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## **Sunflower Women's Hospital**

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# PRESIDENT'S MESSAGE



Dr. Kamini Patel President

<u>Moksha –It is believed that visiting char dham helps</u> <u>achieve Moksha (Salvation). Chota Char Dham are</u> <u>Yamunotri, Gangotri, Kedarnath and Badrinath.</u> <u>We are blessed to have visited these places and encountered</u> <u>the beautiful nature.</u>

Dear AOGS Members, let me pen down to you my recent visit to Char Dham.

I, have lived and passed on various generation but have never felt so peaceful and relaxed. Amidst, Chardham, Kedarnarth intrigues me the most. Shri Kedarnath sits in the Rudraprayag district in the lower Himalayan range of Garhwal near Mandakini River. It is said that this is the same place where Pandavasworshipped to Shiva to atone their sins of committing Gotra Hatya. In the black stoned wall are engraved sculpture of Pandavas, Draupadi and Kunti. Huge Nandi facing shreekedarnath and amidst could see the pyramid shaped stone in the garbh. Never forgettable reflection from 11jyotirlings. Temple heights 3585 meters. Earliest reference is Skanda Purana (7th and 8th century) in the story of Ganga. Kedarnath Purohits are the ancient Brahmins who were given the rights to worship by the ancestors of Pandavas - King Janamajaya.

I, strongly believe thathumans are meant to complete the journey predestined to them, the only thing in our hand is to make this journey as beautiful as we can. At the end, we are only left with the memories and nothing else.

*"From the brain and brain only, arise our pleasures, joys, laughter and jests, as well as our sorrows, pains, grief and tears..."* 



Dr. Nita Thakre Hon. Secretary

Dear friends,

Let me take the opportunity to highlight the leading Urogynecological issue that female across the world is suffering from! June month is the month of creating awareness for the same.

#### World Continence Week (WCW)

is a health campaign run by the International Continence Society (ICS) every year to raise awareness of incontinence related issues.

This year World Continence Week is taking place **between 20-26 June**. Throughout the week various organisations highlight the impact urinary incontinence can have on our lives and encourage those living with incontinence to seek help so they no longer have to suffer in silence.

WCW was initiated at ICS 2008 in Cairo with the first ever World Continence Day. This became World Continence Week (WCW) in June 2009 with activities being developed worldwide.

World Continence Week is always held from Monday to Sunday in the last week of June, although variations can be made to suit a country's circumstances.

Incontinence is the unwanted and involuntary leakage of urine or stool. Incontinence is a sensitive condition that affects an estimated 400 million people across the world. Historically, conditions affecting the bladder and bowel have often been uncomfortable or "taboo" subjects and accordingly these medical disorders have been underreported and underdiagnosed. Surveys have shown that fewer than 40% of persons with urinary incontinence mention their problem to a doctor and this figure is even higher for those with bowel incontinence. These conditions have been inadequately treated and poorly addressed by medical professionals, despite the substantial impact on individual health, self-esteem and quality of life.

In light of this, WCW seeks to draw attention to and increase public awareness about these conditions and to give sufferers the confidence to seek help and improve their quality of life.

#### Vision of World Continence Week

- Globally facilitate continence awareness and promotion to improve health, wellness and quality of life.
- Provide a reputable forum for those seeking information on Continence Promotion and therapies.
- Create a worldwide network of events and organisations that will be recognised as leading authorities of Continence and Bladder and Bowel Health information.
- Further establish Continence Awareness and promote a multi-disciplinary approach to treatment.

WCW Events have been held around the world including the USA, China, Singapore, Poland, Slovakia, New Zealand and Germany.

#### Let us contribute in our small little way to help these sufferers ! I am going to do my bit ! Are you?



HON.SECRETARY'S MESSAGE

## PAST PROGRAMME

## Rally to Protest Against B.U. Permission & Halla Bol Rally



## NMC Regulations Draft 2022

The National Medical Commission, on 23rd May 2022, has released a 104 page long Regulations draft regarding the Conduct of Registered Medical Practitioners in India.

As per the NMC, there are to be Restrictions on the following:

- 1. NO to online consultation or prescription.
- 2. No to sharing feedback on doctor in his review page
- 3. No to sharing post-op patient feedback.
- 4. No to sharing surgical video on social media.
- 5. No marketing and increasing visibility in medical consultation apps like Practo etc
- 6. Doctor returning from Foreign University where MBBS is mentioned or equivalent as MD, cannot be mentioned as MD in India. Unless they complete FMGE and obtain a MD Degree separately in India.
- 7. Ayurvedic medicine doctors cannot practice allopathy treatment
- 8. For Telemedicine practice written consent a must (digital signature)
- o Below 18 years consent from parents or guardians is compulsory.
- o Expert opinions given by doctors by telemedicine must be correct and accurate. Not misleading.
- o NO interaction or discussion about treatment on social media.
- o Doctors cannot post reports or images of patients on social media

## PAST PROGRAMME

## I CARE for Contraception - Date : 7th June 2022



## Saving Mothers Operative Obstetrics - Date : 9th June 2022

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PAST PROGRAMME



## AHMEDABAD OBSTETRICS & GYNAECOLOGICAL SOCIETY





## ANDROLOGY WORKSHOP

## Date : 12th June, 2022 I Vanue : Hotel Hyatt, Vastrapur Lake, Ahmedabad





President Dr. K. D. Nayar

Secretary General Dr. Surmeen Ghumman



Addi. Jt. Secratary Dr. Jayesh Amin



AOGS President Dr. Kamini Patel



AOGS Hon. Secratary Dr. Nita Thakre



SIG Andrology Dr. Venugopal



SIG Andrology Dr Vineet Malhotra



Sec. IFS Gujarat Chapter Dr. Kokila Desai



Program Organiser Dr. Paresh Makwana

## PROGRAMME Coordinator : Dr. Shashvat Jani

Time Topic **Speaker** 9.00 am - 09.20am Registration Inauguration 9.20 am - 09.40 am Dr. Jayesh Patel, Dr. Parth Shah **Chairpersons:** 09.40 am - 10.05 am Semen collection and preparation **Dr. Nancy Sharma** 10.05 am - 10.30 am Semen Examination Past Present and Future **Dr. Hetal Shukla** 10.30 am - 10.55 am Sperm Function Test and its Interpretation Dr. Deven Patel 10.55 am - 11.05 am Discussion Chairpersons : Dr. Nisarg Dharaiya, Dr. Arti Gupte 11.05 am - 11.30 am Individualized Stimulation Protocol in IUI Dr. Paresh Patel 11.30 am - 11.55 am Dr. Paresh Makwana Semen Cryopreservation 11.55 am - 12.10 pm **Optimizing IUI Success Rate** Dr. Venugopal 12.10 pm - 12.25 pm Unexplained Infertility **Dr. Jayesh Amin** 12.25 pm - 12.40 pm Dr. Vineet Malhotra Managment of Azoospermia 12.40 pm - 01.00 pm Discussion 01.00 pm - 02.00 pm Lunch 02.00 pm - 04.00 pm Semen Analysis | Semen Preparation | At Wings Hospital









PAST PROGRAMME

ANDROLOGY WORKSHOP Date : 12th June, 2022 I Vanue : Hotel Hyatt, Vastrapur Lake, Ahmedabad

























































## **CHARDHAM YAATRA**

So thank God.... With the kind blessing of Kedarnath bhagvan atmosphere became clear and my helicopter took off. Surprisingly Sun was shining and negligible chill. No rain. Atmosphere was hilarious. Even pilgrims were not in astounding number. So it hardly took 45 minutes for Darshan..accordingly our Hindu ritual I completed Pooja. So serene and I was full of vigor and blessed. I came back to hotel on time. Thrilled.... No words to express my happiness.

Baba kadarnath ni jai ho.

Kedarnath Mandir. To day I have completed Kedarnath dham yatra. With the kind grace of devo ke dev Mahadev I did not come across any difficulty. Beauty of Himalaya was in full swing. The beauty of Himalayas is in their unique RUSTIC, CALM, TRANQUILITY; AN UNPERTURBED NATURAL AURA. The name Himalayas was" HOUSE OF SNOW".

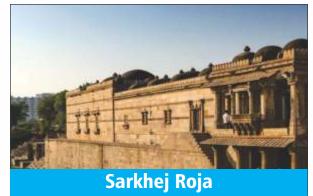
## - Dr. Mukul Shah



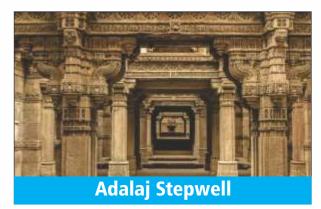
## MOST AMAZING PLACES TO VISIT NEAR AHMEDABAD WITHIN 50 KILOMETRES

Sometimes, you want to escape the city life and head out for a quick getaway from the city. If your starting base is Ahmedabad and you are looking to explore the surroundings for a one or half day trip, try visiting these awesome places to visit near Ahmedabad within 50 kilometres.

Places to Visit near Ahmedabad (within 50 kilometres)



The Sarkhej Roja mosque is a must visit for anyone who is interested in architecture and history. The mosque was constructed in true Islamic architectural style. While at the mosque, visit the iconic tombs and don't forget to check out the lovely cravings and symbolic inscriptions on them.



Situated in Adalaj, the Adalaj Stepwell is very historic. Built centuries ago, the place is a famous tourist attraction. Many visitors from Ahmedabad and other parts of India visit to check out the lovely artwork and construction of the well. The stepwell is five storeys deep, but you are only allowed to see the top half of the well.

Surrounding the well is a spacious open annexure that is ideal for picnics. In fact, many tourists come with picnic baskets to organize a picnic at the Adalaj Stepwell.



The Dandi Kutir is the world's largest museum dedicated to Mahatma Gandhi. The museum is a treasure trove of all things Gandhi. From his writings to artefacts from his life, the museum has it all.

They have a few shows based on the life of Gandhi screened daily at the museum, it is best to attend these for a better understanding of Gandhi. The best ones are the 3D hologram show and the 4D virtual reality show.



The Maniar's Wonderland is a nice place for a one-day family outing. The water park has amazing rides for the whole family, other fun things to do are adventure sports such as zorbing and the zip line and enjoying a few hours at the Snow World. At Maniar's Wonderland, there is also a large garden that is sometimes rented out for parties and weddings. Parking is available and there is a restaurant serving delicious food.



## **Indroda Nature Park**

This theme park is a good place for kids to learn about dinosaurs and wildlife. Divided into different sections, take the kids to the dinosaur park where they will see fossils, replicas of dinosaur eggs and figurines of the extinct animal. There is also an earth section where one can learn about the earth and rocks. The botanical section has a large variety of plants to explore. Inside the park, there is a

small section where a few peacocks and wild animals can be spotted.



The Thol Bird Sanctuary is not just a sanctuary, it is also a picnic spot and a nature trail. A favourite hangout spot for nature lovers, one can enjoy boating on the Thol Lake and birdwatching. Another cool activity to do at the sanctuary is going on nature trails.

There are some parts of the sanctuary that are ideal for open-air picnics, you will have to carry your own food as there is nothing available inside the Thol Bird Sanctuary. For the best experience, we suggest that you visit in the months between November to February.

## **IN A LIGHTER VEIN**



Please also subscribe to our YouTube channel for complete recordings of talks and orations.

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## **EVENTS CALENDAR JUNE**

•	5th June	:	Environmental conclave; online
•	17th to 19th June	:	FOGSI-ICOG Annual Conference: Googly: no talks, only discussion; Navi Mumbai
•	24th to 26th June	:	Controversies in Obstetrics & Gynecology; Jaipur
•	27th to 28th June	:	Training courses: Master certification in non-invasive cosmetic gynaecology / by ISAGSS; Dubai.

## **CUTTING EDGE MEDICINE**

# Latest medical innovations for 2022

Top clinicians and researchers present the medical advancements with the power to transform healthcare in the coming year

## Next Generation of mRNA Vaccinology

Advancements in the generation, purification and cellular delivery of RNA have enabled the development of mRNA vaccines across a broad array of applications, such as cancer and Zika virus infection. The technology is cost-effective, relatively simple to manufacture, and elicits immunity in a novel way. Furthermore, the emergence of the COVID-19 pandemic demonstrated that the world needed rapid development of a vaccine that was deployable around the globe. Because of previous research that laid the groundwork for this technology, an effective COVID-19 vaccine was developed, produced, approved and deployed in less than a year. This landscape-changing technology has the potential to be used to manage some of healthcare's most challenging diseases quickly and efficiently.

## PSMA-Targeted Therapy in Prostate Cancer

**PSMA**(Prostate Specific Membrane Antigen), an antigen found in high levels on the surface of prostate cancer cells, is a potential biomarker for prostate cancer. PMSA PET scans use a radioactive tracer to attach to PSMA proteins, which are then combined with CT or MRI scans to visualize the location of prostate cancer cells. When detected early by PSMA PET scans, recurrent prostate cancer can be treated through a targeted approach with stereotactic body radiation therapy, surgery and/or systemic therapy in a personalized manner.

## New Treatment for the Reduction of LDL

High levels of blood cholesterol, particularly low-density lipoproteins (LDL-C), are known to be a significant contributor to cardiovascular disease. In 2019, the FDA reviewed the application for inclisiran in treating primary hyperlipidemia in adults who have elevated LDL-C. In contrast to statins, it requires infrequent dosing (twice per year) and provides effective and sustained LDL-C reduction in conjunction along with statins.

## Novel Drug for Treatment of Type 2 Diabetes

One potential therapy is a once-weekly injectable dual glucose-dependent insulinotropic polypeptide (GIP) and glucagon-like peptide receptor agonist (GLP-1) that aims to control blood sugar. Injected under the skin, GLP-1 and GIP receptors cause the pancreas to release insulin and block the hormone glucagon, limiting blood sugar spikes after a meal.

## **Breakthrough Treatment for Postpartum Depression**

Experts believe the rate of postpartum depression could be at least twice as high as what current statistics reveal because many cases go undiagnosed. Currently, counseling and anti-depressant medications are the primary treatments but some women do not respond to these therapies. In 2019, the FDA approved an intravenous infusion treatment designed to treat postpartum depression specifically. This novel therapy, administered around the clock for 60 hours, uses a **neurosteroid Brexanolone**, to control the brain's response to stress. This treatment design is groundbreaking as it

targets the signalling thought to be deficient in hormone-sensitive postpartum depression. Additionally, this treatment appears to show benefits very quickly, while traditional anti-depressants typically take two to four weeks to have a significant effect.

## Non-Hormonal Alternatives for Menopause

A new group of non-hormonal drugs, called **NK3R antagonists**, have emerged as a viable alternative to hormone therapy. These drugs disrupt a signalling pathway in the brain that has been linked to the development of hot flashes and have shown promise in clinical trials for relieving moderate to severe menopausal hot flashes as effectively as hormones.

## AI for Early Detection of Sepsis

Sepsis is a severe inflammatory response to infection and a leading cause of hospitalization and death worldwide. Because septic shock has a very high mortality rate, early diagnosis of sepsis is critical. Diagnosis can be complicated because early symptoms are common across other conditions, and the current standard for diagnosis is non-specific. Artificial intelligence (AI) has surfaced as a new tool that can help rapidly detect sepsis. Using AI algorithms, the tool detects several key risk factors in real time by monitoring patients' electronic medical records as physicians input information. Flagging high-risk patients can help facilitate early intervention, which can improve outcomes, lower healthcare costs and save lives.

## **Predictive Analytics and Hypertension**

Using machine learning, a type of artificial intelligence, physicians are able to better select more effective medications, medication combinations, and dosages to improve control of hypertension. Al also will allow physicians to predict cardiovascular morbidities and enable physicians to focus on interventions before they occur. Predictive analytics equip providers with the key that could open the door to preventing hypertension and many other diseases.

## Artificial livers

With a shortage of liver donors, researchers supported by the NIHR Cambridge Biomedical Research Centre aimed to develop an alternative to transplantations.Malfunctioning bile ducts, which act as the organ's waste disposal system, are the cause of 70% of liver transplants in children, and a third in adults.The researchers used this technique to grow new 'mini-bile ducts' in the lab.Research showed that biliary cells from the human gallbladder could be converted into bile duct cells to replace and repair the damaged bile ducts.This is the first time a procedure of this kind has been used on human organs and this breakthrough could increase the number of suitable donor livers.This approach could also be applied to range of organs and diseases, to further accelerate cell-based therapy research.

## The super effective single-dose breast cancer treatment

Led by researchers at University College London in 2020, a pioneering breast cancer therapy was found to be as effective as conventional treatment – while taking just 30 minutes.

The study was funded by the NIHR's Health Technology Assessment Programme and Cancer Research UK, and involved 32 hospitals in ten countries.

Results confirmed the effectiveness of Target Intraoperative Radiotherapy (TARGIT-IORT), a treatment which is delivered directly after tumour removal and which acts as both surgery and radiation treatment

at once.TARGIT-IORT works via a small ball containing a single dose placed inside the breast.The conventional treatment for breast cancer – external beam radiotherapy (EBRT) – takes 3-6 weeks of daily treatment; TARGIT-IORT takes just 20-30 minutes.TARGIT-IORT also has fewer radiation-related side effects, a better cosmetic outcome and leads to a substantial reduction in deaths from causes other than breast cancer.

## Vocal biomarkers: identifying conditions from a conversation

"Computer, run a health check-up from my vocal input." This line might seem to have been lifted from a Star Trek script, but we are close to having such conversations with our computers. With A.I.-based techniques, symptom checker software can detect so-called "vocal biomarkers". By analysing a person's voice recording, the algorithm can discern differences between vocal patterns characteristic of certain diseases.

## A.I. in diagnostics: the physician's assistant

The pandemic highlighted A.I.'s potential in healthcare and the technology will continue to bring its disruptive force in this field. In 2022, we can expect more applications of A.I. in diagnostics beyond identifying COVID-19 from coughs.For instance, with dermatology apps like MiiSkin and Google's Derm Assist, patients can keep track of their skin lesions; receive regular reminders to monitor any suspicious lesions; and get recommendations as to when to have a specialist investigate further.

Clinicians as well will have A.I.-based tools to support diagnoses. PathAI is developing a system that uses digital pathology slides with A. I. technology to aid pathologists in making quicker and more accurate diagnoses. With deep learning techniques, Enlitic's software can flag radiology images with subtle suspicious signs earlier to speed up the workflow of practitioners and help save crucial time for patients.Now we even have companies like DeepMind using their A.I. to predict protein structure, a task that clinicians cannot accomplish themselves. This approach can help develop new cures for conditions with faulty proteins. Their A.I. previously helped predict the risk of developing acute kidney disease 2 days before it manifests based on patients' medical records and lab results.

With such potential across clinical practice, we should not be surprised to see new A. I. tools coming to the aid of doctors and patients alike.

## At-home testing kits: lab tests at your doorstep

One of the futuristic healthcare innovations that are the easiest to put into practice now is likely at-home testing. With a personal testing kit, one can measure a range of health parameters that used to be only available in laboratories.

From microbiome analyses to whole-genome sequencing, such at-home lab tests provide crucial, personalised health information in a private and convenient manner; while lifting off additional pressure on healthcare institutions.

In the near future, these tests could become as easy and accessible as pregnancy tests; cheap, simple enough to use at home, accurate and not requiring any technical knowledge.

## Sources: Cleveland Clinic/ National Institute of Healthcare Research/ Medical Futurist

## Compiled by: Dr Arati Gupte

## **ENDOMETRIOSIS AND INFERTILITY**



## **Dr. Azadeh Patel** MS Obs & GynecInfertility & IVF Specialist Consultant & Clinical Leader- ART Fertility Clinics Ahmedabad

Endometriosis is an estrogendependent benign inflammatory disease characterized by the presence of ectopic endometrial implants. It is a disease that most severely affects women ages 25–35 years and it has been estimated to affect up to 10–15% of reproductive aged women. The prevalence of endometriosis increases dramatically to as high

as 25%–50% in women with infertility and 30–50% of women with endometriosis have infertility. The overall incidence is on a rise.

#### Pathogenesis of Endometriosis:

The definite pathogenesis of endometriosis is still unknown. A number of theories including retrograde menstruation, altered immunity, coelomic metaplasia, and metastatic spread and genetic predisposition contributing to its pathogenesis.

#### Diagnosis:

Symptomsvaries from asymptomatic to classical symptoms.

Diagnosis by clinical examination – per vaginal/per rectal; diagnosis of deep endometriosis if painful induration/nodule in rectovaginal wall. The diagnosis can be made or confirmed by Ultrasound, especially transvaginal ultrasound,MRI and Laparoscopy.

On USG, the endometrioma can be unilateral or bilateral, unilocular or multilocular with thin or thick septations. It contains old blood hence it gives typical ground glass appearance with low levels of echoes, though it can be anechoic cyst or hyperechoic cyst. Sometimes they are adherent to the fundus of the uterus or if large enough can present as kissing ovaries. Adenomyosis of the uterus can be nodular (needs to be differentiated with fibroid) or globular. It is diagnosed by altered echoes in the uterine muscle, calcifications, uterine lakes and altered or irregular endometrial-myometrial junction.Diagnosis of minimal to mild disease –peritoneal implants is mainly by laparoscopy.

**rASRM classification:** Based on intraoperative disease findings, taking peritoneal endometriosis, ovarian endometriosis, posterior cul-de-sac obliteration, ovarian adhesions and tubal adhesions into consideration.

Revised American Society for Reproductive Medicine  $\left(\text{rASRM}\right)^{1}$  classification

Stage 1:	Stage 2:
<ul> <li>Minimal/mild endometriosis</li> <li>Isolated implants</li> <li>No significant adhesions</li> <li>Superficial implants &lt;5cms</li> </ul>	<ul> <li>Moderate endometriosis</li> <li>Multiple implants both superficial + deep, &gt;5cms peritubal + periovarian adhesion</li> <li>Small &lt;4cm endometrioma</li> </ul>
Stage 3:	Stage 4:
<ul> <li>Severe endometriosis</li> <li>Multiple superficial + deep implants</li> <li>Large ovarian endometriomas</li> <li>Elimey + dense adhesions</li> </ul>	<ul> <li>Advance + extensive endometriosis</li> <li>Rectovaginal infiltrates + frozen pelvis</li> </ul>

Flimsy + dense adhesions

**Endometriosis and infertility: Pathogenesis:** Inflammatory conditiondistorts normal reproductive anatomy; Affects follicular development and implantation. Causes ovulatory abnormalities & risk of luteinised unruptured follicle, luteal phase defect, abnormal follicle growth, premature LH surge, and impaired implantation.

#### In minimal or mild Endometriosis

- An abnormal high levels of cytokines in follicular environment,
- Increased apoptosis in granulosa cells
- An increased ability to phagocytose sperm by peritoneal macrophages
- A reduced rate of fertilization in women undergoing ART

 An impairment of implantation rates and endometrial receptivity owing to the local inflammatory state and to an excessive production of antibodies to endometrial antigens.

In moderate to severe Endometriosis additionally it might impair ovulation owing to pelvic adhesions and endometriomas, decreased ovarian reserve, affected tubal transport due to adhesions, and blockage of sperm migration. Management approach to the patient with infertility:

Counselling about the chances of pregnancy and threat to ovarian reserve is important. The fecundity rate in normal reproductive age couples without infertility is estimated to be around 15-20%, while it is just 2-10% in women with untreated endometriosis. A detailed workup is required which includes correct assessment of 1. Ovarian function –by Anti-mullerian hormone (AMH) and Antral Follicle Count (AFC), 2. Tubal patency and 3. Semen analysis.

The treatment modalities available are expectant, medical and surgical.

Based on the age of the patient, active married life and the assessment, an approach or plan for infertility can be made. Expectant management can be considered for 6-18 months if possible. Medical management for infertility treatment, has a limited role as most of the treatment will prevent ovulation. In case of spontaneous conception, Hughes et al. analysis showed that ovarian suppression [oral contraceptive pill (OCP), GnRH agonists, Medroxyprogesterone acetate, Danazol] is not recommendedfor infertility treatment<sup>2</sup>. The only role of medical management is when surgery cannot remove microscopic disease, hormonal treatments have been used to suppress disease and to prevent recurrence. For pregnancy, COH with IUI should be tried before considering IVF/ICSI. IVF/ICSI should be offered as a first line of treatment for infertility in patients with Grade 3/4 endometriosis, with poor ovarian reserve tests, or male/tubal factor.

In infertile women with endometriosis, the Guideline Development Group (GDG) -European society [ESHRE 2022]<sup>3</sup>; recommends not to prescribe adjunctive hormonal treatment before surgery to improve spontaneous pregnancy rates, as suitable evidence is lacking. Some other important considerations proposed are:

- Operative laparoscopy could be offered as a treatment option for endometriosis associated infertility in rASRM stage I/II endometriosis as it improves the rate of ongoing pregnancy.
- 2. In infertile women with rASRM stage I/II endometriosis, IUI with ovarian stimulation is recommended to increase pregnancy rates.
- 3. ART can be performed for infertility associated with endometriosis, especially if tubal function is compromised, associated male factor infertility, low AMH/AFC and/or if other treatments have failed.
- 4. The extended administration of GnRH agonist, or prolonged administration of COC/progestogens as pretreatment and routinely surgery prior to ART treatment to improve live birth rate is not recommended, as the benefit is uncertain.
- 5. Clinicians are not recommended to routinely perform surgery for ovarian endometrioma
- 6. Surgery is likely to have a negative impact on ovarian reserve.
- 7. Surgery for endometrioma prior to ART can be considered only to improve endometriosis associated pain or accessibility of follicles.

#### Surgical management:

Laparoscopy is more preferred compared to laparotomy as it is less adhesiogenic and requires shorter hospital stay. Ablation of the endometriotic implants and adhesiolysis to restore the normal anatomy, cystectomy for endometrioma >4cms, symptomatic or making accessibility of the follicles difficult with Ovum Pick up.

#### References:

1. American Society for Reproductive Medicine. Revised American Society for Reproductive Medicine classification of endometriosis: 1996. FertilSteril. 1997; 67:817-21.

2.Hughes E, et al. Ovulation suppression for endometriosis. Cochrane Database Syst Rev. 2007 Jul 18;2007(3).

3.Endometriosis Guideline Core Group, Christian M Becker et al,ESHRE Endometriosis Guideline Group, ESHRE guideline: endometriosis, Human Reproduction Open, Volume 2022, Issue 2, 2022.

## **INSPIRATIONAL THOUGHTS**



## Dr. Munjal Pandya M.S. (Ob Gy), FICOG Assistant Professor, AMC MET Medical College

## We are born 'Sacred', not scared! We are born Brave, Brilliant and Benevolent!

Have you seen a kid running out of curiosity to a red burning fire? Does he/she fear it? NO! Do these little angels know what 'fear' is? Absolutely 'No'! What they are lacking is: common sense of differentiating harmful from harmless! And what do we do? We feed their minds with Rationality, along with a little artifact called 'Fear'... 'Beta, Don't do stand there, you'll fall!' 'Are you an idiot? Why are you doing this

after so many instructions? Do you want to die?' I am not criticizing or judging right or wrong ways of upbrining; what I am highlighting is: The words! Do we consciously make an effort of evaluating the words chosen by us, while communicating with a child? Does it have to end with something that is scary? Does it have to be 'The Fear' as driving force for everything?

'Prepare for exam, or you'll fail miserably!'I mean, isn't it obvious? Then why are we shouting it in innocent minds, filling it with fear, before even the first steps of preparations!

'If you don't perform well, you'll be thrown out!' Wow! Can't it be 'Give your the best shot, and then result will just be the byproduct!'

'Study hard, or you won't get good spouse!' Is it really necessary to be the motivating statement for a collegian to study hard?

Swami Vivekananda told that every human needs be mentally and physically strong! He said that your nerves and muscles both need to be strong like iron! Weakness is crippling!

Shree Krishna told to Arjun in Bhagvad Geeta that a human is born pious and 'Satvik'. Faith in self and God makes one steadier!

Our Scriptures are full of examples of Strength! "Bhakt Prahlaad", who was born to "Hiranykashupu", kept his hope alive even after receiving poison, getting thrown, getting burnt; and finally Lord Vishnu came as "Narsimhavtaar" to put an end to the troubles of Human race.

Hanuman was full of strength and faith! He got himself caught out of respect of "Brahmaastra" released by Indrajit, yet he was confident of returning back to Shree Ram with news of finding Sita mata!

Abhimanyu, who was aware that he did not know the exit plan of "Chakryavyuh", yet entered it fearlessly, fought valiantly and then was killed by 7 Legendary warriors in an act of cowardice, breaking all the rules of 'fair' war; that's what is called "Courage"!

Shree Ganesh was asked by mother Parvati to guard the entrance, and he did so by fighting everyone at once, with full dedication and confidence!

Our Stories and Scriptures are full of Confidence, Courage, Discipline and Faith! You will find no story which instills fear! Then why are we creating that bubble of fear, by injecting our own insecurities into children and others?

If you play tennis, even a fraction of doubt will surely put your shot out of the line! You must keep your focus 100% to get that shot inside the court!

We belong to the land of Great minds! We have had Great scholars, Great thinkers, Great Scientists, Great Sages, Great Healers, born from this very land!

It is believed that we all are travelers, having limited and pre-defined time with us, how much, we aren't aware of it. The best usage of this time can be done by exploring the rightest possible path, walking on it; and even changing it according to newer and better awareness; by helping others in whichever way we can; and by not becoming the cause of anyone's troubles anytime!

We need to keep expanding our horizons and that, surely will bring in the satisfaction; which actually is the only and most important thing in this life! Satisfaction of doing charity and marketing it isn't actually charity, it's very very humiliating for the receiver, and it mars the core intention!

Live and let live; encourage others as much as you can; assist others as much as you can; and please always remember:

"We are blessed to have this Human form in this birth; We are born Sacred, and not scared!"

## FETAL GROWTH RESTRICTION



Dr. Parag Biniwale President POGS, Chairperson ICOG

#### Introduction

According to the American College of Obstetricians and Gynecologists, intra-uterine growth restriction is "one the most common and complex problems in modern obstetrics.

The first clinically relevant step is the distinction of 'true' fetal growth restriction (FGR) from constitutional smallfor-gestational age, with a near-normal perinatal outcome. FGR should be diagnosed in the presence of any of the factors associated with a poorer perinatal outcome, including Doppler cerebroplacental ratio, uterine artery Doppler, a growth centile below the 3rd centile, and, possibly in the near future, maternal angiogenic factors.

#### **Definitions simplified**

**FGR is best defined as a fetus that has not reached its growth potential.** In practice, small for gestational age (SGA) is often used as a proxy for FGR. However, not all SGA fetuses are growth restricted, and the use of SGA for a pathologically small fetus (FGR) and vice versa should be avoided.

The most accepted definition of FGR internationally remains estimated fetal weight less than 10th centile for gestation and/or abdominal circumference less than 10th centile for gestation. It is ideal that customized population charts be used to improvise detection rate and ovoid over diagnosis.

#### Classification: What's new?

There has been a paradigm shift in the classification of fetal growth restriction. With increasing work on growthrestricted fetuses, our understanding of pathophysiology and basis for classification has changed.

	Early FGR	Late FGR
Gestation	< 32 weeks GA	> 32 weeks GA
Prevalence	0.5-1%	5-10%
Pre-eclampsia	Strong association	Weak association
Placental pathology	Likely	Less likely
Umbilical artery Dopplers	Often abnormal, can stay so for a long time	Normal/abnormal
Detection	Easily detectable	Challenging to detect
Placental disease	Placental disease: severe (UA Doppler abnormal, high association with preeclampsia)	Placental disease: mild (UA Doppler normal, low association with preeclampsia)
Fetal response	Immature fetus = higher tolerance to hypoxia = natural history	Mature fetus = lower tolerance to hypoxia = no (or very short) natural history
Fetal adaptation	Long standing hypoxia ++: systemic cardiovascular adaptation	Hypoxia +/-: central cardiovascular adaptation
Risk of prematurity	Risk of severe prematurity	Risk of prematurity is less
Mortality/morbidity	Risk of mortality and morbidity is high	Risk of long term morbidity is higher than mortality

#### **Predicting FGR**

Risk assessment for FGR should be undertaken preconceptionally, in early pregnancy, and at each antenatal visit through inquiry about maternal characteristics and medical history, previous obstetric history and risk factors that may arise in pregnancy (Maternal biochemistry and ultrasound)(14-24).

Following table depicts the risk factors for FGR in maternal history and their association with the severity.

Risk factor	Definition/details of risk	Odds Ratio for fetal growth restriction
Age	Maternal age > 40 yrs	3.2
Exposure	Smoking > 11 cigarettes/day	2.21
Previous pregnancy history	Previous FGR	3.9
	Previous stillbirth	6.4
Maternal medical history	Maternal SGA	2.64
	Chronic hypertension	2.5
	Diabetes with vasculopathy	6
	APLA	6.22
Present pregnancy	Pre-eclampsia	2.26
	Echogenic bowel	2.1
	Low maternal weight gain	4.9
	PAPP-A < 0.4 MoMs	2.6

#### **Risk assessment algorithm**

Major risk factors for FGR	
Maternal age > 40 yrs	Minor risk factors for FGR
Paternal/maternal h/o FGR	Maternal age > 35 yrs
Previous SGA baby/ previous stillbirth	ART conception
Chronic hypertension	Nullipara
Diabetes with vasculopathy	BMI < 20 kg/m2
Anti-phospholipid syndrome	Previous pre-eclampsia
Heavy bleeding during pregnancy	Pregnancy interval < 6 months
PAPP < 0.4 MoMs	Pregnancy interval more than 60 months

• If there is one major risk factor, or >3 minor risk factors, consider starting low dose aspirin before 16 weeks.

• Serial assessment of fetal weight, AFI and Dopplers from 26-28 weeks

#### Tools for diagnosis of FGR:

Accurate pregnancy dating

Measurement of symphyseal fundal height (SFH) can be undertaken every 2-4 weeks starting from 24 weeks gestation.

With easy availability, and proven safety, USG remains the mainstay for detection of fetal growth restriction.

The following investigations are commonly used for the diagnosis suspected FGR:

- 1. Fetal biometry by USG
- 2. AFI
- 3. Umbilical artery PI:
- 4. Middle cerebral artery PI
- 5. Cerebroplacental ratio

#### Management of FGR: Newer concepts

The best management module consists of early diagnosis, monitoring and timely delivery decision-making. Each day in utero, increases survival by 2% upto 34 weeks.

### ANTENATAL STEROIDS(27)

It is the best fetal therapy- treatment given to the fetus through the maternal circulation and placental transfer, enhancing the lung maturity of the fetus.

#### Advantages of antenatal steroid cover

• 34% reduction in Respiratory Distress Syndrome (RDS)

- 46% reduction in Intra Ventricular Haemorrhage (IVH)
- 54% reduction in Necrotisingenterocolitis (NEC) ""
- 31% reduction in mortality

#### Why Dexamethasone over Betamethasone?

Dexamethasone sodium phosphate and Betamethasone acetate + phosphate are the only two efficacious and safe corticosteroids to be used during antenatal period.

In India, the salt Betamethasone acetate + phosphate, which requires only two doses at 12 hourly interval, is not available. The available salt in India is Betamethasone phosphate which is short acting and requires more frequent administration as compared to the former.Betamethasone is more costly and less stable than Dexamethasone at high temperatures. Dexamethasone is thus a more appropriate option and recommended.

#### Dosage:

4 injections at 12 hour intervals given deep intramuscularly.

#### When to give?

All women with preterm labour/ anticipating delivery for iatrogenic causes should receive antenatal steroid cover between 24 and 34 weeks.

#### **Repeated steroids**

Repeated courses/more frequent doses are not useful. Multiple courses in fact could have harmful neurodevelopmental effects in the baby.

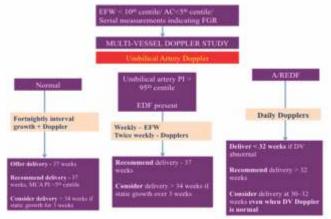
Maximum advantage to the newborn is, if delivered from 24 hours after the last dose of steroid upto 7 days.

The only absolute contraindication to antenatal steroid cover is maternal chorioamnionitis.

Magnesium Sulphate (MgSO4) for Neuroprotection (28,29)

- It reduces risk of moderate cerebral palsy by 30% and severe cerebral palsy by 45%
- MgSO4 for Neuroprotection is recommended for every delivery before 30 weeks'gestation planned or definitely expected within 24 hours of administration of MgSO4
- Dose: 4g loading dose over 20-30 min; maintenance 1g/h till birth/24 hours, whichever first.

Summary of FGR management is mentioned in the simplified flowchart below-



#### Subsequent pregnancy care

The birth of a baby with FGR is a major risk factor for FGR in a subsequent pregnancy. Where possible, the underlying cause for FGR can be investigated to assess for recurrence risk. This includes review of placental histopathology and any investigationsundertakenforFGRbeforeandafterbirth . Where SGA/FGR has been associated with stillbirth or severe long term adverse outcomes, consider additional parentalpsychosocialsupportinasubsequent pregnancy.

# **HEARTY CONGRATULATIONS**







Hearty Congratulations to Dr. Atul Munshi sir for being felicitated as Teacher of Teachers by the Chief Minister

> At a function organized at his residence on 8th May 2022. Very well deserved sir!



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19



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