

HEAL EDUCATE RESPECT
The Mumbai Obstetric $\&$ Gynecological Society

# MOGS NEWSLETTER <br> Buzz \& Bytes 

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## JANUARY 2023 - VOLUME 1 - ISSUE 3

## > MOGS NEWS HEADLINES

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Mumbai medicos cycle 102 km to create awareness on cervical cancer


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Dr. Niranjan Chavan PRESIDENT


Dr. Rajendra Sankpal SECRETARY


Dr. Geetha Balsarkar TREASURER

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## From the Desk of President



Dr. Niranjan Chavan MD, FCPS, DGO, DFP, DICOG, MICOG, FICOG,
Diploma in Endoscopy (USA), Training In Minimal Access Surgery. (Hampstead, U.K)

Dear MOGS members,

A very Happy New year and season's greetings to all! It gives me great pleasure to present to you all MOGS Newsletter BUZZ \& BYTES, January 2023 issue as President of MOGS and Editor-in-Chief of this newsletter. Editors - Dr. Komal Chavan, Dr. Parikshit Tank and Co-editors - Dr. Pratik Tambe and Dr. Pradnya Changede have curated a fascinating newsletter for you all. We present to you interesting scientific content with articles on Functional and Aesthetic Gynaecology by Dr. Narendra Malhotra, Thyroid dysfunctions in Infertility by Dr Sanjeeva Reddy, Current thoughts and concepts in Premature Rupture of Membranes by Dr Krishnendu Gupta and role of Robotics in benign Gynaecological surgeries by Dr Rooma Sinha. The last quarter of the year was an academic extravaganza with multiple CMEs like the Diabetes Research Conference organised in association withIMA, The DHEERA CME on Violence against women, MOGS-FOGSI-JOGI PICSEP workshop on Research methodology, a surgical workshop organised in association with SOVSI and a truly unique hands-on workshop on Aesthetic gynaecology conducted in association with IAVA. This newsletter includes reports of MOGS programs like the Bone Mineral Densitometry camp, a mega event spanning over several hospitals conducted in celebration of World Osteoporosis Day, Anaemia Mukt Bharat Conclave held in celebration of World Iron Deficiency Day which also had a Poster \& Slogan Competition in which several MOGS members and non-MOGS members contributed in large numbers. Winners of this competition were awarded cash prizes. We bring to you glimpses of the several Outreach CMEs held from September 2022 to January 2023; they are a visual delight. This newsletter also includes the report on three $\operatorname{Dr} \mathrm{N}$ A Purandare Teaching Programs held in the last quarter of the year at Bombay Hospital, Wadia Hospital and Nair Hospital. The newsletter also includes a list of all forthcoming programs of MOGS. I would like to thank the Editors, Co-Editors, Dr. Divita and Dr. Manan. The year 2023 looks very exciting! Hope you all enjoy the Quiz, Sudoku and Crossword provided for your entertainment.


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## From the Desk of Secretary



Dr. Rajendra Sankpal

Dear Friends \& Colleagues,
We are extremely pleased to present to you the MOGS Newsletter BUZZ \& BYTES, January 2023 issue.

This newsletter includes all the exciting events that were conducted by MOGS, almost every single weekend like the MOGS outreach programs, Dr. N. A. Purandare teaching programs, Anemia Mukt Bharat Conclave, IAVA Aesthetic Gynecology Workshop, AFG SOVSI Live Operative Workshop and FOGSI-JOGI-MOGSPICSEP workshop. It also showcases MOGS celebration of the World Iron Deficiency Day - Poster and Slogan competition. I hope, like me, you too are excited to see all photographs of each and every event!

If that's not enough, there are enthralling articles on some of our favorite topics ranging from Functional and Aesthetic Gynecology to Thyroid Dysfunction and Infertility and for those looking to rack their brains with some teasers, there is Quiz, Sudoku and Crossword. Do enjoy pictures of all conferences and events to relive all the fun that we all had in the past few months. Editors Dr. Komal Chavan, Dr. Parikshit Tank and Co- Editors Dr. Pratik Tambe, Dr. Pradnya Changede have compiled this wonderful newsletter for MOGS with great detail.
With kind regards,


Dr. Rajendra Sankpal
Secretary MOGS


## www.mogsonline.org

## From the Desk of Editors



Dr. Komal Chavan


Dr. Parikshit Tank


Dr. Pratik Tambe


Dr. Pradnya Changede

Dear MOGS members,

Wishing you a very Happy New Year 2023!
This January 2023 issue of MOGS newsletter - BUZZ and BYTES, is very informative and keeps all the members abreast of common topics in the field of Obstetrics and Gynaecology. The first issue of MOGS newsletter had given glimpses of HER World Congress on Labour and Delivery , World Congress on Anaemia, Menstrual Hygiene Day celebration which was highly appreciated by all. The second MOGS newsletter of the year 2022 was equally exciting. It focused on the latest developments in the field of Gynaecology. This newsletter includes all the exciting events that were conducted by MOGS, almost every single weekend like the MOGS outreach programs, Dr. N. A. Purandare teaching programs, SHARP Conference and Glimpses of workshop, Glimpses of MOGS IAVA Aesthetic Gynaecology Workshop \& MOGS AFG SOVSI Live Operative Workshop, Anemia Mukt Bharat CME and PICSEP. It also showcases MOGS celebrations of the World Anemia Day Poster and Slogan Competition. This newsletter includes scientific articles written by experts in their respective fields. We thank them for their contributions. Along with this academic feast, we also have brain tickling quiz time, Sudoku and crosswords for our enthusiastic members. We thank MOGS President Dr Niranjan Chavan and office bearers for allowing us to be a part of this initiative. We also thank our Co-editors and the entire team of Buzz and Bytes for compiling this newsletter so efficiently. We hope you enjoy reading the articles and find them useful. We would welcome any comments or suggestions and encourage you to reach out to us with feedback.

Wishing you and your family good health and happy reading.
Thank you


Dr. Komal Chavan


Dr. Pratik Tambe


Dr. Parikshit Tank Editors
PRChangeds

Dr. Pradnya Changede Co-Editors

## Cosmetic and Esthetic Gynecology



## Dr. Narendra Malhotra

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## INTRODUCTION

Cosmetic gynecology can also be called functional gynecology, which involves regenerative and esthetic gynecology procedures for conditions that women usually shy away from. Some of the common unspoken esthetic gynecological conditions are as mentioned below:

- Pelvic organ prolapses - Symptomatic/ asymptomatic
- Urinary dysfunction
- Stress urinary incontinence (SUI)
- Sexual dysfunction
- Overactive bladder
- Fecal incontinence
- Pelvic pain
- Vulval/vaginal itching and pain
- Abnormal vaginal discharge
- Cosmetic issues with genitalia

Based on this outlook, we can see newer emerging specialties in gynecology such as female pelvic medicine, reconstructive surgery, and cosmetic and esthetic gynecology. The common procedures involved under these specialties include:

- Vaginal tightening
- Post-delivery rehabilitation
- SUI management
- Vaginal dryness
- Vulvar rejuvenation
- Removal of scars
- Vulvodynia/vestibulitis
- Lichen sclerosis
- Vaginal infections
- Bleaching

The common causes of tissue aging and laxity are as follows:

- Genetics
- Menopause
- Low estrogen status
- Pregnancy and childbirth
- Smoking
- Obesity
- Significant weight fluctuation


## UNSPOKEN GYNECOLOGICAL CONDITIONS

Urinary incontinence
However, among all, urinary incontinence is the most prevalent condition as compared to other chronic diseases in women. This condition is observed in women across all age groups and not just menopausal women. SUI is not a regular problem as it largely affects the quality of life ( QoL ) of a woman Unine leakage is normally triggered due to coughing, sneezing, laughing, lifting, exercising, or straining. Age, pelvic floor muscle degeneration, and endopelvic fascial disruption are also some of the reasons for SUI.

Types of urinary incontinence are as follows:

- SUI
- Urge incontinence
- Mixed incontinence
- Overflow incontinence
- Atypical incontinence

Urinary incontinence leads to symptoms such as urgency, frequency, nocturia/enuresis, and dysuria and the causes can range from urinary tract infections, medications, abnormal growths, urinary tract abnormalities, neuromuscular problems, or most importantly, pelvic support problems.

Urinary incontinence can be treated effectively using the following steps:

- Lifestyle changes such as weight reduction, avoiding smoking, and usage of pads and garments.
- Bladder training
- Physical therapy
- Pessary
- Medications
- Bulking agents
- Surgery
- Laser vaginal rejuvenation

In cases where surgery is required, it needs to be well-planned with the help of a surgeon. The surgery can make use of tape, mesh, or laparoscopic Burch to lift the pelvic floor.
Kegel exercises are routinely recommended in women with incontinence problems. Kegel master is a device that helps a woman to perform proper and effective Kegel exercises by applying adjustable targeted resistance against the muscles of the female pelvic floor. The Kegelmaster has 15 levels of resistance with a maximum of 4.5 lbs of pressure required to close the unit. The advanced Kegelmaster has 64 levels of resistance with a maximum of 9.5 lbs of pressure required to close the unit. ${ }^{1}$

The different types of surgeries performed for SUI
are as follows:

## Vaginal

- Anterior repair
- Needle suspension

Slings

- MUS


## Abdominal

- MMK
- Colposuspension
- Slings
- Artificial sphincter.


## Urethral

## - Bulking agents

## Laparoscopic

- Colposuspension
- Slings


## Urogenital Prolapse

- Pelvic organ prolapse affects almost half the women above 50 years of age, with clinically significant prolapse seen in about $10-20 \%$ of women.
- For the majority of asymptomatic women, no treatment is indicated
- There is an $11 \%$ chance of undergoing at least one operation for prolapse or incontinence by the age of 79 years.
- The treatment for urogenital prolapse includes lifestyle changes, bladder training, physical therapy, pessary, vaginal mesh, surgery, and the latest being laser vaginal rejuvenation.


## Vaginal Atrophy

- Urogenital atrophy is the only symptom all menopausal women will experience at some point; however, only $<1 / 2$ of the women undergoing menopause with vaginal atrophy symptoms are receiving treatment.
- Symptoms associated with vulvovaginal atrophy (VVA), such as lack of lubrication and pain with intercourse, affect $20-45 \%$ of midlife and older women ${ }^{[2]}$
- Over time, VVA can be progressive and less likely to resolve without intervention. It can have a significant effect on a woman's sexual health and QoL.
- The symptoms of vaginal atrophy include vaginal dryness, burning, decreased lubrication during sexual activity, painful intercourse, vaginal bleeding or vulvar fissures, vaginal discharge, and urinary tract symptoms.
- The treatment includes hormonal and nonhormonal medications including vaginal lubricants and moisturizers along with regular sexual activity.
- Laser vaginal rejuvenation can be offered as a treatment option too.


## Atrophic Vaginitis

- This condition is seen in pre-pubertal, lactating, as well as post-menopausal women and is caused due to reduced endogenous estrogen
- This causes thinning of the vaginal epithelium making it susceptible to trauma and infections with a pH value on the higher side.
- The symptoms of vaginitis are abnormal vaginal discharge, pruritis, irritation, burning, soreness, odor, dyspareunia, bleeding, and dysuria.

The treatment for atrophic vaginitis includes oral or vaginal estrogen replacement, oral birth control pills, estrogen in combination with medroxyprogesterone, vaginal creams, and estrogen vaginal rings.

## Vaginal Relaxation Syndrome

- This is a common medical condition described as the loss of normal vaginal structure and is usually associated with vaginal delivery and natural aging.
- Thisconditionusuallyleadstosexualdysfunction, urinary incontinence, and urogenital syndrome of menopause.


## Vestibulodynia/Vulvodynia

- Acommon conditioninvolving unexplained pain around introitus with 1 million cases per year, seen in women of all ages with hypersensitivity to touch.
- The causes are multiple, different, and unexplained.


## Lichen Sclerosus/Lichen Planus

- Comprises 70\% of benign epithelial disorders with epithelial thinning, inflammation, and histological changes in the dermis.
- Etiology is unknown with itching, vaginal soreness, and dyspareunia being the common symptoms.
- The signs include crinkled skin, labia minora atrophy, constriction of the vaginal orifice, adhesions, ecchymoses, and fissures.
- Treatment modalities include intravaginal hydrocortisone suppositories, steroid creams, vaginal estrogen cream, vaginal dilators for stenosis, surgery, vulvar hygiene, and emotional support.


## Vulvar Psoriasis

- The physical appearance resembles red moist lesions with or without scales.
- The treatment usually includes topical corticosteroids.


## NEWER TREATMENT OPTIONS

Non-invasive measures such as extemal energy application, CO2 laser, YAG lasers, radiofrequency, and ultrasound are available.

## Radiofrequency/ThermiVa

- It is a non-invasive temperature-controlled radiofrequency device
- Radiofrequency energy is delivered deeply into
the vulva/vagina which helps with immediate tissue tightening
- Newer and tighter collagen stimulation results in softer and smoother skin in as less as $15-30$ $\min ^{3}$
- It remodels the collagen below the skin due to the heating of the skin and mucosa promoting immediate contraction of collagen, immediate collagen remodeling, elasticity, and long-term stimulation of the production of new collagen.
- It is a non-surgical, non-anesthesia, and painless OPD procedure with immediate results.
- Can be used for loose vagina, loose labia, dry vagina, leaky bladder, and orgasmic problems.


## Vaginal Laser Therapy

- This procedure is robotic and automatic. The FemiLift is an FDA-approved pixel CO2 laser that allows selectively targeted treatment where Habitat Conservation Plans can target specific areas or zones 45 degrees at a time.
- This could be used for vulvovaginal dryness, vaginal laxity, mild-to-moderate urinary incontinence, mild prolapse, and vulval diseases.
- The effects of laser on the tissues are photostimulation, photodynamic reaction, and photothermolytic action.
- The laser heats the area 6 mm below the skin to stimulate the production of collagen, elastin, and fibroblast activity, thereby treating and


## Collagen re-growth 6 months post FemiLift Treatment

Before


After

improving SUI, vaginal laxity, and dryness. ${ }^{[9]}$

- The ER: YAG laser with 2940 rm wavelength is commonly used in India.
- Pixel CO laser uses a diffractive optical element to pixelate the beam into 81 microscopic pixels in a $9 \times 9$ pattern. This pattern promotes faster healing with effective mechanisms such as thermal damage, superficial shrinkage, deep aseptic wound, and collagen remodeling.
- The acute thermal damage phase lasts for 48-72 h with edema, the release of chemical mediators, and collagen shrinkage. A second sitting is recommended in the next 30 days when fibroblasts recruit and remodel and then the third sitting after 30 days. A memory setting is recommended after a year.
- The figure represents vaginal wall colposcopy image after FemiLift treatment and through the microholes PRP gets absorbed after smearing the vagina with PRP. It improves healing.


## How Does Vaginal Laser Therapy Work?

- The machine has multiple settings and it can move $360^{\circ}$ in the vagina. The energy levels can be adjusted too.
- A total of five passes are given in and out of the vagina but when the laser beam comes out the energy is reduced because the vulva is more sensitive.
- It is completely robotic and the patient feels no pain.

- In the beginning, colposcopy is done with the scope which has a camera. This will help in measuring the vaginal canal and then the laser procedure is initiated.
- This is an OPD-based procedure, no anesthesia or lubricant is required only baby oil will suffice.


## Protocol for FemiLift Probe

- Apply liquid lidocaine $2 \%$ introitus and wait for 3 min .
- Three passages in the inner part of the introitus $25 \mathrm{mj} / \mathrm{p}$; three passages in the outer part of the introitus $15 \mathrm{mj} / \mathrm{p}$.
- Repeat the same, if necessary, after 1 month.

The IBM's Monalisa probe is also used for vaginal tightening. These probes can improve vaginal microflora in postmenopausal women. It can help in skin lightening and removes winkles too.

## PRE-TREATMENT CONSULTATION

It usually involves the following steps:

- Complete health history questionnaire
- Vaginal/bladder questionnaire
- Complete $O B / G Y N$ history including Pap smear results
- Pelvic examination


## CONTRAINDICATIONS

- Active HPV/herpes
- Abnormal Pap smear
- Active vaginal infection
- GYN cancer
- Undiagnosed vaginal bleeding
- Uncontrolled diabetes
- Pregnancy
- Recent vaginal injury
- Any active bleeding

Some other non-gynecological uses in women include:

- Pregnancy stretch marks
- Facial laser
- Warts
- Dark spots and moles
- Scar marks post keloids
- Evolving indications
- External operation with a cut laser

All these indications should be recognized as the "unspoken problems" of women and the need should be valued and treatment options must be presented to them.

## CONCLUSION

Several women are afraid of being stigmatized if they go to their gynecologists about their gynecological problems. Women of all ages must be made aware of and educated about various gynecological conditions that may affect them, and their needs must be acknowledged, as well as treatment choices are given.

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# Report of MOGS SHARP Global Gynaecology Conference held on 3rd and 4th of September 2022 

MOGS conducted the SHARP Global Gynaecology conference on the 3rd and 4th of September 2022 at the St. Regis Hotel, Mumbai

This conference was conducted under the leadership of Dr. Niranjan Chavan (President of MOGS), Dr. Rajendra Sankpal (Secretary of MOGS) and Dr. Geetha Balsarkar (Treasurer of MOGS). The conveners of this conference were Dr. Atul Ganatra, Dr. Rohan Palshetkar, Dr. Riddhi Desai and Dr. Gaurav Desai. A total of 16 National \& international organisations' faculty were involved.

There were 3 pre-congress workshops conducted at various centres in Mumbai on 2nd September 2022. The infertility workshop was conducted in collaboration with ISAR at the MET centre in Mumbai. The workshop convenors were Dr Nandita Palshetkar, Dr Hrishikesh Pai and Dr Rishma Pai. The Minimal Access Gynaecology Surgery workshop was conducted in collaboration with IAGE \& Apollo Hospital, Hyderabad at Sion Hospital. The workshop convenors were Dr. Bhaskar Pal, Dr. Arun Nayak and Dr. Sudha Tandon. The Gynaecological Oncology workshop was conducted at the CPS College and the convenors were Dr. Sarita Bhalerao, Dr. Amita Maheshwari and Dr. Gaurav Desai.

The conference was conducted at Hotel St. Regis, Mumbai. The conference was attended by nearly 500 people with varied interests and age groups that included residents of postgraduate colleges to consultants. They had valuable inputs which made the sessions more interactive and enlightening. The active participation of the audience was appreciated by everyone. The halls were divided into 3 halls - Speroff (infertility hall), Te Linde
(Endoscopy), Berek and Novak (Oncology). There were 23 talks, 12 panel discussions, 31 Keynote Addresses, 3 debates and 2 orations. The MOGS Bhanuben Nanavati Oration was delivered by Dr. CN Purandare on Technique of Modified Radical Hysterectomy and the MOGS SHARP Conference Oration was delivered by Dr. PC Mahapatra on Dying Art or Growing Science? Difficult Vaginal Hysterectomy. The conference inauguration was conducted by Dr. Komal Chavan and Dr. Rohan Palshetkar. Mrs. Vidya Balan, Film Actor was the guest of Honour and Dr. CN Purandare was the Chief Guest. In the evening, there was the MOGS Talent show where all our members performed and Drs Sargam Soni, Rohan Palshetkar, Amrita Tandon, Prashant Mangeshikar, Kaushalya, Siddhesh Iyer and Amruta Bhende, Dr Mestry were awarded prizes for their performances. In the evening we had the Vision for HER walk where we had our MOGS Office bearers, managing committee members and youth council members walk with their daughters, sisters, mothers and grandmothers. Dr Shanthakumari, Dr Hrishikesh Pai, Dr Rishma Pai, Dr Nandita Palshetkar, Dr Jaydeep Tank \& Dr Rajendrasing Pardesi were felicitated in traditional Maharashtrian style with Pagadi, Shawl \& Shreefal and bestowed with Plaque of The MOGS SHARP Global Excellence Award by President MOGS Dr. Niranjan Chavan and Office Bearers \& past Presidents of FOGSI \& MOGS.

The Valedictory was conducted by Dr. Riddhi Desai and Dr. Gaurav Desai. The prizes for the best paper and poster presentation were distributed. We had 75 paper and poster presentations. Dr. Rajendra Sankpal, Secretary MOGS delivered the vote of thanks.

Here are some glimpses from the conference.








Felicitation of Past President and Secretary General FOGSI \& MOGS President Dr. C B Purandare prior to SHARP Global Gyn. Conference

## Report of Happy Learning 99th CME held on 13th September 2022

TThe 99th CME of the Happy learning Web series was held on 13th September 2022 from 6 pm onwards in association with the medical disorders in pregnancy committee, AMOGS and Mumbai Obstetrics \& Gynaecological Societies on the topic of 'Preventive Oncology'

Dr M.C. Patel was the Program Director, Dr. Mandakini Megh and Dr Sneha Bhuyar were the Program Convenors and Dr B.Kalpana and Dr Shreya Prabhoo Lotlikar were the Program Coordinators. The Master of Ceremony were Dr. Shurui Thar and Dr. Ashwini Sakhalkar.

The program was inaugurated by the program director and convenors along with Dr. Usha Saraiya our esteemed Chief guest who blessed the occasion. Dr Niranjan Chavan (President MOGS), Dr. Rajendra Sankpal ( Secretary MOGS), Dr. Rajendrasing Pardeshi ( President AMOGS) and Dr Sujata Dalvi ( Secretary AMOGS, Librarian MOGS) were our guests of honor who graced the occasion and congratulated Dr MC Patel for the 99th episode of his web series.

There were 3 talks by the esteemed speakers

1. Dr Sarita Bhalerao spoke on HPV testing for cervical cancer screening. The session was chaired by Dr. Bipin Pandit and Dr. Anahita Chauhan

2. Dr Mandakini Megh spoke on Cervical cancer screening. Dr Rajendra Sankpal and Dr Komal Chavan chaired this session.
3. Dr MC Patel spoke on Legal issues in Gynaec oncology. This session was chaired by Dr Ganpat Sawant and Dr Ashok Shukla.

It was followed by a very interactive and informative panel which was moderated by Dr Reena Wani and Dr Shreya Prabhoo

The panelists were Dr Sujata Dalvi, Dr Priya Vora, Dr Gautam Sonawane, Dr Pradnya Supe, Dr Bhumika Kotecha, Dr Nidhi Shah and Dr Sidra Khot.

A formal vote of thanks was given by Dr B Kalpana. A total attendance of 62 gynecologists attended the program.

Academic Partners- Zydus, Gynnext \& Gynova.


## Report of Out of the Box CME held on 17th September 2022

MOGS conducted the OUT OF THE BOX CME on 17.9.22 at St. Regis. The convenors for this program were Dr. Komal Chavan and Dr. Rohan Palshetkar. The Masters of Ceremony for this program were Dr. Tanushree Padgaonkar and Dr. Esha Chainani. The CME began with a panel on Recurrent implantation failure moderated by Dr. Rohan Palshetkar and Dr. Parzan Mistry. The panelists were Dr. Ritu Hinduja, Dr. Shreedevi Tanksale, Dr. Tejal Poddar, Dr. Nishita Shah, Dr. Shruti Thar, Dr. Rana Chaudhary. The second panel was on Micronutrients in Pregnancy moderated by Dr. Komal Chavan and Dr. Punit Bhojani. The esteemed panelists were Dr. Sarita Bhalerao, Dr. Suchitra Pandit, Dr. Anahita Chauhan, Dr. Reena Wani, Dr. Mandakini Megh, Dr. Ameya Purandare and Dr. Priya Vora. This was followed by the felicitation of all the MOGS Past Presidents, FOGSI Office Bearers and Managing committee members by our President Dr. Niranjan Chavan, Secretary Dr. Rajendra Sarkpal and Treasurer Dr. Geetha Balsarkar.

We, the convenors would like to thank Dr. Niranjan Chavan, Dr. Rajendra Sankpal and Dr. Geetha Balsarkar for giving us this opportunity.


# Thyroid Dysfunction and Infertility 



Dr. Nellepalli Sanjeeva Reddy

Dr. Radha Vembu

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## BACKGROUND

Thyroid hormones are required for regulating metabolism and reproductive health. In females, the ovarian cycle is regulated by the synchronized action of thyroid hormones, luteinizing hormone (LH), follicle-stimulating hormone (FSH), and prolactin on the hypothalamic-pituitary-ovarian axis. ${ }^{1}$ The progesterone release from the corpus luteum occurs only when thyroid hormones act along with $\mathrm{FSH}, \mathrm{LH}$, and hCG .
Thyroid hormone receptors (TR-д 1 and TR - B1) are seen on the ovarian surface epithelium and in oocytes of primordial, primary, and secondary follicles. They participate in the complex regulation of ovarian function. In animal models, thyroid hormones synergize with FSH to exert direct stimulatory effects on granulosa cell function, such as morphological differentiation, $\mathrm{LH} / \mathrm{hCG}$ receptor formation, induction of 3 B -hydroxysteroid dehydrogenase, and aromatase. ${ }^{2}$ They influence fertility by altering the GnRH and prolactin secretion, SHBG levels, and coagulation factors

## THYROID DISORDERS AND INFERTILITY

## Prevalence

The prevalence of thyroid disorders is increasing worldwide probably due to increased awareness and diagnosis. It is more common in the age group of $20-45$ years. The prevalence of subclinical hypothyroidism (SCH) is $5-7 \%$, overt hypothyroidism is $2-4.5 \%$, hyperthyroidism is 0.5 $1 \%$, and thyroid autoimmunity (TAI) is $5-10 \%{ }^{3}$.

## Whom to Screen

It is recommended to screen women with signs and symptoms of hypothyroidism, elevated levels of cholesterol, menstrual irregularities, and infertility. However, it is preferred to screen all infertile women for thyroid disorders even though it is controversial. ATA $2017^{4}$ guidelines recommend screening for all infertile women but not so by ASRM (2015). ${ }^{5}$ The SOGC committee opinion (2020) ${ }^{6}$ suggests that the clinicians who check thyroid-stimulating hormone (TSH) in all infertile women with minor elevations of TSH $(4-10 \mathrm{mIU} / \mathrm{L})$ should have repeat tests at least 4 weeks later because minor elevations in TSH will normalize. The recent European Thyroid Association (ETA 2021) ${ }^{7}$ recommends that all women seeking medical advice for subfertility should be screened for serum TSH and TPOAb. The main justification for this recommendation is to ensure that overt thyroid dysfunction is detected and managed appropriately before pregnancy. Since overt thyroid dysfunction can negatively affect fertility and pregnancy outcomes, this approach has gained support.

## HYPOTHYROIDISM AND INFERTILITY

In hypothyroidism, serum TSH levels are elevated with normal or low FT4 levels. Subclinical hypothyroidism is an association of raised serum TSH levels above the upper limit of normality with normal FT4 withno symptoms of thyroid deficiency. In overt hypothyroidism, in addition to elevated serum TSH level, FT4 is low with symptoms of thyroid hormone deficiency. If this upper limit
of normality for the population is not available, then the upper limit of the reference range of the assay is used. This range varies in each society guidelines. If an age-based upper limit of normal for a third-generation TSH assay is not available in an iodine-sufficient area, an upper limit of normal of $4.12 \mathrm{mIU} / \mathrm{L}$ should be considered. ${ }^{8}$ However, this upper limit is $4.5-5.0 \mathrm{mIU} / \mathrm{L}$ according to ASRM ${ }^{3}$ Hence, TSH levels used in different studies to determine the association of thyroid function with fertility problems varied considerably. In general, association with adverse fertility outcomes seem to emerge at TSH levels above $4.0 \mathrm{mLU} / \mathrm{L}$. ${ }^{\text {? }}$

## EFFECTS OF HYPOTHYROIDISM

## Ovulatory Disturbance

Thyroid disorders are associated with disturbed folliculogenesis. It can cause anovulation by its direct and indirect action as depicted in Figure 1.

## Menstrual Changes

These women can present with disturbance in cycle length, abnormal uterine bleeding, and defects in hemostasis. Menstrual abnormalities are more prevalent in hypothyroid women ( $25-60 \%$ ) when compared to euthyroid women (10\%) and the predominant menstrual disturbance in these women is oligomenorrhea. ${ }^{10}$

## Hormonal Changes

The rate of metabolic clearance of androstenedione and estrone is decreased, but there is increased peripheral aromatization. In addition, there is decrease in plasma binding activity of SHBG. Hence, the plasma concentration of total testosterone and estradiol is decreased with increase in their unbound fraction. There is also a blunted LH response which, in tum, stimulates TRH secretion and increase serum prolactin levels. All these changes lead to ovulatory dysfunction, corpus luteum insufficiency, and low progesterone levels in the luteal phase. ${ }^{10}$

Infertility
This is due to altered estrogen metabolism, hyperprolactinemia, ovulatory dysfunction, and disturbance in GnRH secretion.

## THYROID AUTOIMMUNITY AND FEMALE INFERTILITY

TAI is defined as presence of the thyroid autoantibodies - anti thyroperoxidase antibody (Anti TPO -ab), or anti thyroglobulin antibody (Anti Tg - ab ). This is the most common cause of hypothyroidism among women of childbearing age. ${ }^{11}$

In women with TPO-ab, the relative risk of female infertility is increased (RR - $2.25 ; 95 \%$ CI 1.02-5.12; $P=0.045) .{ }^{12}$ Women with recurrent miscarriages have a higher incidence of $\mathrm{Tg}-\mathrm{ab}$ and / or TPO -ab amounting to as high as $25 \%{ }^{13}$

There is a 2-3fold increase in the risk of spontaneous miscarriage among antibody-positive women than those who test negative. Among the two antibodies, TPO - ab is considered as a more sensitive marker of TAI ${ }^{14}$

## INDICATIONS FOR TESTING THYROID ANTIBODIES [TABLE 1]

According to the American Association of clinical endocrinologists, ${ }^{8}$ antibody testing is indicated in women with (a) $\mathrm{TSH}>2.5 \mathrm{mIU} / \mathrm{L}$ on repeated testing, (b) history of recurrent miscarriage, and (c)


Figure 1: Ovulatory disturbance in thyroid dysfunction

Table 1: Endocrine societies guidelines for TSH and anti-thyroidantibody testing ${ }^{24}$

| Guideline recommendation | ASRM 2015 | ACOG | SOGC 2020 | ETA 2021 |
| :--- | :---: | :---: | :---: | :---: |
| Routine TSH testing | No | No | No | Yes |
| Routine TPO/TGantibodies | No | No | No | Yes |
| Treatment if TSH $>2.5$ | No | No | No | Yes |
|  | if TSH $>4.0$ |  | if TSH $>4.0$ |  |

TSH: Thyroid-stimulating hormone
serum TSH between 2.5 and $4 \mathrm{mIU} / \mathrm{L}$. In addition, ESHRE2015 ${ }^{[5]}$ recommends screening in women with a diminished ovarian reserve and premature ovarian insufficiency. Recently, ETA (2021) ${ }^{7}$ has suggested TPO-ab testing for all women seeking infertility evaluation.

The indications for TAI testing are increasing among the various causes of infertility. A metaanalysis showed that euthyroid patients with thyroid antibodies are associated with unexplained infertility (OR 1.5,95\%CI 1.1-2.0). ${ }^{16}$ The other causes linked to TAI are PCOS which can be explained by polymorphism of PCOS-related gene for fibrillin 3 , influencing the activity of TGF- B, and a key regulator of immune tolerance. They contribute to autoimmunity along with lower TGF-B, Vitamin D levels, and high estrogen-to-progesterone ratio. ${ }^{17}$ There is evidence that endometriosis is also linked with TAI as there are immunological changes associated with it.

## TAI AND OVARIAN STIMULATION (OS)

During OS, there is a rapid and supraphysiologic increase in serum estradiol levels. This results in excess thyroxine-binding globulin(TBG) production and sialylation by the liver and reduced clearance of TBG. In addition, there is a direct effect of raised estradiol levels on TRH. All these mechanisms explain the raise in TSH during OS which is more pronounced in women with TAI. Hence, the overall effect of OS in women with TAI is a decrease in FT4 levels with an increase in TSH levels and this is more evident when the TSH level is $>2.5 \mathrm{mIU} / \mathrm{L}$ before OS. Hence, it is suggested to test TSH level

1-2 weeks before OS to keep TSH $<2.5 \mathrm{mIU} / \mathrm{L}$ and on the day of B -hCG testing. It is not recommended to monitor serum TSH levels during OS as results obtained during the course of OS may be difficult to interpret. ${ }^{4}$

## TAI AND ASSISTED REPRODUCTIVE TECHNOLOGY

Women with TAI have an increased risk of developing (sub) clinical hypothyroidism.

TAI is associated with adverse pregnancy outcomes such as the increased risk of miscarriage, and preterm delivery in both spontaneous and assisted reproduction treatment (ART) pregnancies. A study by Zhong et al. ${ }^{18}$ comparing in vitro fertilization (IVF) outcomes in TAI-positive and TAI-negative women revealed that TAI-positive women had a significantly lower fertilization rate ( $64.3 \%$ vs. $74.6 \%$ ), implantation rate ( $17.8 \%$ vs. $27.1 \%$ ), pregnancy rate ( $33.3 \%$ vs. $46.7 \%$ ), and a higher risk of miscarriage rate ( 26.9 vs . $11.8 \%$ ) following IVFET compared to their TAI negative counterparts. ${ }^{18}$ This can be explained by alteration in endometrial receptivity that affects the fetal allograft, and changes in the profile of endometrial T cells with reduced secretion of interleukin -4 and 10 along with hypersecretion of interferon-g have been reported. The hyperactivity and increased migration of cytotoxic natural killer cells may also alter the immune and hormonal response of the uterus in women with TAI ${ }^{19}$ However, a prospective study by Sakar et al..$^{20}$ showed comparable pregnancy and miscarriage rates between 49 TAI-positive and 202 TAI-negative women after IVF.

Thyroid antibodies can have an unfavorable


Figure 2: Algorithm for evaluation of infertile women with suspected thyroid dysfunction
effect on oocyte and embryo quality. Since thyroid hormones play an essential role in oocyte maturation and implantation, it has been hypothesized that the decline in thyroid function induced by the stimulation protocol in women with TAI may negatively influence the pregnancy rate in ART. Hence, it is preferred to keep TSH $<2.5 \mathrm{mIU} / \mathrm{L}$ before starting infertility treatment in these women.

## SCH AND ART OUTCOME

SCH increases the risk of miscarriage when compared to euthyroid women in spontaneous pregnancies. A meta-analysis among women with SCH and euthyroid before 20 weeks of pregnancy showed a higher prevalence of miscarriage in SCH than euthyroid women (RR - $1.45,95 \% \mathrm{CI} 1.07-1.96$, $P-0.02$ ) ( $95 \%$ CI $1.07 \pm$
1.96, $P-0.02)^{21}$

According to ASRM, ${ }^{5}$ there is insufficient evidence that SCH (TSH $>2.5 \mathrm{mIU} / \mathrm{L}$ with normal FT4) is associated with infertility and miscarriage. However, there is fair evidence that SCH (TSH
$>4 \mathrm{mIU} / \mathrm{L}$ ) is associated with miscarriage and
levothyroxine treatment is associated with an increase in pregnancy rate and a decrease in miscarriage rate. ${ }^{5}$ Most of the evidence suggests that ART outcomes do not differ between women with serum TSH $<2.5 \mathrm{mIU} / \mathrm{L}$ and those with very mild TSH elevations, defined as a TSH between 2.5 and $4.0 \mathrm{~m} \mathrm{IU} / \mathrm{L}$.

## MANAGEMENT OF HYPOTHYROIDISM

The aim of starting levothyroxine (LT4) is to improve the obstetric and neonatal outcomes following treatment. The indications to start LT4 include (a) overt hypothyroidism, (b) serum TSH levels $>4.0$ $\mathrm{mIU} / \mathrm{L}$ irrespective of TAI, and (c) serum TSH level between 2.5 and 4.0 m IU/L with TPO-ab positive.?

LT4 treatment is not recommended in euthyroid women with TAI undergoing IVF/ICSI and serum TSH level between 2.5 and $4.0 \mathrm{~m} \mathrm{IU} / \mathrm{L}$ with TPOab negative. ${ }^{6}$ This is supported by the TABLET trial which did not show any beneficial effect of LT4 on live birth rate in these women ${ }^{22}$

LT4 is started in the dose of $25-50 \mathrm{mcg} /$ day for 4
weeks based on clinical and biochemical assessment and serum TSH levels are monitored. The dose is increased every 4 weeks by 25 mcg based on serum TSH levels Figure 2.

## ROLE OF GLUCOCORTICOIDS IN TPO AB POSITIVITY

It is not recommended to start glucocorticoids in women with TPO $a b$ positive until further information on the risks and benefits of steroids in early pregnancy is available. ${ }^{6}$

## Overtreatment

With LT4 is not recommended as it has a deleterious effects during early pregnancy on offspring and brain morphology in childhood. It can lead to subclinical hyperthyroidism in $14-21 \%$ of women and there is an increased risk of preterm deliveries and gestational diabetes. ${ }^{23}$

## Hyperthyroidism and Female Infertility

Epidemiological evidence regarding a potential link between infertility and thyrotoxicosis is scarce and inconclusive. The prevalence of hyperthyroidism is $0.5-2 \%$. Subclinical hyperthyroidism is diagnosed if serum TSH is suppressed with normal FT4, without any symptoms. If serum TSH is suppressed with high FT4 or FT3 and if the patient is symptomatic, they are labeled as overt hyperthyroidism.

There are an increased concentration of SHBG, LH, plasma androgens, and serum estradiol levels. Menstrual disturbances are common in these women of which hypomenorrhea, polymenorrhea, oligomenorrhea, and hypermenorrhea are more prevalent.

These women should postpone pregnancy for at least 6 months after starting treatment. The antithyroid drugs used are Methimazole ( $10-20 \mathrm{mg}$ initially and maintenance dose of $5-10 \mathrm{mg}$ after 4-8 weeks) and Propylthiouracil (PTU) (100-600 mg / day in three divided doses per day) and when pregnancy is planned, should be changed to PTU. Other drugs which are tried are lugol's iodine and
radioactive iodine. Surgery is indicated only if not tolerating the drugs and in non-compliant patients.

## THYROID DYSFUNCTION IN MALES

It is less common in men when compared to women and its effects on reproductive function are less delineated. Hypothyroidism in men is associated with reduced libido, impotence, affects spermatogenesis, and sperm morphology. They have reduced SHBG, testosterone, DHEA, and pregnenolone sulfate.

In hyperthyroidism, linear motility is the most common semen parameter which is affected; they can also present with erectile dysfunction in up to $70 \%$ and is reversible after treatment. These men have increased SHBG, estradiol, and testosterone levels.

According to ETA 2021 guidelines, universal screening of all males presenting for evaluation is not recommended. They suggest screening for thyroid dysfunction in men with erectile and ejaculatory dysfunction and with altered semen parameters. It is recommended not to delay IVF/ ICSI in case of subclinical or overt hypo or hyper thyroidism in males as long as sperm parameters are not strongly affected.

## CONCLUSION

It is recommended to evaluate for thyroid dysfunction in all women seeking infertility evaluation LT4 treatment is recommended when TSH is $>4.0 \mathrm{mIU} / \mathrm{L}$ and if TSH between 2.5 to 4 $\mathrm{mIU} / \mathrm{L}$ with TPO-ab positive.

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## MOGS Quiz Time

 by Dr. Divita Kamble and Dr. Radhika Bhutada1. 1st women to undergo a Caesarean section is?
a. Asclepius
b. Coronis
c. Apolla
d. Julius
2. Who is Father of Modern Caesarean section?
a. Julius Sanger
b. Max Sanger
c. Pagel
d. Crede
3. Who was the first baby conceived by IVF?
a. Louise Joy Brown
b. Patrick Steptoe
c. Robert Edwards
d. Jean Purdy
4. Who is founder president of The Mumbai Obstetric and Gynaecology Society?
a. Dr N A Purandare
b. Sir Mangaldas Mehta
c. H V Tilak
d. Chamanlal Mehta
5. Who is first Indian female doctor
a. Dr Anandibai Joshi
b. Dr Kadambini Gangulyc. Dr Sarojini Naidu
d. Dr Padmavati Iyer

# Report of Teacher's Day Felicitation Program held on 25th September 2022 

TThe Mumbai Obstetrics and Gynecological Society organized a CME with Teacher's Felicitation Program on 25th Sept 2022 at Hotel Taj Santacruz from 7.00 pm to 10.30 pm .

The Convenors for the event were Dr Rajendra Nagarkatti and Dr Komal Chavan and the MOC's for the program were Dr Supriya Arwari, Dr Nishita Parikh, Dr Ashwini Sakhalkar and Dr Shruti Thar.

The first Session was an academic session with 3 talks. The first talk was chaired by Dr S M Sanjanwala, Dr Geetha Balsarkar and Dr SR Desai. It was presented by Dr Jaydeep Tank on Current Management of PCOS - Controversy to Consensus. True to the title of the talk, Dr Jaydeep dwelt on each controversy related to PCOS and suggested evidence-based solutions for each.

The second talk was chaired by Dr Madhuri Mehendale and Dr Michelle Fonseca. It was given by Dr Jatin Shah on Low AMH and Poor Ovarian reserve. The talk was in his usual quick-fire style packed with various options and newer regimens for these women. Today with Donor IVF cycles becoming difficult with the new ART bill, these options were lapped up by the audience.

The third talk in this Session was chaired by


Dr Rajendra Saraogi and Dr Rajeshri Tayeshete.
It was presented by Dr Deepak Jumani in his inimitable and flamboyant style. He had the audience in rapt attention with his quotes, phrases and pictures on Sexuality and Spirituality!

This was followed by the Teachers Felicitation Program. The MOC for this part of the program was the Shayari queen Dr Supriya Arwari. This year we had two categories of Felicitation Awards.

In the first part we felicitated our Senior teachers with the "Teacher of Teacher's" Award. This was presented to Dr Shirish Sheth, Dr P R Vaidya (who was presented the Felicitation award at her residence and had sent her recorded video message), Dr P K Shah, Dr V R Badhwar and Dr S N Agarwal. Dr Niranjan Chavan spoke from his heart about how these teachers had taught him and many others and shaped their careers.

All the senior stalwarts remembered their teaching days and also gave pearls of wisdom to the attendees.

Thenextsection was Felicitation of eminent Teachers from our Mumbai Obstetrics and Gynecological Society who have served the Society and taught many students and colleagues. The Teachers

included were Dr Aspi Raimalwalla, Dr Shashikant Kamat, Dr Sarita Bhalerao, Dr Sanjay Shah, Dr Mahesh Ashar, Dr Jatin Shah, Dr Rahul Mayekar, Dr Swati Allahbadia, Dr Malcolm Fonseca, and Dr Tushar Palve.

All the teachers thanked MOGS for the honour bestowed on them and also spoke of the values and importance of a teacher in one's life.


This was followed by a grand dirner.
The hall was jam-packed and the total participation in this program was 170 .

We, the convenors Dr Rajendra Nagarkatti and Dr Komal Chavan thank Dr Niranjan Chavan, Dr Rajendra Sankpal, Dr Geetha Balsarkar and the entire Team MOGS for giving us this opportunity.


## Glimpses of Outreach Programmes

The MOGS Outreach Program in Sunville Banquets, Worli Saturday 1/10/2022


The MOGS Outreach Program on Updates in OBGYN was held on October 9, 2022, at Courtyard by Marriot


The MOGS Outreach Program on updates in infertility was held on November 30, 2022, at The GCC Club, Mira Road


The MOGS Outreach Program on Women's Health First was held on December 4, 2022, at Lavender Bough


# Report of MOGS FOGSI UNICEF Dheera Violence Against Women CME held on 18th October, 2022 

The MOGS FOGSI UNICEF Dheera VAW CME was conducted online on Tuesday, 18th October, 2022 between 2 to 4 pm . The event was supported by FOGSI and was attended by about 25 gynecologists.

The programme coordinators were Dr Parikshit Tank and Dr Pratik Tambe. Eminent current and past FOGSI office Bearers were present as faculty for the event. The programme was accredited with 3 ICOG credit points.
The scientific proceedings began with a message from the MOGS President Dr Niranjan Chavan who introduced the Dheera Violence Against Women program as the flagship program of the FOGSI President Dr Shanthakumari, which was being conducted all over the country by FOGSI Societies. The conveners Dr Parikshit Tank and Dr Pratik Tambe then welcomed the delegates and thanked the MOGS Office Bearers for the opportunity to conduct this event. This is a standardized programme with a prepared set of slide presentations which were delivered by key faculty as per the FOGSI guidelines regarding the same.

Our chairpersons for the first session were Dr Pratik Tambe and Dr Mansi Medhekar. The first speaker was Dr Madhuri Patel, Secretary General FOGSI who gave an overview on VAW. Dr Mandakini Megh, Past Chair ICOG explained the Approach to Women Facing Violence. The next speaker was Dr Ramanidevi, Past VP FOGSI who illustrated the Effects of VAW on Pregnancy and the Newbom. Dr Parikshit Tank, Co-convener and Treasurer FOGSI highlighted a much neglected topic-Mental Support for Women.
The Chairpersons for the second session were Dr Ameya Purandare and Dr Komal Chavan The speakers in this session were all Master Trainers of
the Dheera programme. Dr Sujata Dalvi, Clinical Secretary MOGS spoke on Challenging Issues and Self Care in Dealing with VAW. Dr Kiranmai, FOGSI Chairperson VAW explained the Support Systems and Resources for Survivors. Dr Madhuri Mehendale, Managing Committee member MOGS highlighted the Approach to Sexual Violence and finally, Dr Anita Sabharwal, one of the key contributors to the slide presentations spoke on Examination of a Survivor and Collection of Evidence.

The Vote of Thanks was proposed by Dr Parikshit Tank. The various issues regarding prevention and tackling VAW were appreciated by the audience. The pre-test and post-test questionnaires were administered to the attendees as per the protocol.
We would like to thank the MOGS and the office bearers, our esteemed President Dr Niranjan Chavan and Secretary Dr Rajendra Sankpal for this opportunity, the close cooperation by the UNICEF team and Mr Ajey Bharadwaj for his guidance.
Please find attatched some pictures which we took at the event.





# BMD Osteoporosis Detection Camp held on World Osteoporosis Day, 19th October 2022 by MOGS 

TThe Mumbai Obstetrics \& Gynaecological society conducted the bone mineral densitometry detection camp on 19th October 2022 from morning 9 am to 6 pm . This was the first time such an event was organized by MOGS.

A total of 38 centres participated in this event in the city of Mumbai and suburbs organised by MOGS President Dr Niranjan Chavan, where a world record was created for doing a maximum number of BONE MINERAL DENSITOMETRY (BMD) evaluations done in the women population on a single day in a metro city of India.
3566 patients were screened for bone mineral density at multiple centres across Mumbai on the 19th of October 2022, of which $200(5.2 \%)$ patients were detected to have osteoporosis.
1700 (47.6\%) patients had osteopenia with a T score of -1.0 to -2.5 .

Educational Qualification:
$1660(41.2 \%)$ patients held a degree or were pursuing a degree course.
$1400(28.9 \%)$ were secondary school graduates.
700 ( $17.3 \%$ ) had completed primary school education. whereas $312(8.8 \%)$ were uneducated.
Around $75 \%$ of patients were not on any dietary supplementation, whereas the remaining $25 \%$ people were already taking Calcium and Vitamin D supplementation.
38 centres conveners were felicitated by the esteemed hands of Dr. Dilip Mhaisekar, Director, DMER and Ex Vice Chancellor, MUHS on 20th October 2022.

Disorders in pregnancy committee, MOGS, MC member and Dr. Rajendra Sankpal, Secretary, MOGS.

The purpose of this camp was to screen the Vit D levels in the bone as it is an important marker for detecting osteoporosis amongst women in all age groups so that they know indirectly the calcium level in their body which is an important element for bone formation and making the bones healthier \& stronger.
The list of centers and the names of Coordinators who were felicitated is as follows:

1. LTMGH, Sion Hospital - 311 responses

Dr Niranjan Chavan
Dr. Arun H. Nayak
Dr Deepali Kapote
Dr Zubin Sheriar


2. St. Elizabeth Hospital Dr Anahita Chauhan

## St. Elizabeth Hospital

Ruxmani Lying-in Hospital, Girgaon
Dr. Sujata Dalvi
St. Elizabeth Hospital
Ruxmani Lying-in Hospital, Girgaon
Dr. Ameya Purandare
St. Elizabeth Hospital
Ruxmani Lying-in Hospital, Girgaon
Dr. Vora's Hospital, Haji Ali
Dr. Priya Vora



## 3. Sangita Maternity Surgical and Diagnostic Centre, Andheri West- 100 responses

Dr Priti Vyas

4. Mukund Hospital, Andheri East- 76 responses Dr. Bipin Pandit - Dr Shreya Prabhoo

5. R N Cooper Hospital- 88 responses Dr Reena Wani

6. Masina Hospital, Byculla - 77 responses

Dr Bhumika Kotecha - Dr Punit Bhojani

7. V N Desai Hospital, Santacruz East- 163 responses

Dr Komal Chavan • Dr Lalita Mayadeo

8. Tandon Hospital, Chembur - 35 responses

Dr Sudha Tandon
9. Padmashree D Y Patil Hospital- 99 responses

Dr. Rohan Palshetkar
Dr. Mayuri More
Dr Aditi Tandon
Dr Amrita Tandon

10. Sunshine Fertility \& IVF Centre (Atulok Hospital), Vikhroli
Dr. Amiti Agrawal

11. Bandra Bhabha Hospital- 190 responses

Dr Rajeshwari Khyade - Dr Sangeeta Upadhayay

12. Govandi Shatabdi Hospital- 134 responses

Dr. Siddhi Kore • Dr. Saroj Dhaka • Dr. Shruti Nayak

13. BYL Nair Hospital, Bombay Central- 139 responses
Dr. Shailesh Kore • Dr. Alka Gupta Dr. Priya Misar

14. Shushrusha Hospital, Dadar- 129 responses Dr Mansi Medhekar - Dr Medha Tankhiwale Dr Reena Sengupta

15. KEM Hospital, Parel- 117 responses

Dr Niranjan Mayadeo
Dr Hemangi Chaudhary
16. Sir J J Group of Hospitals, Byculla - 156 responses
Dr Ashok Anand • Dr Priti Loius

17. Cama \& Albless Hospital, CST- 147 responses

Dr Tushar Palve - Dr Zaveria Kazi


## 18. Khan Bahadur Bhabha Hospital, Kurla- 111 responses

Kimaya Clinic, Wadala - 26 responses • Dr Vijaya Babre

19. Khan Bahadur Bhabha Hospital, Kurla

Birth and Beyond, Parel \& Wadala- 26 responses Dr Roshu Shetty

Khan Bahadur Bhabha Hospital, Kurla
Dr Hemlata Kuhite

20. Noble Plus Hospital, Ghatkopar West - 53 responses

Dr Ganpat sawant - Dr Shrutika Kamble

21. Ashirwad Hospital - 2 responses Dr Rajendra Nagarkatti
22. Shobhana Hospital- 63 responses Dr S R Desai

23. Sai Ashirvad Maternity \& Nursing Home- 52 responses
Dr Ashok Shukla
24. Wockhardt Hospital Mira Road- 350 responses

Dr. S N Agarval
Dr. Mangala Patil
Dr. Rajashri Tayshetye

25. Hitanshi Nursing Home - 44 responses

Dr. Preeti Sharma
26. Juana MCCH- 68 responses

Dr. Jagruti Ghosh

27. Dhanvantri Hospital- 38 responses Dr. Gayatri Jadhav
28. Ruby Hospital, Vikhroli - 82 responses Dr Yogesh Trivedi

29. Thar Women's Hospital, Mulund- 127 responses
Dr Shruti Thar

30. BDBA Hospital, Kandivali- 107 responses Dr. Nimish Tutwala - Dr. Siddesh Iyer
31. Saidham Hosptial, Nallasopara - 42 responses Dr Sanjay Manjalkar
32. Padmakar Mhatre hospital, Mira Road - 88 responses
Dr Pramod Survase

33. Ankoor Fertility Clinic- 124 responses

Dr Kedar Ganla • Dr Rana Chowdhary

34. Dr. Vora Hospital, Haji Ali- 84 responses


# Benign Gynecological Surgeries and the Role of Robotics 

Dr. Rooma Sinha<br>Professor, Gynecology Apollo Health Education \& Research Foundation, Associate Professor, Macquarie University, Australia, Laparoscopic \& Robotic Surgeon, Apollo Hospitals, Hyderabad, India

## INTRODUCTION

India is the pioneer in gynecological endoscopy in the world, by bringing in and adapting new technologies that have propelled us further in the field of gynecology. The introduction of video laparoscopy and the first laparoscopic hysterectomy (in 1988) have been the game changers in gynecological surgeries. It was difficult to teach and learn at the beginning; however, the introduction of video laparoscopy proved to be a boon in gynecology.
Hysterectomyisperformedthroughvarious modalities which have progressed over time. For women requiring a benign hysterectomy procedure, it should not be considered challenging to use 2 -dimensional options, straight stick laparoscopic skills, etc., and a long learning curve and difficulty in suturing should not be limiting for doctors to perform open surgeries.
With the advent of laparoscopy and having experienced laparoscopic surgeons, performing open gynecological surgeries raises an ethical question that when laparoscopy is feasible, can all surgeries be done, and can all the surgeons perform gynecological surgeries using laparoscopy? This is the area where robotics in gynecology could play a key role, where laparoscopic surgery is performed with an advanced computerassisted technology. The purpose of this article is to review the current literature and discuss the role of robotics in benign gynecologicalsurgeries.

## MYOMECTOMY

Minimal access surgeries for myomectomy depend on factors such as the size, number and location of fibroids,
and scientific evidence. before proceeding with the surgery. However, myomectomies can be performed using techniques such as laparoscopy, hand-assisted laparoscopy, robotic myomectomy, and hybrid myomectomytechniques.
A study by Sirhhe et al., presented at the American Academy of Gynecologic Laparoscopists in 2015 compared the outcomes of laparoscopicassisted myomectomy (LAM) versus robot-assisted laparoscopic myomectomy (RALM) in about 76 patients. The clinical outcomes of RALM suggested that the operative time was high ( 106 min vs. 101); however, it significantly reduced the length of stay and blood loss as compared to LAM. Furthermore, the weight and number of fibroids were much higher with RALM. Hence, it can be concluded that in complex myomectomy cases, RALM can be successfully used.

## ADVANTAGES OF ROBOTICS TECHNIQUE

This technique is used for myomaextraction, uterine reconstructionincluding myoma bed suturing, and for complex myomectomy.

## Myoma Extraction

When compared to general laparoscopy, myoma extraction is much more than traction, counter traction, and suturing in two layers. Intracapsular myomectomy is performed to save the pseudo capsule that consists of the vascular network and the neuroendocrine bundle, thereby mediating inflammation and wound healing. Gentle myomectomy by coagulating and cutting the
fibrous bridges constitutes the extraction of myoma from the fibromuscular layer using the PushSpreadToggle technique. ${ }^{[7]}$ Sharp and simple sutures can help in preserving endometrium infertile patients.

## Uterine Reconstruction

A transmural defect of about $10-12 \mathrm{~cm}$ interior wall myoma from the serosa to the endometrium cannot be closed in two layers. Furthermore, quick suturing can help in controlling the heavy blood loss as there is continued blood loss while suturing. Hence,sometimes, it may require up to 5 layers of suturing as well.

Robotics offers the advantage of a $540^{\circ}$ twist of the robotic needle driver that simulates the rotation of a human wrist compared to that of a $45^{\circ}$ shoulder movement in laparoscopy with a lap needle holder. Therefore, this technique results in deep bites, and precision multilayer closure of the uterine defect in less time.

A study by Chandra et al. compared the laparoscopic versus robotic suturing performance by experts and novices and the results are mentioned in Table 1.

In conclusion, robotics is an advanced and improved enablingtool for gynecological surgeries.

## COMPLEX MYOMECTOMY

Complex myomectomies can be due to fibroids/ myoma that is large, multiple in number, at an odd location, abnormal capsule or has multiple pathologies together. A large oddly located myoma, in the lower uterine segment closer to the cervix needs careful

Table 1: Results from comparison of laparoscopic versus roboticsuturing performance

| Robot vs. laparoscopy | Lap expert | Lap novice |
| :---: | :---: | :---: |
| Smoothness of the task | No <br> difference | Better |
| Total task time | Better | Better |
| Instrument path length (Economy of movement) | Improved | Better (Persistent enabling effect) |

evaluationand operation as the bladder is in proximity. In an abnomal myoma capsule, we can usually see an alteration in the fibroid tissue textureand a complete loss of the dissection plane making it difficult tolocate the myoma.

Complex pathological myomas such as bilateral endometriomas, and fibroids with coexistent adenomyoma require a strong strategy and means to resolve. For all such cases, robotics techniques will prove to be beneficial.

## APPLICATIONS OF ROBOTICS IN THE FOLLOWING CONDITIONS

Robotic Hysterectomy

There are two types of hysterectomy that are prone to conversion - large specimen and endometriosis. For a case with a large fibroid, regular port placement is practiced. Port placement at the umbilicus traces the upper pedicles and then moves to the cervix for opening and closing the vault to complete the hysterectomy procedure Roboticinstruments with their maneuvering ability help a great deal in such cases. Manipulation becomes difficult in a large specimen with multiple large myomas. Skillful rotation with an upward push of the colpomotizer makes it easier to handle.

Bladder dissection in certain cases is difficult especially when it is placed in the lower segment scar. A head-on robotics approach isfollowed with bipolar forceps in the left hand to push the uterus up making space for the bladder dissection easily.

## Tacking Uterine Vessels in Large Uterus

Only two instruments are used for tacking the uterine vessels wherehot shears are for coagulation and retraction while bipolar forceps are used to hold and stretch. The altemation technique with both instruments is similar to doing a ballet.

A study by Sinha et al., comparing robotic versus laparoscopichysterectomy in a large uterus stated that the conversion rate was $4 \%$ with robotic surgery as compared to $10.9 \%$ with laparoscopicsurgery. ${ }^{2}$

## Endometriosis

The adhesive nature of this disease creates favorability for robotic surgery as compared to laparoscopic surgery for adhesiolysis. Robotics offers much precision to tackle endometriosis surgeries, however, the cost factor is a higher vis-d-vis laparoscopic procedure.

## Robotic Sacrocolpopexy

Dissection of the rectum from behind and the bladder in front of the vaginal vault is done using robotics. In benign urogynecological cases, dissection and suturing are easy with the help of robotics.

## Youssef's Syndrome

This syndrome involves the adherence of the bladder with the lowersegment of the uterus with the presence of memoria. The bladder base with the uterus is identified and dissected off the uterine wall with the help of robotics. The bladder is repaired and the uterine scar is fixed with the help of a peritoneal patch to prevent fistulareforming and is sutured in two layers. ${ }^{3}$

## Cervical Cerclage

For preventing pregnancy loss, mersilene tape is used as a suture in all types of surgeries. The precision of using mersilene tape can be slightly better with robotics.

## Concerns with Robotic Technology

The three major concerns when using robotics are more time required, the higher cost involved, and more ports. Suitable modifications have been suggested to address these concerns.

For myomectomy, the following steps are proposed to make a difference:

- Preoperative magnetic resonance imaging
- Reduced ports and instruments
- Barbed suture $(30 / 45 \mathrm{~cm})$
- Cold knife morcellation and indigenous bags
- Hybrid myomectomy

As far as the time taken for the surgery with robotics is concerned, the clinical outcomes suggest that though robotic myomectomy demands more time, it is performed for complex cases with higher fibroid weights; thereby reducing the length of stay, IV analgesia administration, and blood transfusion.

## CONCLUSION

Robotics in benign gynecologic surgery is still evolving. It is expected that in the next 10 years, gynecology as therapy will see a steep rise in the use of robotics as a means to manage various conditions and surgeries. Medtronic also plans to launch a new soft tissue robot against the existing da Vinci in India. ${ }^{4}$ Soon, robotic technology will be available on the counter side to laparoscopy in gynecology. However, at a point where robotics can be more beneficial to women, it stands a chance to replace the existing laparoscopic techniques.

## REFERENCES

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4. Chiu LH , Chen CH , Tu PC, Chang CW, Yen YK, Liu WM. Comparison of robotic surgery and laparoscopy to perform total hysterectomy with pelvic adhesions or large uterus. J MinimAccess Surg 2015;11:87-93.

# Three Dr. NA Purandare Teaching Programs were Organized by MOGS in the Last Quarter. One at Wadia Hospital on 8th October 2022, Second at Bombay Hospital on 24th September 2022 and third at Nair Hospital \& TNMC on 3rd December 2022. 

Report of Dr. NA Purandareteaching program held on $8^{\text {se }}$ October, 2022 at Wadia Hospital.

- The Dr. NA Purandare Teaching program was conducted at Wadia hospital on $8^{\text {th }}$ October 2022 in association with Mumbai Obstetrics and Gynecological society. Dr. Geetha Balsarkar, Dr. Sujata Dalvi, and Dr. Sunil Tambvekar were the Convenors of the program. The Master of Ceremonies was Dr. Vrushti Solanki.
- Session 1 was a lecture on Examination Tips by Dr. MJ Jassawalla and Fetal Growth Retardation by Dr. Vandana Bansal. This was chaired by Dr. Sunil Tambvekar and Dr. Vandana Bansal.
- Session 2 was a case presentation on Previous C Section. The Examiners were Dr. Pooja Bandekar, Dr. Rachna Dalmia, and Dr. Deepali Kale.
- Session 3 was a case presentation on PostMenopausal Urinary Symptoms. The examiners were Dr. Geetha Balsarkar, Dr. Sujata Dalvi, and Dr. Payal Lakhani.
- Session 4 comprised of three capsules. This session was chaired by Dr. Priya Vora and Dr. Kinjal Shah. Dr. Sarita Naik spoke on 'UTIPrevention and Basics of Management' and Dr. Sarita Bhalerao spoke on 'Cervical Cancer Screening'

Dr. NA Purandare teaching program was held on $24^{\text {th }}$ September, 2022 at Bombay Hospital.

- Dr. NA Purandare Teaching program was conducted at Bombay hospital on $24^{\text {th }}$ September, 2022 in association with Mumbai Obstetrics and Gynecological society. Dr. Suvama Khadilkar, Dr. Shashi Goyal, and Dr. Kunjal Bathija were the Convenors of the program. The Master of Ceremony was Dr. Rajashree Tayshete.
- The program was inaugurated by MOGS president Dr. Niranjan Chavan, Secretary Dr. Rajendra Sankpal and the treasurer Dr. Geetha Balsarkar. The Chief guests were Dr. R Patil (Medical director, Bombay hospital) and Dr. Satish Khadilkar (Dean, Bombay Hospital)
- There were 2 case presentations, one on Placenta previa in pregnancy and the other one on Postmenopausal bleeding. The examiners were Dr. Niranjan Mayadeo, Dr. Sujata Dalvi, Dr. Kurjal Bathija, Dr. Nitin Pai, Dr. Survana Khadilkar, Dr. Shashi Goyal and Dr. Ameya Purandare.
- Talks were given by esteemed speakers
- Dr. Rahul Baxi-Current Trends of Diabetes in pregnancy.
- Dr. Sheela Mane - Management of PPH.
- Dr. Niranjan Mayadeo - Screening Methods of Gynecological Cancer.
- Dr. Richa Bansal - Newer Management of Gynecological Cancer.
- Dr.Sarita Naik-Medical \&Surgical Management of Urinary Incontinence After Menopause.
- These talks were chaired by senior gynecologistsDr. Satish Tibrewala, Dr. Shilpa Ambekar, Dr. Varsha Pai, and Dr. Arpita Chakraborty
- 1600 students from different cities attended this program online.
- Dr. Tejashree Kamble then gave the Vote of Thanks and ended the program.
Dr. NA PURANDARE TEACHING PROGRAM was held on $3^{\text {nd }}$ December, 2022 at BYL Nair Hospital and TNMC, Mumbai -
- MOGS Dr. N A Purandare program was hosted on Saturday $3^{\text {m }}$ December 2022 by BYL Nair Hospital and TNMC, Mumbai via Webinar.
- The conveners were Dr. Shailesh Kore, Dr. Mansi Medhekar, and Dr. Pradnya Supe. The total no of registrations was 499 with 216 people in live attendance.
- Session 1 was a Case presentation on Abnormal Uterine bleeding (Ovarian) presented by Dr. Soumya Sharan.
- Session 2 had two capsules. This was chaired by Dr. Siddhi Kore and Dr. Aditi Phulpagare. The speakers were Dr. Mansi Medhekar who spoke on POP-Q classification and Dr. Sanket Pisat who spoke on Adhesion Prevention strategies in GYN surgeries. Dr. Niranjan Chavan, President MOGS, and Dr. Pravin Rathi, Dean, BYL Nair Hospital sent video messages wishing all the students.
- Session 3 was a case presentation on Twin pregnancy presented by: Dr. Ketki Patil. The examiners were Dr. Shailesh Kore, Dr. Poumima Satoskar, Dr. Kirti Bendre, and Dr. Arundhati Tilve.
- Session 4 comprised of two capsules. This session was chaired by Dr. Munira Ansari and Dr. Shreya Prabhoo. Dr. Pooja Vazirani spoke on 'Perinatal Infections: Points to ponder' followed by Dr. Vandana Bansal who spoke on 'Twin Pregnancy where one goes wrong'.
- Session 5 was of short cases which were presented by two students. Dr. Shrutika presented 'Vaginal Infections' and Dr. Piyusha presented a case on 'TUFD'. The examiners for this session were Dr. Madhuri Mehendale, Dr. Punit Bhojani, and Dr. Rajashri Tayshette.




## Report of AICC RCOG Annual Conference 2022 held on from 4th to 6th November 2022

TThe AICC RCOG Annual Conference 2022 was held from November 4th to 6th , 2022, at CPS College, Parel and Hotel Taj Land's End, Bandra, Mumbai.

4 Pre-conference workshops were held. Challenges in Obstetrics was wonderfully designed by Dr. Suchitra Pandit, Dr. Anahita Chauhan and Dr. Komal Chavan, Dr. V. P. Pailey, Dr. Tim Draycott and Dr. Patrick O'Brien who were faculties for the program. The highlight was the hands-on session on obstetric models.

The Infertility Workshop was organized by Dr. Ameet Patki, Dr. Sunita Tandulwadkar and Dr.

Anand Nanavati who covered latest developments in the field. Dr. Rupin Shah and Dr. Firuza Parikh gave excellent talks.

Abnormal uterine bleeding workshop was held in collaboration with IAGE. Conveners were Dr. Sudha Tandon, Dr. Gaurav Desai, Dr. Sudeshna Ray. Audience appreciated the videos, talks and interactive panels.

The Conference inauguration was crisp \& short and beautifully conducted by Dr. Priti Vyas.
The Scientific Program was meticulously planned by Dr. Ameet Patki and his team of Dr: Reena Wani, Dr. Puunima Satoskar, Dr. Pratik Tambe, Dr. Priya

Workshops


Vora, Dr. Siddesh Iyer, Sudeslna Ray, Dr. Kinjal Shah and Dr. Rupali Dharwadkar.

There were 3 Orations given by Prof. Eddie Morris, President, RCOG, Dr. Ranee Thakar, Vice President, RCOG and Dr. Hrishikesh Pai, President, FOGSI.

Dr. Abdul Sultan gave the SIMS Black Lecture and Dr. Bhaskar Pal give a wonderful keynote address on C Section rates.

In the evening Dr. Sudha Tandon and Dr. Aditi Tandon had planned a fantastic banquet. Dr. Kedar Ganla with Dr. Sandhya Saharan and Dr. Supriya Arwari presented a comedy show Koffee with Kedar which entertained the audience. There were dances on the theme of festivals of India. There was a group dance Jerusalem in which there was participation from international \& National guests plus MOGS members and youth council.

The delegates appreciated the Scientific content. There were excellent master classes. The Master Class Fetal Medicine had eminent faculty from

UK. Dr. Manjiri Khare, Dr. Ranjit Akolekar and Dr. Pranav Pandya, Dr. Ranee Thakar.Mr. Abdul Sultan conducted an excellent workshop on Obstetric anal sphincter injury .

International faculty Prof. Eddie Mornis, Dr. Tim Draycott, Dr. Patrick O'Brien, Dr. Jo Mountfield, Dr. Sue Ward, Dr. Ranee Thakar, Dr. Jyotsna Acharya, Dr. Amar Bhide, Dr. Pranav Pandya, Dr. Ranjit Akolekar, Dr. Yatin Thakur, Dr. Vidya Thakur attended the event.

The Valedictory session and lucky draw were beautifully organized and conducted by Dr. Pradnya Supe and Dr. Shreya Prabhoo.

Dr. Ameet Patki and Dr. Sarita Bhalerao expressed their gratitude to MOGS President, Dr. Niranjan Chavan and all office bearers and managing committee for their participation.

The MOGS staff Divyaben, Manohar, Hemant, Naresh and Mandar worked very hard and did an excellent job.

Conference





# Anemia Mukt Bharat Conclave 2022 held on World Anemia Day on 26th November 2022 by MOGS 

TThe Mumbai Obstetrics \& Gynaecological society organised 'Anemia Mukt Bharat Conclave' on 26th November 2022 from evening 7 pm to $10: 30 \mathrm{pm}$ on the occasion of World Anemia Day.

This event was held at the Sofitel Hotel, Mumbai in the presence of many renowned Obstetricians and Gynecologists. It was a well-organized and executed event with key speakers, panel discussions, and a slogan and poster competition.
The conference was inaugurated by Dr. Niranjan Chavan (President of MOGS), Dr. Hrishikesh Pai (Chief Guest and President of FOGSI), Dr. P C Mahapatra (Guest of Honor and Past President of FOGSI), Dr. Abhay Bhave (Key Speaker and Hematologist at Lilavati \& Global Hospital, Mumbai) and was attended by approximately 150 Obstetricians and Gynecologists of Mumbai.

Dr. Abhay Bhave, Hematologist at Lilavati \& Global Hospital, Mumbai, was the Key Speaker, and gave a lecture on 'Management of Iron Deficiency in Pregnancy.' 3 panel discussions were held.

1. Hematological Disorders in Pregnancy-Case Scenarios.

Moderators: Dr. Reena Wani and Dr. Priya Vora
Panelists: Dr. Satish Sanjanwala,
Dr. Abhay Bhave, Dr. Hemangi Chaudhary,
Dr. Rajeshree Katke, Dr. Rakesh Pandia,
Dr. Shweta Khade
2. Changing Approaches in Management of Anemia ~Newer Molecule

Moderators: Dr. Reena Wani, Dr. Punit Bhojani
Panelists: Dr. Madhuri Patel, Dr. Shailesh Kore, Dr. Shyam Rathi, Dr. Ganpat Sawant, Dr. Madhuri Mehendale, Dr. Mansi Medhekar
3. Real Case Discussions on Obstetrics Emergencies Leading to Anemia

Moderators: Dr. Ameya Purandare and Dr Komal Chavan

Panelists: Dr. Hara Patnaik, Dr. Arun Nayak, Dr. Aspi Raimalwala, Dr. Lalita Maydeo, Dr. Pradnya Changede, Dr. Jyotsana Patel, Dr. Mohini Shinde Abreo, Dr. Namita Padwal An interesting and thoughtful slogan and poster competition was organized prior to the event. Total 65 entries were recorded from senior \& junior MOGS members along with many MOGS nonmembers. Winners of this competition were announced at the end of the conclave.



## Winners of Slogan \& Poster Competition

| Slogan Competition Winners - |  | Third Prize: Dr Hetvi Somaiya |
| :---: | :---: | :---: |
| Sénior Category |  | Slogan Competition - Special Prizes |
| First Prize: | Dr Shailesh Kore | Dr Jyotsana Patel |
| Second Prize: | Dr Aspi Ramaiwala | Dr Amarjeet Kaur Bava |
| Third Prize: | Dr Pramod Survase | Dr Shweta Khade |
|  | Dr Neena Patwardhan | Dr Rakesh Dadhmal |
| Slogan Competition Winners |  | Dr Divita Kamble |
| -Junior Category |  | Dr Priyanka Vora |
| First Prize: | Dr Manan Boob | Dr Darshana Ajmera |
| Second Prize: | Dr Zeba Pathan | Dr Radhika Bhutada |
| Third Prize: | Dr Mrinal Chatterjee | Poster Competition - Special Prizes |
| Slogan Competition - Non Member |  | Dr Ketki Patil |
| First Prize: | Dr Pushpa C | Dr Ankita Kumari |
|  | Dr Vandana Gandhi | Dr Mitali Sharma |
| Second Prize: | Dr Jyotibunglowala | Dr Bindu G. |
| Third Prize: | Dr Radharani Talla | Dr Shital Londhe |
| Poster Competition - |  | Slogan Competition - |
| Sénior Category |  | Senior Category |
| First prize: | Dr Shreedevi Tanskale | 1st Prize: Dr Shailesh Kore |
| Second Prize: | Dr Riddhi Desai | नियमित जांचं लोह गोलिया खानेमे पालक |
| Third Prize: Dr Rana Choudhary |  |  |
| Poster Complition - |  |  |
| Junior Category |  | 2nd Prize: Dr Aspi Ramaiwala |
| First Prize: | Dr Cara Saldhana | Dr Aspi Ramaiwa |
| Second Prize: | Dr Shreya Kampoowale | In life sometimes IRON is more precious than PEARLS |
| Third Prize: | Dr Soumya | 3rd Prize $\quad$ Dr Pramod Survase |
| Poster Competition - Non Member |  | "चांगल्या आरोग्यासाठी लोहयक्त आहार अन् |
| First Prize: | Dr Vidyadhar Ranande | औषध घेऊया..... |
| Second Prize: | Dr Palak Bansal | अनेमिया मुक्त भारताचे स्वप्न साकारुया." |

3rd Prize Dr Neena Patwardhan

हरी सब्जियां, फलोंका सेवन, ऊचित इलाज करवाना

अनिमियामुक्त बनाओ भारत अपना

## Slogan Competition Junior Category

1st Prize: Dr Manan Boob
Iron: It was good enough for Iron Man, it's good enough for you!

2nd Prize: Dr Zeba Pathan
Catch them RED, before they turn WHITE
3rd Prize: $\quad$ Dr Minal Chatterjee
Ek goli laal, kare door malal; Khaye Jo Pregnancy me, ho Sehat me Sudhar aur Anemia ka upchar.

## Slogan Competition - Non Member

Dr Pushpa C
"शिशु को मिलेगा तभी सुकून, जब मॉ में होगा पर्याप्त खून"

1st Prize Dr Vandana Gandhi

मधक्या सुटीपूर्वाँच ,
पहिला घास लोहाच्या गोळीचा अध्यां तासानंतर डबा खाताना दुसरा घास पोळीचा आणि दर सहामाही व वारिक परिक्षा संपताच

2nd Prize: Dr Jyoti Bunglowala एनीमिया को अगर भगाना है आयरन की गोली रोज़ ख़ाना है आयरन की गोली कब तक एनीमिया दूर ना हो तब तक

3rd Prize Dr Radharani Talla
Go for more green and turn from pale to pink

## Poster Competition - Senior Category

1st Prize Dr Shreedevi Tanskale

## Iron- Elixir of Lifể



## Anemia Mukt Bharat

2nd Prize
Dr Riddhi Desai



## Poster Competition - Junlor

 Category1st Prize:
Dr Cara Saldhana
Anaemia Mukt Bharat Take IRON Serious'y

-

3rd Prize: Dr Soumya


Poster Competition - Non Member
1st Prize:
Dr. Vidyadhar Ranande


पालक मेथी बीट खाओ एनीमिया को दूर भगाओ

पालक मेथी बीटरूट खा आणि दूर पळवा एनीमिया ला.

सशक्त मी झाले झाले
हिमोग्लोबीन झाले बारा आता स्वस्त आणि मस्त रोज करा जेवणात हे फस्त
2nd Prize:
Dr Palak Bansal


3rd Prize: Dr Hetvi Somaiya


## Poster Competition - Special Prizes

Dr Ketki Patil
Dr Ankita Kumari
Dr Mitali Sharma
Dr Bindu G.
Dr Shital Londhe

# Premature Rupture of the Membranes: Current Thoughts and Concepts 

## Dr. Krishnendu Gupta

Department of Obstetrics and Gynaecology,Vivekananda Institute of Medical Sciences (VIMS). Kolkata, West Bengal, India

## INTRODUCTION

Premature rupture of membranes or pre-labor rupture of membranes (PROM) refers to the rupture of fetal membranes before the onset of labor. ${ }^{1}$ It affects about $10 \%$ of all pregnancies. ${ }^{[1]}$ Term PROM occurs at term, more than 37 weeks of gestation. If membrane rupture occurs before 37 weeks of gestation, it is referred to as preterm PROM (PPROM). The incidence is about $3 \%$. It is responsible for about $30-40 \%$ of all preterm births.

## IMPORTANT DEFINITIONS

- Low birth weight (LBW): Neonates weighing $1500-2500 \mathrm{~g}$
- Very low birthweight: Neonates weighing 10001499 g
- Extremely low birthweight: Neonates weighing $500-999 \mathrm{~g}$

In 1960, if a baby was bom with a birth weight of less than 1000 gm , the risk of death was $95 \%$. Because of the advancement of medical science, in 2007 it was the opposite, which showed a survival rate of $>95 \%$.

## PPROM: PATHOPHYSIOLOGY

Fetal membranes are bound together by different layers of extracellular matrix, composed of the amnion and chorion. ${ }^{4}$ Matrix is the key factor that defines the elasticity of the fetal membranes. ${ }^{4}$ Any process that weakens the matrix, increases the chance of PROM.

## PPROM: RISK FACTORS

- Infection is the greatest risk factor
- Previous history of PROM (Recurrence rate: $21 \%$ )
- History of antepartum hemorrhage, multiple pregnancies, polyhydramnios mechanical distension
- In urban areas, hazards of smoking and drug abuse are well-known
- Cervical incompetence (insufficiency)
- Iatrogenic: cerclage operation, amniocentesis, fetoscopy.


## PPROM: INFECTION

- Bacterial proteases potentially decrease the strength and elasticity of the membranes. They produce phospholipases which stimulate the release of prostaglandins formed from arachidonic acid leading to premature uterine contractions ${ }^{4}$
- This infection which causes the host immune response to release cytokines and mediators which weaken the membranes which damage the matrix and causes release of matrix metalloproteinases (MMP) ${ }^{3}$
- MMPs are a family of enzymes that are released from the extracellular matrix and decrease membrane strength by increasing collagen degradation
- Increased risk of PPROM is seen in women infected with gonorrhea, trichomonas, and chlamydia. Group B streptococcus (GBS) should be treated carefully: Streptococcus agalactiae, Gardnerella voginalis
- Doctors should remember that if the sign of clinical infection is $1-2 \%$ and subclinical infection is as high as $40 \%$ and if not treated, then it may cause problems. Hence, it is necessary to diagnose and treat the infection as early as possible.


## PPROM: HOW TO DIAGNOSE?

- History of leakage of liquor amniii per vagina (PV)/dribbling PV
- Per speculum $(\mathrm{P} / \mathrm{S})$ examination: To visualize the leakage of liquor/dribbling
- Valsalva maneuver such as coughing to visualize the leakage well when not evident
- Avoid per vaginal/digital examination to prevent ascending infection
- Examination of escaping fluid by biochemical tests to confirm the diagnosis.


## PPROM: TESTS

- Nitrazine paper test
- Fern test
- Nile blue sulfate test
- Others: Indigo-carmine test, Detection of fetal fibronectin
- New: Amniotic leak detection kit/pad (AminoSense ${ }^{\text {TM }}$ )- wom in a panty liner. If there is a leak or discoloration it becomes blue and if after an hour or after drying the color remains blue, then it can be concluded that it is a kind of amniotic fluid and not the urine.


## PPROM: ROLE OF ULTRASOUND

The role of USG is not only to diagnose the leak of urine but also liquor or amniotic fluid volume/ index

- Assessment of the cervix: length dilatation of the cervical os, funneling (if any)
- Assessment of the fetus: gestational age, heart rate, and presentation
- Placenta: Localization.


## PPROM: MATERNAL COMPLICATIONS

- Infection: Chorioamnionitis (13-60\%) Puerperal sepsis Chorioamnionitis (clinical/acute): Presence of pyrexia and the presence of any two of the following-Maternal and fetal tachycardia, uterine tenderness, foul-smelling vaginal discharge, maternal leukocytosis.
- Abruptio placentae ( $4-12 \%$ ) Because of all these complications, there is an increased incidence of cesarean section.


## PPROM: FETAL AND NEONATAL COMPLICATIONS

- Prematurity
- Infection: neonatal septicemia
- Fetal asphyxia: oligohydramnios, cord compression, or cord prolapse
- Fetal pulmonary hypoplasia (more common if PROM $<26$ weeks of gestation)
- Musculoskeletal deformity because of the cramping of the uterus (due to chronic oligohydramnios): limb, talipes, craniofacial defects
- Respiratory distress syndrome
- Cerebral palsy (CP) (Extremely important) ${ }^{4}$


## MgSO $_{4}$ ROLEt EARLY OBSERVATIONAL DATA

In the 1980's Van de Bor, and Leviton's studies showed decreased rates of intraventricular hemorrhage (IVH) and CP in very low birth weight (VLBW) infants bom to women with preeclampsia who were given $\mathrm{MgSO4}$. In the early 1990s, a study by Kuban demonstrated that VLBWinfants exposed to MgSO 4 for tocolysis also had decreased rates of IVH. In 1996, Grether et al. showed a lower rate of CP in VLBW infants exposed to MgSO 4 . As per the above studies, it could be concluded that exposure to MgSO 4 can be beneficial.

## PPROM: ROLE OF MgSO ${ }_{4}$

Magnesium sulfate is used in women at risk of preterm birth for neuroprotection of the fetus. Antenatal administration of MgSO 4 in imminent preterm birth protects the offspring from the risk of developing $C P$.

## INDICATIONS

"Imminent preterm birth" which includes:

1. Preterm labor with or without PPROM
2. Planned preterm birth for fetal or maternal indication.

## HOW DOES MgSO WORK?

It works in one of four ways.

1. MgSO 4 decreases neuronal injury by "downregulation" of excitatory stimuli. Damaged neurons are sensitive to the excitatory neurotransmitter glutamate, but the blocking of N - methyl-D-aspartate receptors by magnesium prevent the influx of calcium that causes cell death ${ }^{45}$
2. The vasoactive properties of magnesium minimize the hypoxic-ischemic damage by the resulting increased cerebral blood flow due to cerebral vasodilatation ${ }^{5}$
3. MgSO 4 has been shown to prevent neuronal injury by reducing both oxygen free radicals and proinflammatory cytokines ${ }^{5}$
4. Magnesium may directly reduce neuronal loss as it has anti-apoptotic (programmed cell death). ${ }^{5}$

It imparts the best protection to the preterm birth that occurs within 24-32 weeks of gestation.

## DOSE

- $\mathrm{MgS}_{4}$ is administered as a 4 g IV loading dose over 30 m followed by a $1 \mathrm{~g} / \mathrm{h}$ maintenance infusion until birth ${ }^{6}$
- For planned preterm birth, it is started ideally
within 4 h before birth, as a 4 -g IV loading dose over 30 min , followed by a $1 \mathrm{~g} / \mathrm{h}$ maintenance dose until birth ${ }^{?}$
- MgSO is discontinued if delivery is no longer imminent, or a maximum of 24 h of therapy has been given
- When MgSO is given for fetal neuroprotection, another tocolytic(s) is/are usually discontinued, as magnesium sulfate itself acts as a tocolytic. Based on this, it is found that it has a role in preventing $C P$.


## MgSO $_{4}$ FOR NEUROPROTECTION: HOW TO ADMINISTER

Loading dose and Maintenance dose- 1 ampoule of MgSO 4 contains 1 gm in 2 mL ( $50 \%$ solution).
Initial: 4 g IV over $30-60 \mathrm{~min}$.
Dilute 4 amps of $\mathrm{MgSO} 4: 8 \mathrm{~mL}+12 \mathrm{~mL}$ of normal saline (NS) $=20 \mathrm{~mL}$; Infuse 20 mL in $30-60 \mathrm{~min}$.

Maintenance: 1 g IV per hour for 24 h .
Dilute $10 \mathrm{amps} \mathrm{MgSO}: 20 \mathrm{~mL}+30 \mathrm{~mL}$ of $\mathrm{NS}=50$ mL ; infuse $5 \mathrm{~mL} / \mathrm{h}$ for 24 h . Check for any signs of MgSO 4 toxicity.

## $\mathrm{MgSO}_{4} \mathbf{4}$ CLINICAL EVIDENCE

A study by Doyle et al., in the Cochrane Database of Systemic Reviews 2009, concluded that the neuroprotective role of antenatal magnesium sulfate therapy given to women at risk of preterm birth for the preterm fetus is now established.

The American College of Obstetricians and Gynecologists (ACOG) Committee guideline in 2010 which without any change has been reaffirmed in 2020 with their opinion on magnesium sulfate given before anticipated preterm birth for neuroprotection. ${ }^{8}$

TheRoyalCollegeofObstetriciansandGynecologists (RCOG) took a Scientific Impact Paper in 2011 speaking positively about magnesium sulfate. The paper showed that magnesium sulfate given to
mothers shortly before delivery reduces the risk of CP and protects against gross motor dysfunction in those infants who are delivered preterm. The effect may be greatest at early gestations and is not associated with adverse long-term fetal or maternal outcomes. Women should be advised of an increase in minor adverse effects associated with the medication ${ }^{9}$

Nguyen et al. conducted a study in the Cochrane Database of Systemic Reviews 2013 for determining the role of magnesium sulfate in women at term for neuroprotection of the term fetus. ${ }^{10}$ They found that there is currently insufficient evidence of the efficacy and safety of magnesium sulfate when administered to women for neuroprotection of the term fetus. There has been recent evidence for the use of magnesium sulfate for neuroprotection of the preterm fetus. Hence, magnesium sulfate can be given to preterm, for term gestation the studies are inadequate.

The Royal College of Physicians of Ireland 2015 Clinical practice guideline is currently under revision.

## PPROM/PROM: CLINICAL EVIDENCE

The decision to prescribe antibiotics for women with PROM is not clear-cut. Co-amoxiclav has an increased risk of neonatal necrotizing enterocolitis, and thus should be avoided in women at risk of preterm delivery. Another paper by Tchirikov et al., clearly shows which antibiotic can be used.

Erythromycin is the choice of antibiotic for PPROM as per the evidence available [Table 1].

## PPROMt MANAGEMENT

The data fromACOG 2016, 2017 on the management of PPROM by gestational age categories are mentioned in Table 2.

Single corticosteroid course may be considered Tocolytics: no consensus
Antimicrobials may be considered

- The combination of birthweight, gestational age, and sex provides the best estimates of chances of survival and should be considered in individual cases. ${ }^{11}$


## PPROM RECOMMENDATIONS

RCOG Green-top guideline no. 73., June 2019 stated that-

- The diagnosis of spontaneous rupture of the membranes is made mainly by the combination of maternal history and a sterile speculum examination (Grade D)
- If on speculum examination, no amniotic fluid is seen, clinicians should consider performing an insulin-like growth factor-binding protein1 or placental alpha microglobulin-1 test of vaginal fluid for further management (Grade B)
- Following the diagnosis of PPROM, an antibiotic (preferably erythromycin) should be given for 10 days or until the labor is established (whichever is earlier)
- Women who have PPROM between $24 \div 0$ and33+6 weeks' gestation should be offered corticosteroids; steroids can be considered up to $35+6$ weeks' gestation (Grade A).
- A combination of clinical assessment, maternal blood tests, and fetal heart rate can be used to diagnose chorioamnionitis in women with PPROM; these parameters cannot be used in isolation [12] (Grade D) as one parameter is not sufficient
- Women whose pregnancy is complicated by PPROMafter 24+0 weeks' gestation and who have no contraindications to continuing pregnancy should be offered expectant management until $37+0$ weeks; timing of birth should be discussed with each woman on an individual basis with careful consideration of the patient preference and ongoing clinical assessment (Grade A). ${ }^{13}$ A discussion is important, in every guideline,

Table 1: Antibiotics in PPROM: Review

| Organization | Antibiotics | Comment |
| :---: | :---: | :---: |
| ACOG (USA) | Penicillin Ampicillin (alternative) Erythromycin (up to $32 \%$ resistance) Clindamycin | Not commended <br> Only if the isolate is susceptible to 04 sensitive 5 Mio . E. I initial, then 2.5 Mio. E. I 4 h until delivery |
| DGGG <br> (Germany) | Penicillin G Mezlocillin, piperacillin, clindamycin, ampicillin, erythromycin, or cefazolin (alternative) |  |
| RANZCOG <br> (Australia and | Ampicillin/amoxicillin and erythromycin <br> Erythromycin (altemative single-use | (PPROM 2 g IV 6 h and then 250 mg PO 8 h for 5 days: 250 mg |
| New Zealand) | IAP regime for GBS colonized women: penicillin or altemative ampicillin IV; with penicillin allergy clindamycin and erythromycin after sensitivity testing because of resistants! Altemative cefazolin or vancomycin $(20 \mathrm{mg} / \mathrm{kg}$ Nevery 8 h - maximum 2 g ) | 532 weeks) <br> PO 6 h for 48 h , then 500 mg PO 8 h for 5 days) <br> 250 mg PO every 6 h for 10 days |
| $\mathrm{RCOG}(\mathrm{UK})$ | Penicillin <br> Erythromycin (may be used if allergic to penicillin) <br> IAP regime for GBS colonized women: benzylpenicillin ( 3 g IV and 1.5 g 4 -h until delivery) or clindamycin ( 900 mg IV 8-h) if allergic to penicillin; alternative vancomycin by resistant | For 10 days |
| SOGC <br> (Canada) | Ampicillin erythromycin (alone if allergic to penicillin) IAP regime for GBS colonized women: <br> penicillin G 5 million units IV, then 2.5 million 4 $h$ instead of ampicillin or cefazolin ( 2 g IV then 1 g IV 8 h ) if penicillin allergic but not at risk of anaphylaxis or erythromycin ( 500 mg I every 6 h ) or clindamycin ( 900 mg IV every 8 h ) if penicillinallergic and at risk of anaphylactic shock | 2 g IV every 6 h for 48 h and amoxicillin 250 mg PO and/or every 8 h for 5 days 250 mg I every 6 h for 48 h followed by 333 mg PO every 8 h for 5 days or 250 mg PO every 6 h for 10 days |

Table 2: Management of PPROM by gestational age ${ }^{11}$

| Gestational Age | Management |
| :---: | :---: |
| 34 weeks or more | Plan delivery: Labor induction unless contraindicated Group B Streptococcal prophylaxis <br> Single corticosteroid course up to $36^{67}$ weeks |
| 32 weeks <br> to 33 <br> completed <br> weeks | Expectant management <br> Group B Streptococcal prophylaxis single corticosteroid course <br> Antimicrobials to prolong latency ${ }^{11}$ |
| 24 weeks <br> to 31 <br> completed <br> weeks | Expectant management <br> Group B Streptococcal prophylaxis single corticosteroid course <br> Tocolytics: no consensus Antimicrobials to prolong latency Magnesium sulphate for neuroprotection may be considered |
| Before 24 weeks | Patient counseling <br> Expectant management or induction of labor Group B Streptococcal prophylaxis is not recommended |

the patient or the couple must be involved in the plan of the management because not only the risk involved to the baby but also the cost involved is extremely important

- In women who have PPROM and are in established labor or having a planned preterm birth within 24 h , intravenous magnesium sulfate should be offered between $24+0$ and $29+6$ weeks of gestation (Grade A). ${ }^{13}$


## CONCLUSION

Accurate diagnosis of PROM in term and preterm pregnancies is important for gestational-age-
specific intervention and management. Early detection and diagnosis of PPROM are of utmost importance. It is also vital to identify potential risk factors for PPROM. A single most important risk factor is infection.

The use of Co-amoxiclav should be avoided. As per the available evidence, erythromycin is the antibiotic of choice for PPROM Magnesium sulfate should be offered for fetal neuroprotection.

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# Live Operative Workshop held on 27th November 2022 jointly by MOGS, AFG and SOVSI 

TThe Association for Fellow Gynecologists in association with MOGS and SOVSI (Society of vaginal surgeons of India) had organized a live operative workshop on 27 th of November 2022 from moming $8: 30 \mathrm{am}$ to $5: 00 \mathrm{pm}$ at the Bharat Ratna Dr. Babasaheb Ambedkar Municipal Hospital Kandivali, Mumbai in the presence of many renowned Obstetricians and Gynecologists.

Inauguration of the event happened in the august presence of Dr. Shirish Sheth (Past President, FIGO, FOGSI and MOGS), Dr. P C Mahapatra (Past President, FOGSI), Dr. Hara Patnaik with Dr. Raju Sahetya (President), Dr. Nitin Shah (Secretary), Dr. Anurag Bhate (Treasurer), Dr. Rajendra Saraogi (well Known Gynecologist and Infertility Specialist), Dr. Niranjan Chavan (President, MOGS and Convenor), Dr. Nimish Tutwala (Convenor), Dr. Mohan Gadam (well Known and highly experienced Gynecologist).
Surgeries which were demonstrated live at the workshop included:

Obstetrics:

1. Brace Sutures (B-Lynch, Hayman's, Cho's)
2. Systemic De-vascularization,
3. Forceps Delivery at Cesarean Section,
4. C Section - Uterine Artery compression Stitch for Placenta Previa

## Gynecology:

1. Non-Decent Vaginal Hysterectomy with salpingectomy in previous 2 LSCS
2. Hysterectomy with Energy Sources,
3. Non-Decent Vaginal Hysterectomy with
salpingectomy in bulky uterus, clamp less
4. Sacro-spinous fixation,
5. Colporrhaphy and Colpoperineorrhaphy in third degree perineal tear,
6. VH with high uterosacral suspension
7. McCall's Culdoplasty,
8. SUI Repair TOT Repair)
9. NDVH in bulky uterus

## Operative Faculty:

1. Dr. Shirish Seth: Consultant at Breach Candy Hospital, Saifee Hospital and Sir Hurkisondas Hospital Mumbai.
2. Dr. P C Mahapatra: Past President of FOGSI and Director at Prachee Institute of Mother and Child Care.
3. Dr. Ramkrishna Purohit: Inventor of Purohit Technique of Vaginal Hysterectomy
4. Dr. Hara Patnaik: Renowned Gynecologist at Cuttack
5. Dr. Ashok R Anand: (well known for Dr Ashok Anand Stitch to minimize blood loss in cases of placenta previa.
6. Dr. Mukesh Rathi: well-known Gynecologist
7. Dr. R M Saraogi: well-known Gynecologist and Infertility Specialist
8. Dr. Mahesh Asher: Infertility Specialist at Lavmi Advance Women's care Centre
9. Dr. Mohan Gadam: well-known and highly experienced Gynecologist
10. Dr. Nimish Tutwala: Gynecologist at Sai

Swayam Maternity \& Nursing Home
11. Dr. Ankesh Sahetya: Gynecologist and infertility specialist
12. Dr. Ramchandra Gite: well Known Gynecologist at Navi Mumbai

Co-ordination with OT was done in an excellent
manner by Dr Motwani, Dr Rajkumar Shah, Dr Nikhil Datar, Dr Arun Nayak, Dr Urmila Surekha and Dr Komal Chavan

This event received a massive response with a total of 119 registrations and took place with great enthusiasm.

Glimpses of the Morning session:


Glimpses of Inauguration:



Gynaecologists

(b) (D) (3)



# Report of MOGS FOGSI Respectful Abortion Care CME held on 29th November 2022 

The MOGS FOGSI Respectful Abortion Care CME was conducted online on Tuesday, 29 th November, 2022 between 4 to 6 pm . The event was supported by FOGSI and was attended by about 20 gynecologists.

The program coordinators were Dr Parikshit Tank and Dr Pratik Tambe. We were privileged to have eminent FOGSI Office Bearers as faculty for the event. The program was accredited with 2 ICOG credit points.
The scientific proceedings began with a message from the MOGS President Dr Niranjan Chavan who introduced the Respectful Abortion Care program which was launched under the dynamic leadership of our Immediate Past President of FOGSI Dr Shanthakumari. This was conducted all over the country by FOGSI Societies. The conveners Dr Parikshit Tank and Dr Pratik Tambe welcomed the delegates and thanked the MOGS Office Bearers for the opportunity to conduct this event. This is a standardized program with a prepared set of slide presentations which were delivered by key faculty as per the FOGSI guidelines regarding the same. The Master of Ceremony was Dr Jagruti Ghosh.

Our chairpersons for the first session were Dr Pratik Tambe and Dr Ameya Purandare. The first speaker was Dr Parikshit Tank, Co-Convener and Treasurer FOGSI who elucidated the Recent Amendments in the MTP Act. Dr Krishnakumari, Past President OGSH spoke on Safe Abortion where she highlighted the techniques prescribed by WHO on the subject.

The Chairpersons for the second session were Dr Komal Chavan and Dr Priti Vyas. Dr Laxmi Shrikhande, Chairperson ICOG spoke on the WHO SAVER Toolkit on Safe Abortion Values which illustrated the concept with a number of beautiful
videos. The final speaker was Dr Kiranmai D, FOGSI Chairperson for No to Violence Against Women Committee who gave important tips on Pre and Post Abortion FP Counselling.
The Vote of Thanks was proposed by Dr Pratik Tambe. The various issues regarding safe abortion techniques, the legal changes in the amended MIP Act and the fact that in India abortion is still safe, accessible and permitted by law were highlighted by the speakers and were much appreciated by the audience. The pre-test and post-test questionnaires were administered to the attendees as per the protocol.
We would like to thank the MOGS and the Office Bearers, our esteemed President Dr Niranjan Chavan and Secretary Dr Rajendra Sankpal for this opportunity, the close cooperation by the UNICEF team and Mr. Ajey Bharadwaj for his guidance.



## Sudoku

## by Dr. Shreya Kampoowale and Dr. Shruti Rane

| 3 |  | 5 | 4 |  | 2 |  | 6 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | 9 |  | 7 | 6 |  | 1 |  | 8 |
| 6 |  |  | 1 |  | 3 | 2 | 4 | 5 |
|  |  | 3 | 9 |  |  | 5 | 8 |  |
| 9 | 6 |  |  | 5 | 8 | 7 |  | 3 |
|  | 8 | 1 | 3 |  | 4 |  | 9 | 2 |
|  | 5 |  | 6 |  | 1 | 4 |  |  |
| 2 |  | 5 | 4 | 9 |  | 7 |  |  |
| 1 | 4 | 9 |  |  | 7 | 3 |  | 6 |

## FOGSI JOGI MOGS PICSEP Workshop 2022 held on 5th December 2022, organised by MOGS.

The Mumbai Obstetrics \& Gynaecological Society organized 'FOGSI JOGI MOGS PICSEP WORKSHOP' on 5th DECEMBER 2022 from afternoon $12: 00 \mathrm{pm}$ to $5: 30 \mathrm{pm}$.

This event was held at Main Auditorium, 3rd Floor, College Building, Lokmanya Tilak Municipal Medical College and General Hospital, Sion, Mumbai in the presence of many renowned Obstetricians and Gynaecologists. It was a wellorganized and executed event with Key Speakers followed by a quiz competition.

The conference was inaugurated by Dr Mohan Joshi (Chief Guest and Dean of LTMMC \& GH),

Dr. Hrishikesh Pai (Guest of Honor and President of FOGSI), Dr. Niranjan Chavan (President of MOGS), Dr. Geetha Balsarkar (Editor-in-Chief, JOGI), Dr. Arun Nayak (Head of Department, OBGY at LTMMC and GH), Dr. Madhuri Patel (Secretary General, FOGSI), Dr. Suvarna Khadilkar (Deputy Secretary General, FOGSI) and Dr. Pradnya Changede (Secretary \& Manager, JOGI) with the lamp lighting ceremony. It was attended by 119 Obstetricians and Gynecologists which included 33 faculty and 86 postgraduate students. MMC Observer for this event was Dr. Shivaji Kachare.

1. The event started with an introduction to the workshop by Dr. Pradnya Changede (Secretary \& Manager, JOGI).
2. Dr Arun H Nayak (Professor and Head of Department, OBGY at LTMMC and GH), delivered a lecture on 'Selection of Topic for Research' which was chaired by Dr. Niranjan Chavan (President of MOGS and Professor and Head of Unit, OBGY at LTMMC and GH)
and Dr. Nitin Karnik (Head of Department, Medicine at LTMMC and GH).
3. The next session was by Dr. Sujata Dalvi, Consultant Bhatia Hospital, Secretary AMOGS, on 'Types of Studies in Research' which was chaired by Dr. Rahul V Mayekar. (Head of Unit, Department of OBGY at LTMMC and GH).
4. Dr. Madhuri Patel, Secretary General, FOGSI spoke on the important topic of 'The Art and Science of Scientific Writing'.
5. Dr. Geetha Balsarkar, (Treasurer, MOGS and Editor in Chief JOGI) then delivered a talk on 'The Other Side: What Reviewers and Editors Want' which was chaired by Dr. Swati Manerkar (Head of Neonatology) and Dr. Amarjeet Bawa (Associate Professor in Department of OBGY at LTMMC and GH).

This was followed by the inauguration ceremony and lunch.
6. There was an enlightening session on 'Overview of Evidence-Based Medicine and Relevance to Practice' by Dr. Komal N Chavan which was chaired by Dr. Paras Kothari (Head of Department of Pediatric Surgery at LTMMC and GH) and Dr. Shruti Bhoyar (Head of Unit of Department of OBGY at LTMMC and GH)
7. Dr. Suvarna Khadilkar thenspoke on asessionon 'Ethical Principles in Guiding Research' which was chaired by Dr. Shailesh Kore (Professor, Department of OGBY,TNMC), Dr. Archana Bhosale (Associate Professor, Department of OBGY), and Dr. Deepali Kapote (Associate Professor, Department of OBGY).
8. Mrs. Vasumathi Sriganesh then had an illuminating session on 'Literature Search and Referencing' which was chaired by Dr. Shailesh Kore (Professor, Department of OBGY, Nair Hospital), Dr. Reena Wani (Professor, Head of Department, OBGY, R. N. Cooper) and Dr. Prasad Deshmukh (Assistant Professor, Department of OBGY, LTMMC and GH).
9. Dr. Anahita Chauhan then took a session on ‘Critical Evaluation of Journal Article - Use of PICO Tool' which was chaired by Dr. Swati Gawai (Assistant Professor, Department of OBGY, LTMMC and GH) and Dr. Shweta Khade (Assistant Professor, Department of OBGY, LTMMC and GH).
10. The last session was delivered by Dr. Pallavi Shelke (Department of PSM, LTMMC, and GH) on 'Basics of medical statistics' which was chaired by Dr. Seema Bansode (Head of


Department, PSM, LTMMC, and GH) and Mr. Kiran Jagtap (Biostatistician, Department, PSM, LTMMC, and GH).

An interesting and thoughtful quiz was organized at the end of the event by Dr. Gaurav Desai (Assistant Professor, Department of OBGY, KEMH). Winners of this competition were as follows:

First Prize: Dr. Manan Boob, Second Prize: Dr. Soham Gholba, and Third Prize: Dr. Sumedha Pathade, were announced at the end of the event.


# Report on Diabetes Research and Solutions Conference in collaboration with MOGS \& IMA (Mumbai West) held on 13th November 2022 

TThe HAPO Symposium (Hyperglycaemia in Pregnancy) a Diabetes Research and Solutions conference was held on day 2 of the conference ( $13 / 11 / 22$ ) at The Club, Andheri from 9.00 am to 10.00 pm . This was a conference by Mumbai Diabetes care foundation in collaboration with MOGS and IMA (Mumbai west). This was a hybrid program and was live streamed with 1000 active logins from all over the nation.

This symposium was chaired by Dr Kulin Shah and Dr Shreya Prabhoo.

The first talk was given by Dr Komal Chavan on Screening and monitoring for Diabetes in Pregnancy - What do Obstetricians Do? The talk was elaborate and informative and was very well taken by the audience with the conference hall being full on a Sunday morning.

The second talk was given by Dr Benny Negalur, Diabetologist and a consultant physician from Thane on preparing a woman with Diabetes for pregnancy. The third talk was given by Dr Usha

Sriram, an Endocrinologist from Chennai on Controversies and Consensus in GDM. Both the talks were lucid and the speakers emphasised important points in the management of diabetes in pregnancy.

The fourth talk was by Dr Bhumika Kotecha Mundhe on peripartum management of pregnancy and Diabetes. The topic was covered with good take-home messages and practical tips in regards to management and was very interactive with the audience too.

The fifth talk was by Dr Shilpa Joshi, a dietitian and diabetes educator from Mumbai. She spoke on medical nutrition therapy in GDM Her talk aptly covered the nutritional aspect in the management of GDM patients.

At the conclusion of the session, the organiser's team Dr Manoj Chawla, Dr Purvi Chawla and Dr Ketan Mehta thanked MOGS President Dr Niranjan Chavan, Secretary Dr Rajendra Sankpal \& Treasurer Dr Geetha Balsarkar for the collaboration.


## Report on IAVA World Congress 2022 on Functional and Aesthetic Gynaecology in Association with MOGS held on 9th December 2022

IAVA World Congress 2022 on Functional and Aesthetic Gynaecology in association with MOGS was a very memorable event.

The main headings of topics covered were Pelvic Floor, Urinary Incontinence, Sexual Dysfunction, Menopause and the newer modalities to treat them along with the established older methods. These newer modalities included surgeries and non-surgical methods like Energy Based Devices: Radiofrequency and Lasers, HIFEM Devices, PRP, Botulinum Toxin, Peels etc.

Newer topics in the mixed bag were Instagraming for gynaes, V-NOTES, Vaginal Colposcopy, etc.

International and national faculties (from so many parts of the country), each a stalwart in their own field were a part of this program. Once the delegates

came in, they were glued to their seats and many stayed till the end.

There were 5 Live Demos of procedures (which is not ususal for Aesthetic Gynae) and 2 Panel Discussions.

There were 3 Pre-Congress Workshops on Radiofrequency, HIFEM Chair, PRP and Diode Laser which were well attended.

Dr. Hrishikesh Pai, President FOGSI, Dr. Niranjan Chavan, President MOGS, Dr. Mandakini Megh, President ICOG, Dr. Prabhu Mishra, President IASRM were involved in the inauguration, along with Dr Sejal Ajmera, President IAVA.

The dinner at Soho House was super fun.
It was 3 days of intense Academic Feast.



# FOGSI presents Modern Approaches to Gynaecology and Obstetrics (FEMTEK-1) held on 22nd October 2022 with MOGS. 

The FEMTEK-1 was a super successful Gala Event, a mix of academics, fellowship, and fun. A Galaxy of Stalwarts witnessed the Grand Installation ceremony of a great Visionary and a great Human being, Dr Hrishikesh Pai sir as the 61st FOGSI President with his new team at Hotel St. Regis Mumbai. We had Aditi Golvitrikar as MOC, Karishma Kapoor \& Lara Dutta as Chief Guests \& Poonam Dillon \& Padmini Kolahapure as Guests of Honour from Bollywood. Glimpses of the grand show.



FEDERATION OF OBSIETRIC G GYMAECOLOGICALSICS [FEMTEK-1] EXKARAHHALL MAGO



# FOGSI Presidential CME (Karyashala) in association with MOGS held on 29th January 2023 

FOGSI Presidential CME (Karyashala) in association with MOGS

Venue: Hotel Courtyard by Marriot, Andheri East, Mumbai.

Date and time: 29/01/2023 • 8.00am -2.00pm
Conveners:
Dr Bela Bhatt, Chairperson FOGSI Imaging Science Committee.

Dr Charulata Bapaye, Chairperson Study of Female Breast Committee.

Dr Supriya Jaiswal, Chairperson Adolescent Health Committee.

MOC: Dr Parzan Mistry, Dr Shruti Thar
Educational grants from Alembic Pharma
Session 1:
Chairpersons: Dr Saraogi, Dr Urmila Sureka,
Dr Minaxi Nagvekar

- Anaemia in Pregnancy

Dr Rohan Palshetkar

- Management of PPH

Dr Komal Chavan

- Prediction \& Prevention of Preterm Labour Dr Ameya Purandare
Session 2:
Chairpersons: Dr Rajkumar Shah, Dr Rupali Dharwadkar, Dr Jyotsna Patel,
Dr Priti Vyas
- Adolescent Sexuality

Dr Supriya Jaiswal

- Adolescent AUB

Dr Parag Biniwale

- PCOS in Adolescents

Dr Sujata Dalvi

Lighting of Lamp with address by FOGSI President Dr Hrishikesh Pai, Secretary General Dr Madhuri Patel \& MOGS President Dr Niranjan Chavan.

Session 3:
Chairpersons: Dr Dhrupti Dedhia, Dr Deepali Saboo, Dr Suruchi Desai

- Non-immune Hydrops Fetalis - Changing Scenario
Dr Bela Bhatt
- Evolving Structural Abnormalities Dr Pooja Vazirani
- Fetal Therapeutic Interventions Dr Priya Deshpande
Session 4:
Chaippersons: Dr Rajkumar Shah, Dr Siddesh Iyer
- Breastfeeding: Mothers with special needs Dr Madhuri Patel

Panel : Breast Dialogues
Moderators: Dr Sneha Bhuyar, Dr Charulata Bapaye Expert: Dr P.K.Shah

## Panelists:

Dr. Ameya Purandare, Dr Pradnya Changede
Dr Priya Vora, Dr Karishma Kirti,
Dr Rashmi Parikh.
Total attendance: 80
Highlights of the programme
Excellent academic sessions were appreciated by each \& every delegate. Presence of FOGSI President Dr Hrishikesh Pai \& MOGS President Dr Niranjan Chavan was like icing on the cake! Conveners thanked the President FOGSI Dr Hrishikesh Pai, MOGS President Dr Niranjan Chavan \& all the faculties \& delegates.



# MOGS Republic Day Celebration at The Cama and Albless Hospital on 26th January 2023. 

The event was attended by Convener Dr. Tushar Palve, MS Cama Hospital, Dr. Niranjan Chavan (Chief guest; President MOGS \& Professor and Unit Chief LTMMC \& GH), Dr. Madhuri Patel (Guest of honour and Secretary General FOGSI). Other dignitaries were Dr. Komal Chavan, Dr. Ameya Purandare, Dr. Shrutika Thakkar, Dr. Sujata Dalvi along with CAMA Hospital faculty, staff, paramedical staff, class 4 employees and security force and commandos.
The event started with hoisting done at 7:55 am; following which the digitaries were welcomed by Dr. Tushar Palve. It was a well organised and executed event which included singing and dancing on patriotic songs by the paramedical staff, speeches by the dignitaries and felicitation of, paramedical staff, class 4 employees and security force and commandos.





# MOGS DR. N A Purandare Teaching Program at Seth GSMC and KEM Hospital held on 13th January, 2023 

MOGS Dr. N A Purandare teaching program webinar was conducted on virtual platform on Friday, 13th January, 2023 from 5:00 to 8:00 p.m The convenor for this webinar was Dr Gaurav Desai, managing committee member MOGS.
Master of ceremony was Dr Akriti Saxena, Asst Prof KEM hospital. This webinar was meant
to educate the students and residents in medical colleges and postgraduate institutes on case scenarios in OBGYN as well as instruments, drugs, specimens and table viva.
Session 1 was an obstetric case on Autoimmune disorders in Pregnancy which was presented by Dr Mukulika Sharma and Dr Janvi Josan. Chairpersons for this session were Dr Varsha Nimbalkar and Dr Prachi Patil. The expert faculty examiners for this session were Dr

Padmaja Samant, Dr Anjali Rajadhyaksha and Dr Kimaya Mali.
Session 2 was a gynaec case on Gestational Trophoblastic Disease. This case was presented by Dr Parimal Udapurkar and Dr Ayushi Kanoi both final year residents in the department of


OBGYN. Examiners for this session were Dr Ching Ling Yi, Dr Hemangi Chaudhari and Dr
Anahita Chauhan Chairpersons for this session were Dr Priyanka Rane and Dr Ankita
Mathur.
Session 3 consisted of a table viva on instruments in OBGYN, drugs and specimens in
OBGYN as well as NST and CTG analysis. Chairpersons were Dr Rani Daruwale and Dr
Nazreen Bilagi. Resident doctors were Dr Sanchari Pal, Dr Anushka Mehta and Dr Minal
Tibrewal. Examiners for this table viva were Dr Niranjan Maydeo, Dr Ajit Virkud and Dr
Reena Wani.
The discussions were very educational and all viewers and participating residents appreciated the knowledge the experts shared.
We the faculties and convener would like to thank MOGS team, President Dr.Niranjan Chavan,
Dr RajendraSankpalSecretary \& Dr.Geeta Balsarkar Treasurer .
Total registrations were 569.


# Academic Events in the New Year-2023 Highlights 

Inauguration of AICOG 2025 stall at AICOG 2023, Kolkata.


MOGS Dr. N A Purandare teaching program webinar was conducted on a virtual platform in collaboration with Seth G.S Medical College and KEM Hospital Mumbai.


Dr. N A Purandare Teaching Program- online webinar held on 14th January 2023 in association with Masina hospital

The Mumbal Ohstetric \& Gynaecological Society Dr. N. A. Purandare Teaching Program In Association with - Masina Hospital
Soturder 14" January 2023 / $5.00 \mathrm{pm}-9.00 \mathrm{pm}$




## SCIENTIFIC PROGRAMME



## SESSION 1-CASE PRSENTATION - [LONG CASE]






## Stssion 2-CAPSULES


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SESSION 3-CASE PRESENTATION - [LONG CASE]
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SESSION 5 - CASE PRESENEAIION - (SHORT CASE)


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'Basics in OBGY' MOGS outreach program held on 15 January 2023 at Lavender bough, Banquet Hall Ghatkopar West Mumbai.


MOGS Outreach Program held on 21st January 2023 in association with Fortis Hospital.


MOGS Cyclothon 2023 -An Awareness Drive for prevention of Cervical cancer, Anemia and PIH arranged on 29th January 2023.


FOGSI Presidential CME held on 29th January 2023


## Forthcoming Events



Sir H. N. Relliance Foundation Hospital

## The Mumbai Obstetric \& Bynaecological Society



## RECEWTADAVACES S INFRETTLITYCME

2nd February 2023 | $2.00 \mathrm{pm}-5.00 \mathrm{pm}$
Verue: Cowrention Certec, 1st Floce, Kapol Nivas
Sir. H. N.Reliance Foundation Hospital, GIrgson, Mumbai- 400004





## Forthcoming Events

## MOGS - GOLDS 2023

## $51^{\text {ST }}$ Annual Conference of MOGS

(Gynaecology \& Obstetric Learning Dilemmas solved)


Theme Subjects
= Minimal Access Gynaecological Surgeries

- Emergency \& Operative Obstetrics
- Modern Technology in Fertility Control
- Miscellaneous


## Five Orations

- Dr. M D Adatia Oration
= Dr. Shradhanand Thakur Oration
- Dr. Subhash J Penkar and Dr. Marie Pereira sitver Jubilee Oration
- Dr. Usha Krishna Oration
- MOGS Presidential Oration

Congress Highlights

- MOGS Dr. Shirish Sheth Workshop on Petvic Floor
- MOGS Dr. Ganatra Trust CME
- MOGS Dr. K Sankari Symposium



## Gynaecology Crossword by Dr. Manan Boob and Dr. Darshana Ajmera



Across
2. Modulator of the biochemical activity in tissues
6. Oxygen deficiency
11. Destroyed by means of an electric current
13. Period of development from fertilization to birth
15. A bacterium that causes one of the most prevalent sexually transmitted diseases
17. Voluntary prevention of pregnancy prescriptions
18. To rupture during labor when your water doesn't break
19. Painful intercourse
20. Usual method for calculating expected date of birth

## Down

1. Expansion of an orifice or organ
2. A biopsy of the uterine cervix using an instrument
3. Inherited blood disorder that may shorten life span
4. Delivery of the fetus through surgical incision into the uterus
5. Vaginal discharge appears during postpartum puerperium
6. Being born with existing at time of birth
7. Cysts on the ovaries
8. A women pregnant for the first time
9. Painful menses
10. Emergency contraception also called preven or plan B 16. Complication of pregnancy that includes general edema, hypertension and proteinuria

Word Bank

Amniotomy
Cervical punch biopsy
Dysmenortheal
Gestation
Postcoital

Fulgurated
Cesarean section
Dilation
Hypoxia
Primigravida

Lochia
Chlamydia Dyspareunia Nagele's Rule Prostaglandin

## Contraception

Congenital anomalies
Eclampsia
Polycystic
Sickle cell anemia

## Gynaecology Crossword Answer Keys

## Across:

2. Prostaglandins
3. Hypoxia
4. Fulgurated
5. Gestation
6. Chlamydia
7. Contraception
8. Amniotomy
9. Dyspareunia
10. Nagele's Rule

Down:

1. Dilation
2. Cervical Punch Biopsy
3. Sickle cell anaemia
4. Cesarean section
5. Lochia
6. Congenital Anomalies
7. Polycystic
8. Primigravida
9. Dysmenorrhea
10. Post coital
11. Eclampsia

## Sudoku Answer Key

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| 7 | 2 | 3 | 9 | 1 | 6 | 5 | 8 | 4 |
| 9 | 6 | 4 | 2 | 5 | 8 | 7 | 1 | 3 |
| 5 | 8 | 1 | 3 | 7 | 4 | 6 | 9 | 2 |
| 8 | 5 | 7 | 6 | 3 | 1 | 4 | 2 | 9 |
| 2 | 3 | 6 | 5 | 4 | 9 | 8 | 7 | 1 |
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## MOGS Quiz Answer Key

Quiz Answer Key

1. b
2. b
3. a
4. a
5. $a$


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## MOGS ACADEMIC PARTNERS

## PLATINUM



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## DIAMOND



## GOLD

## AstraZeneca

SECRETARIAT


## Mumbal Obstetrics \& Gynecological Society


[^0]:    Dr. Niranjan Chavan
    President, MOGS

