquid Biopsy and Circulating Tumor DNA (ctDNA)
• Under investigation as a future diagnostic and monitoring tool.

Practical Challenges in India
1. Late presentation: Over 70% present with stage III/IV disease.
2. Limited access to specialized oncology centers.
3. Inadequate awareness among primary care providers.
4. Resource constraints limiting molecular testing and advanced imaging.
Community-based awareness programs and upskilling of peripheral practitioners are crucial for earlier detection.

Key Diagnostic Pearls
• Any postmenopausal adnexal mass should be considered malignant until proven otherwise.
• Persistent, unexplained abdominal distension or ascites warrants imaging and CA-125 testing.
• Multidisciplinary evaluation (gynecologic oncologist, radiologist, pathologist) improves diagnostic accuracy.
• Referral to oncology centers before surgery is advisable when malignancy is suspected, to ensure proper staging and cytoreduction.

Conclusion
Ovarian cancer continues to challenge clinicians due to its silent course and late diagnosis. A structured diagnostic approach—integrating clinical acumen, biomarker evaluation, advanced imaging, and histopathologic confirmation—is vital.
Accurate FIGO staging remains the foundation for prognostication and management planning.
The evolving molecular landscape offers promising tools for early detection and personalized therapy. However, the most effective strategy remains heightened vigilance, timely referral, and multidisciplinary collaboration.

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Vaccination and Screening for Cervical Cancer – Stepping towards elimination

Cervical cancer continues to be a leading cause of mortality among women. In 2022, it was estimated that 6,62,044 new cases and 3,48,709 deaths due to cervical cancer were reported globally, corresponding to the fourth cause of cancer morbidity and mortality in women worldwide. Of these, 19% cases and 23% deaths due to cervical cancer were reported from India.(1)

As per National Cancer Registry Program in India, the cumulative risk in Indian women to develop cervical cancer in her lifetime is 1 in 75 (2). It was estimated that an alarming number of new cases i.e.85,241 would be detected in 2025 in India.

Cervical cancer is amenable to prevention with vaccination and screening.

In 2020, WHO launched global strategy to eliminate cervical cancer with 90-70-90 approach.(3)

The Global Strategy targets to be achieved, by 2030 are:

1.90% of girls fully vaccinated with human papilloma virus (HPV) vaccine by age 15 years
2.70% of women screened with a high-performance test by 35 years of age and again by 45 years of age 3.90% of women identified with cervical disease receive treatment (90% of women with pre-cancer treated, and 90% of women with invasive cancer managed)

HPV infections are common in women in reproductive age group. 70 to 90% HPV infections are asymptomatic and resolve in 1-2 years. Persistent infection with high risk HPV subtype can lead to precancer, which if not detected and treated can progress to invasive cervical cancer.

Primary prevention of Cervical Cancer(Vaccination)

Since 2007, HPV vaccines based on VLPs(virus like particles) were licensed in many countries including the United States and Australia as a means of preventing cervical cancer. (5)HPV vaccination reduces risk of HPV infection, precancer and invasive cancer. 90% reduction in incidence of cervical cancer was reported in a large Swedish study in women vaccinated before 17 years of age.(6)

FOGSI has released GCP guidelines for use of HPV vaccine in India.

Following HPV Vaccines are currently available in India:

Vaccination is preferred at an early age, as efficacy drops after first intercourse.

Name of vaccine	Type of vaccine	HPV subtypes	Dose	Schedule
Cervavac	Quadrivalent	6,11,16,18	0.5 ml im in deltoid	9-14 years two doses (0 , 6 months) 15-26 years three doses(0,1-2months ,6 months)
Gardasil	Quadrivalent	6,11,16,18		
Gardasil 9	Nine valent	6,11,16,18, 31,33, 45,52,58		

Gardasil is approved for Vaccination in women between 26 to 45 years of age. Three doses are recommended at 0,1-2 ,6 months interval. However, vaccination may not be effective or cost effective in this age group due to prior infections.

Gardasil 9 covers all high risk and medium risk HPV subtypes causing cervical malignancy, except HPV 35.(7)

Cervavac is also licensed for vaccination in Boys between 9-26 years. (8)

The vaccination schedule in boys is as follows
9-14 years of age- Two doses 0, 6months
15-26 years of age- Three doses 0, 2, 6months

SAGE (Strategic advisory Committee group) WHO 2022 recommends

- One or two dose schedule for girls between 9-14 years of age
- One or two dose schedule for girls and women between 15-20 years of age
- Two doses with 6 months interval for women older than 21 years of age.

Vaccines are stored at 2-8^0 c

Side effects are usually mild. They include Injection site pain (35–88%), redness (5–40%), and swelling (4–35%) .

Mild systemic adverse events like headache, dizziness, myalgia, arthralgia, and gastrointestinal symptoms (nausea, vomiting, and abdominal pain) may be seen.

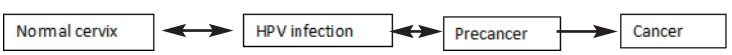
Rare events of anaphylaxis have been reported.

HPV vaccines are safe for use in immunocom-

promised or human immunodeficiency virus (HIV) infected persons.
HPV Vaccine can be administered concomittently with other vaccines, when indicated. Vaccination is contraindicated during pregnancy. If patient conceives after first dose of vaccination, further doses are given after delivery. In case of inadvertent vaccination during pregnancy, termination is not recommended. Vaccination is safe in lactating women.
Vaccination can be done in patients with abnormal pap report,positive HPV result or previous HPV lesions, if they desire. They are counseled about reduced efficacy of vaccine due to prior infection.
Vaccination does not eliminate the need for routine screening for cervical cancer. The vaccine does not cover all HPV subtypes .HPV 45 – High risk for malignancy (6% of cervical cancers) , medium risk (31,33,35,52,58 subtypes) and low risk (39,51,56,59,68)HPV protection is not provided by Quadrivalent vaccine. Nine valent vaccine does not protect against medium risk HPV type 35 (2% of cervical cancers) and low risk subtypes. (7)

Screening for cervical cancer

The aim of cervical cancer screening is to detect women with precancer . Effective screening and treatment of cervical precancers can reduce the lifetime risk to less than 0.5%.
There are three approaches for screening



*Tests under evaluation

Cervical cytology has been the mainstay of cervical screening programs since mid 20th century. The sensitivity of cytology for detecting precancer is 50% to 70% as compared to HPV testing which is more than 90%. It is found that 97% of cervical precancers are HPV positive.

Molecular	Cytogenic	Visual inspection
Nucleic acid amplification tests (NAAT) high-risk HPV DNA/ NAAT mRNA	Conventional pap smear	Visual inspection with acetic acid or with Lugol's iodine (VIA/VILI) Naked eye Camera or colposcope Automated visual evaluation of digital images*
DNA methylation* Protein biomarkers* HPV antibodies , oncoproteins	Liquid based cytology Dual staining to identify p16,ki67	

Liquid based cytology has better sensitivity than conventional pap smear. Same sample can be used for HPV DNA testing.
Pap smear reporting is done as per Bethesda system as follows.

HPV DNA testing

It has very high negative predictive value. It is recommended as a screening test after age of 30 years.
Recommendations for screening for cervical cancer
USPSTF (US Preventive services Task Force) 2017
• Screening should start at 21 years of age.

Epithelial cell abnormalities		Glandular cell abnormalities	
ASCUS	Atypical Squamous Cells of Undetermined Significance	AGC	Atypical glandular cells (specify endocervical, endometrial or NOS, i.e., Not Otherwise Significant
ASC-H	Atypical Squamous Cells: cannot exclude High grade Squamous Intra-epithelial Lesion	AGC-FN	Atypical Glandular Cells – Favor Neoplastic
LSIL	Low-grade Squamous Intra-epithelial Lesion	EIS	Endocervical Adenocarcinoma in Situ
HSIL	High grade Squamous Intra-epithelial Lesion	Endometrial cells in a woman > 40 years of age	
SCC	Squamous Cell Carcinoma	Adenocarcinoma	

• 21-30years - Screening with Cytology should be done every 3 years
• 30-65 years- Screening with Cytology every 3 years or high risk HPV testing should be done every 5 years or Co testing with cytology and HPV testing should be done every 5 years
• After age of 65 years - Screening can be stopped if two cytology reports or 2HPV test reports in last 10 years are normal.
WHO suggests HPV DNA testing between age group 30-49 years, every 5-10 years. If HPV testing is not available, WHO suggests Cytology or VIA every 3 years.
FOGSI Resource based Good clinical practice recommendations are as follows
Most appropriate screening test will depend upon available resources.
1. Good resource setting – HPV testing or co testing with HPV and Cytology is recommended
2. If HPV testing can not be afforded and Cytology is available, Cytology is to be used for screening.
3. If cytology is not available and HPV testing cannot be afforded , VIA (visual inspection acetic acid) is to be used for screening.

	Good Resource Setting	Limited Resource Setting
Modalities	HPV testing • Primary HPV testing • Co-testing (HPV & cytology) Cytology Colposcopy and biopsy VIA	VIA Colposcopy ± Biopsy
Target Age Group (years)	25 - 65	30 - 65
Age to start (years)	Cytology at 25 Primary HPV Testing / Co-testing at 30	VIA at 30
Frequency	Primary HPV Testing or Co-testing – every 5 years Cytology – every 3 years	Every 5 years (at least 1-3 times in a lifetime)
Age to stop (years)	65 with consistent negative results in last 15 years • Women with no prior screening should undergo tests once at 65 years and, if negative, screening can be stopped.	
Follow up method after treatment	HPV or cytology after 12 months	VIA after 12 months
Screening of CIN (2+) patient after treatment	Need to be screened for at least 20 years	
Hysterectomised patient	• Following hysterectomy in which cervix was removed for benign causes : no need for screening, unless there is history of previous cervical intra-epithelial neoplasia • Absence of cervix must be confirmed by clinical records or examination • If indications for hysterectomy unclear, screening may be performed at clinician's discretion	
Follow up in women with CIN in hysterectomy HPE report	Need to be screened with HPV at 6 months and 18 months	

Follow up after HPV screening (more than 30 years)
HPV Negative – Repeat every 5 years

HPV positive – Perform cytology / VIA / HPV 16,18 genotyping.
If these tests are negative , repeat HPV after one year.
If Positive for either cytology or VIA or 16,18 genotyping – Patient is posted for colposcopy and biopsy if available . If colposcopy is not available, VIA directed biopsy is taken.

Follow up after screening with co testing
HPV and Cytology negative – Repeat testing is done after 5 years
HPV negative and cytology ASCUS or LSIL – Co testing repeated after one year
HPV negative and cytology ASCUS or LSIL persists after one year - Colposcopy and biopsy is done
HPV negative and cytology ASC H or HSIL - Colposcopy and biopsy is done
HPV positive and cytology negative –
a. Repeat co testing after one year – HPV remains positive –
Colposcopy and biopsy is taken
b. HPV 16,18 testing is done if available - If positive Colposcopy and biopsy is done. If negative , co testing is repeated after one year.

Follow up after screening with cytology
a. LSIL/ ASCUS in age group 25-29 years – Cytology is repeated after one year . If ASCUS or higher report persists for 2 years , colposcopy and biopsy is done.
b. ASCUS in age group more than 30 years – HPV testing is done. If HPV is positive, colposcopy and biopsy is done. If HPV is negative , co testing is repeated in five years
c. LSIL in age group more than 30 years – HPV testing is done.
If HPV is positive, colposcopy and biopsy is done.

If HPV is negative, co testing is repeated in one year.
i) If HPV is negative, co testing is repeated after three years.
ii) If HPV is positive , colposcopy and biopsy is done.
d. ASC H or HSIL in age group more than 30 years – Colposcopy and cervical biopsy is done. Ablation or excision procedure is done depending upon lesion.
e. ASC H or HSIL in age group less than 30 years - If patient is desirous of child bearing , colposcopy and biopsy is done. If biopsy does not show CIN 2 or 3, colposcopy is repeated after 6 months.

Follow up after screening with VIA (Visual Inspection with Acetic acid 5%)
The test is considered negative if there are no aceto-white areas after application of 5% acetic acid.
VIA is considered positive if
a. distinct , ill defined, dense areas with well defined or ill defined margins appear on cervix
b. Entire cervix turns dense white
c. Leucoplakia or condyloma are seen on cervix
In VIA positive cases
a. See and treat approach is followed.
b. Colposcopy and biopsy is done if available

Management will depend upon the screening test results.
Criteria for single visit approach strategies (FOGSI GCPR guidelines)

Screen and Treat Approach
• In Public Health Programs
• VIA detects abnormal lesion
• If Criteria for are ablation fulfilled immediate treatment with or without biopsy
• Lower probability of over-treatment in high prevalence areas
• Post-hoc analysis is possible if biopsy is taken

See and Treat Approach
• In Colposcopy Clinics
• Patient is referred with abnormal cytology report
• If Colposcopy scoring indicates a high grade lesion simultaneous treatment done – excision or ablation
• Low probability of over-treatment because of high specificity of cytology
• Post-hoc analysis of biopsy report/excision specimen
Follow up with adequate screening method (cytology or HPV testing) is essential for at least 20 years after treatment for CIN 2or above.

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Primary Ovarian Malignancy With Rectal Metastasis: A Rare Presentation With Pr Bleeding

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Introduction

Most common presentations of ovarian cancers are abdominal swelling, abdominal pain, dyspepsia, urinary frequency and weight change. Unfortunately these symptoms occur at a late stage. Ovarian cancers metastasize predominantly by trascoelonic dissemination.[1] These cells grow on the peritoneal surface but rarely penetrate into organs. Organ invasion is seen in the late stage and it points towards poor prognosis.[2] Liver, Spean invasions are common but full thickness invasion of rectum are rarely seen and reported.[3] There is only one case report till date as per our knowledge which was published in Indian Journal of Surgical Oncology by Deepjyoti et al.

Case Report

A case of 64 years old female presented with chief complaints of pain abdomen on and off with history of blood in stool for 2 months. On PR examination a hard growth palpable about 7 cm above anal verge. PV examination was suggestive of obliteration of fornices with hard mass. PET CT WB was suggestive of metabolically active lobulated solid cystic lesion in the pelvis inseparable from the uterus and left ovary. Another high grade metabolic activity in the eccentric thickening involving rectum noted. This was in favor of neoplastic etiology likely two separate primary as carcinoma ovary and carcinoma rectum with no distant metastasis. Biopsy and IHC of rectal growth and ovarian growth was suggestive of a high grade serous carcinoma. Case discussed in MDT and decision taken for upfront cytoreduction surgery. Patient recovered well and discharged on post operative day 10. Final histopathology report was high grade serous carcinoma involving bilateral ovaries, fallopian tubes, uterus and separate in rectum. Tran mural involvement of rectum entailed to Stage IVB. PCI 9, no involvement of omentum, lymph nodes and peritoneum.

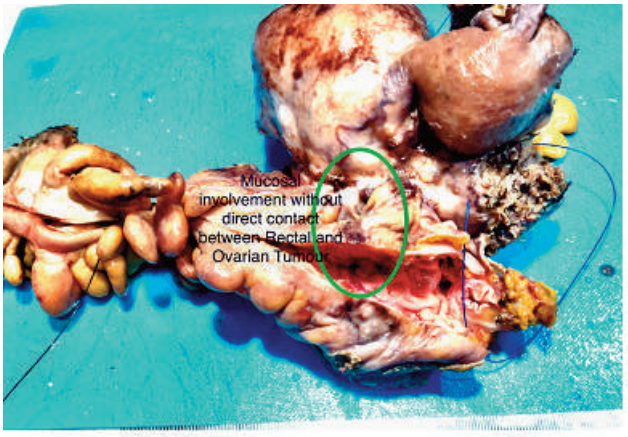

Figure 1: Specimen - Ovary with Rectum

Discussion

Figure 2: Pelvic exenteration for ca ovary

Ovarian cancer presentation as per rectal bleeding secondary to isolated rectal metastasis is very uncommon. In initial stage symptoms of ovarian cancer are vague and non-specific. This lead to delayed presentation so much that 80% patients get diagnosed in late stage. The pattern of ovarian metastasis is atypical as it spread predominantly by trascoelonic pathway. Cancer cells from ovary gets exfoliated. These cells get attached to surface of organs and peritoneum. Ovarian and primary peritoneal malignancies are difficult to differentiate on histopathology as both of them spread in peritoneal cavity and usually do not invade organs till its advanced stage. Advanced Ovarian carcinomas present with extension to fallopian tubes, uterus, sigmoid colon, rectum, omentum, and peritoneal cavity.[4] Epithelial to mesenchymal transformation lead to acquisition of invasive phenotype. Trans mural invasion of solid organs is common but it's rare for intestine that to a thick rectum with surrounding mesorectal layer.[5] Management of such stage IVB cancer is controversial in view of limited level 1 evidence. As per NCCN and most of the guidelines for any stage ovarian cancer cytoreductive surgery is preferred option over chemotherapy as long as you can achieve R0.[6]

Conclusion

Per rectal bleeding as a presentation of primary ovarian malignancy is rare. Rectum is adjacent organ of ovary in a narrow cavity of pelvis. Radiological investigations, gross inspection as well as histopathology have shown separate lesion in rectum. Isolated rectal metastasis can be considered in this case but that is not going to change the prognosis or staging. Trans mural invasion of rectum in case of primary ovarial carcinoma is depicted as Stage IVB weather it is direct invasion or isolated metastasis. Here the presentation as per rectal bleeding is more important to raise awareness among clinicians to suspect and evaluate advanced disease. Through evaluation gastrointestinal tract and pelvis is important. They may present as separate synchronous malignancy from ovarian and gastrointestinal origin and their managements are different. Early detection of ovarian malignancy with per rectal bleeding is not going to change stage but definitely will change morbidity to some extent.

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Diagnosis and Management of Endometrial Cancer

Epidemiology and Background

- Most common gynecologic malignancy in developed nations.
- Peak incidence: 55–65 years, postmenopausal women.
- ~80 % present with early-stage disease.

1. Diagnosis & Initial Evaluation

A. Clinical Presentation

- Postmenopausal bleeding (PMB) – most common (≈90%).
- Premenopausal: intermenstrual bleeding, menorrhagia, infertility.

B. Diagnostic Work-up

Step	Investigation	Comment (Level of evidence)
1	Transvaginal US (TVS)	First-line for Postmenopausal bleeding (ET =4 mm abnormal). (I,A)
2	Endometrial biopsy (diagnostic modality)	Histologic gold standard. (I,A)
3	Hysteroscopy - guided sampling	For focal lesions / inconclusive biopsy.
4	MRI pelvis – Best for assessing myometrial invasion	For myometrial / cervical invasion. (I,A)
5	CT chest ± abdomen	For metastases in high-grade / advanced tumors.

C. Endometrial Biopsy

Biopsy must not be missed in the following high-risk scenarios (suspect increased malignancy risk):

Flowchart – When to Perform Endometrial Biopsy:

Abnormal uterine bleeding (AUB)
↓
Postmenopausal? → YES → Always biopsy (regardless of ET)
↓
NO → Premenopausal
↓
Age ≥45 yrs → Biopsy at presentation
↓
Age <45 yrs → Assess risk factors
↓
If PCOS/Obesity/Diabetes/Tamoxifen/Unopposed estrogen / family history of lynch syndrome → Biopsy
Else → Empirical therapy → Biopsy if persistent >3 months

2. Molecular Classification (Stratification of risk of recurrence depending on molecular profile – Tests can be done on endometrial biopsy or on final hysterectomy specimen)

Subtype	Key mutation	Prognosis	Management note
POLE-ultramutated	DNA polymerase ε identified by next generation sequencing (NGS)	Excellent	Adjuvant therapy can be de-escalated
MMRd (MSI-H)	MLH1/MSH2/MSH6/PMS2 loss – by Immunohistochemistry (IHC)	Intermediate	Immunotherapy responsive
p53-abnormal	TP53 mutation by IHC	Poor	Needs intensified therapy
NSMP	None identified	Intermediate	Conventional management

3. FIGO 2023 Endometrial Carcinoma Staging (June 2023)

Integrates histologic aggressiveness, LVSI, and molecular context. Surgical/pathologic staging is standard; report grade, LVSI, and (when available) POLE/MMR/p53 status for adjuvant planning.

4. Surgical Staging Principles

Surgical staging includes total hysterectomy with bilateral salpingo-oophorectomy (TH + BSO), assessment of lymph nodes (preferably via sentinel node mapping), peritoneal washings, and omental evaluation as indicated.

Flowchart – Surgical Staging Approach

Apparent organ confined Disease on imaging
↓
Total Hysterectomy + BSO (preferably by minimal invasive surgery laparoscopy/ robotic)
↓
Sentinel Lymph Node Mapping (ICG, near-infrared) – Preferred
↓
If mapping fails or aggressive histology → Systematic LN dissection
↓
Omentectomy for serous / clear cell / carcinosarcoma
↓
Peritoneal washings for cytology

5. Adjuvant Therapy

Risk Group	Criteria (Includes Stage as well as molecular profile)	Recommended Adjuvant Therapy
Low Risk	Stage IA1–IA2 non-aggressive, <50% MI, no/focal LVSI, favourable molecular profile (POLE-mut)	No adjuvant therapy
Intermediate	Stage IB non-aggressive, <50% MI, no substantial LVSI, favourable molecular profile	Vaginal brachytherapy alone
High-Intermediate	Stage IB/II with substantial LVSI, grade 3, non-aggressive histology; favourable molecular profile (MMRd/NSMP)	Vaginal brachytherapy or external beam radiation based on risk
High	Aggressive histology, p53-abn, deep MI =50%, Stage III, node+ or para-aortic involvement	Combined External beam radiation + systemic chemotherapy (Carboplatin/Paclitaxel)
Advanced / Metastatic	Stage IV or distant metastasis	Systemic therapy ± RT; integrate immunotherapy/targeted agents

6. Advanced & Recurrent Disease

Setting	Standard	Recent Advances
Stage III–IV resectable	Cytoreductive surgery + chemo	HIPEC can be considered
Unresectable / recurrent	Systemic therapy	Immunotherapy & targeted agents. Palliative therapy

7. Follow-Up and Surveillance

Period	Frequency	Evaluation
0–3 yrs	3–6 monthly	History + pelvic exam
3–5 yrs	6–12 monthly	Clinical review
> 5 yrs	Annually	Survivorship care

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Upcoming Programs:

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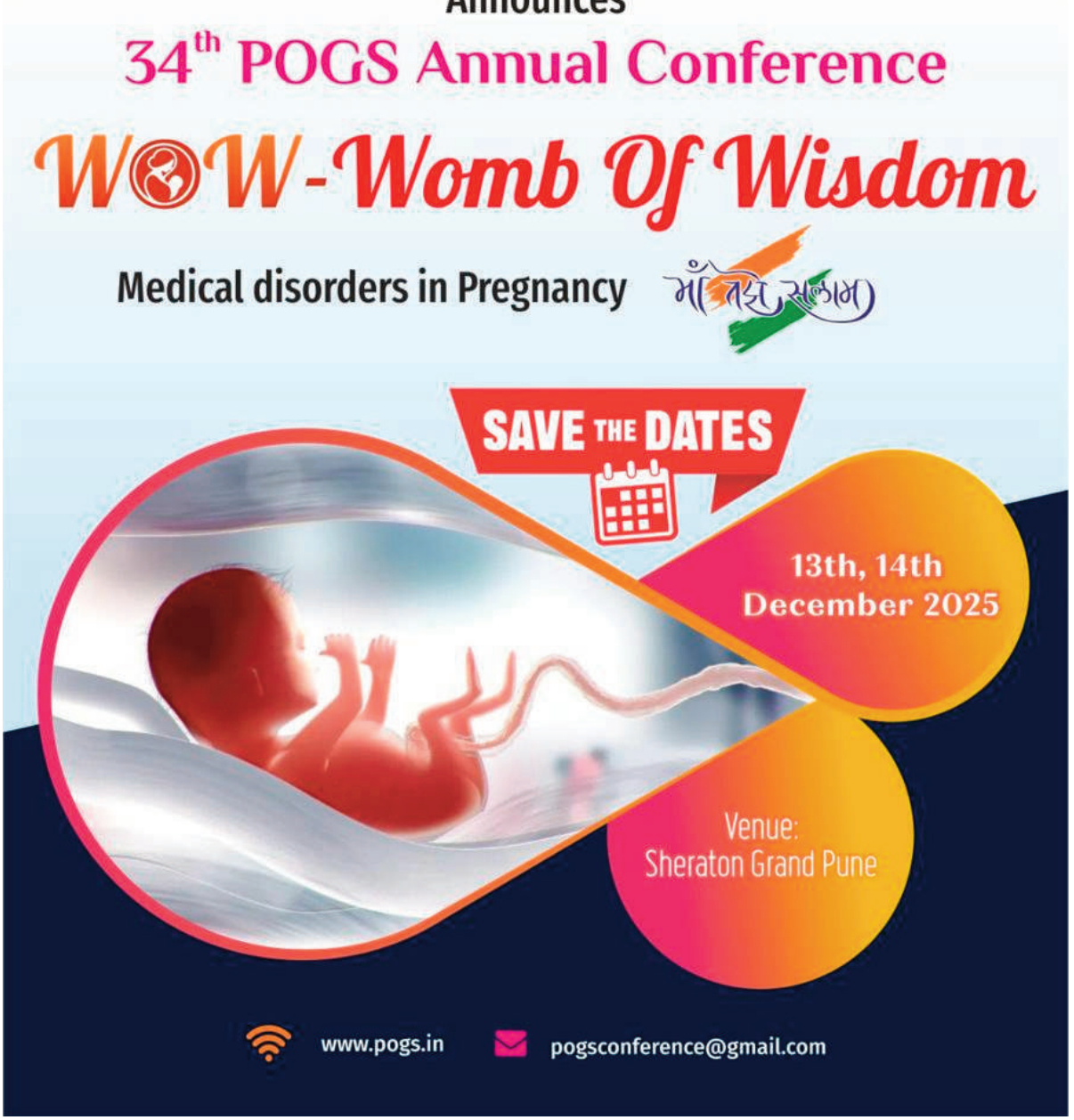
Past chairperson Perinatology committee FOGSI 2018-20Clinical director Dept of Obgyn Cloudnine Hospital, KNR, Pune

POGS Annual Conference on Medical Disorders in Pregnancy

Dear Friends and colleagues
It is a great honor to welcome you to this year's POGS annual conference on Medical Disorders in Pregnancy.
Pregnancy is a remarkable journey, but medical conditions can add layers of complexity that challenge even the most experienced clinicians.
Over the course of this conference, let's come together to share knowledge, exchange experiences, and explore the latest advances in maternal-fetal medicine. This is a platform to learn, discuss, and collaborate, so that we can continue to provide the safest, most compassionate, and evidence-based care to mothers and their babies.
Looking forward to stimulating sessions, insightful lectures, and meaningful interactions which will not only deepen our understanding but also inspire us to elevate the standards of care in our daily practice.
In tackling medical disorders in pregnancy, teamwork and evidence are our strongest allies
Once again, a warm welcome to each one of you, and let us make this conference a truly enriching experience."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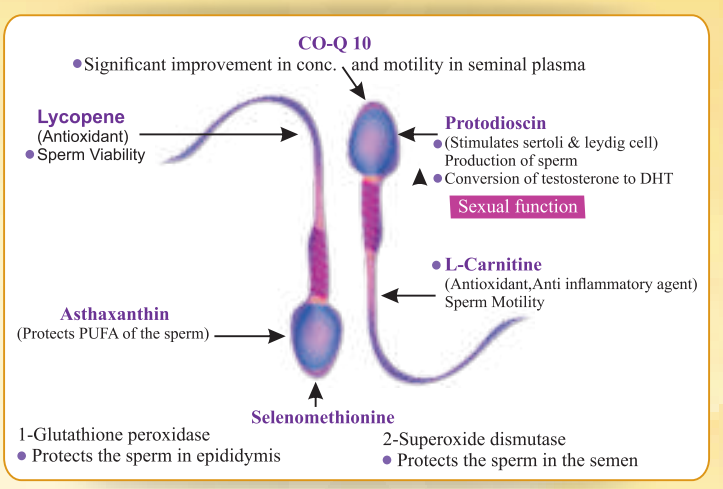
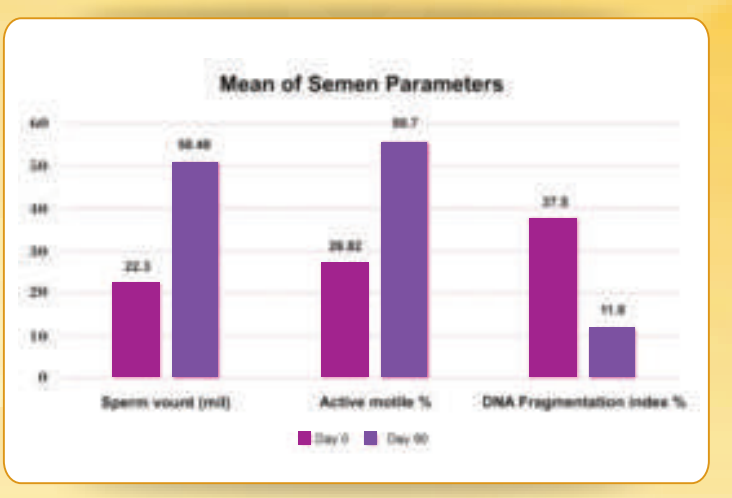
Clinical Trial





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