AHMEDABAD OBSTETRICS AND GYNAECOLOGICAL SOCIETY

AOGS TIMES

Nirvana

2022-2023

APRIL 2022 I VOLUME 1

Theme : Healthy Woman - Healthy Nation

Motto : Ethics Compassion Commitment

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PRESIDENT'S MESSAGE

Dr. Kamini Patel
President

Nirvana, the feeling of complete happiness and peace.

AOGS Team - Thank you for honouring me with the post of President - AOGS.

AOGS, our association has always worked for the welfare of the patients and the doctors in our association. It becomes our soul responsibility for the continuous upgradation in our field. Nirvana concept was thought to spread the message "Thinking about healthy motherhood above all – leading to the feeling of complete happiness and peace."

For this year, we plan to take a step forward to spread the awareness regarding healthy motherhood "Pregnancy – A beautiful journey" not just with the doctors also to the women around. We as a team plan to adopt a girl child for education from the city and around. Other projects that we plan to take up this year are Medico-Legal CMEs, Importance to PG Series for young budding doctors, helping the PHC Centres and helping the schools with the basic amenities.

If family support is strong, we can work to our fullest and this is how AOGS stands strong by giving the best motherhood journey aiming to "Health Mother, Healthy Family."

We plan to plan two trips in this year, one national and one international. For recreational activities musical programs will be taken forward. We are proud to confirm that we will be hosting SOGOG this year and also an infertility conference with the union of IFS, ISAR and ACE.

"When individuals really connect energy wise, suddenly you will find they are hugely empowered team"

-Sadhguru

HON.SECRETARY'S MESSAGE

Dr. Nita Thakre
Hon. Secretary

Dear AOGS members,

Warmest Greetings!

At the outset , let me thank you all for giving me the opportunity to serve you as a Honorary Secretary of our prestigious AOGS consisting of 970+ members. This can not happen without your support. I am overwhelmed by the confidence and trust shown by you all! I would want to take you all together with me in this journey.

I am very fortunate to have extremely young, energetic and enthusiastic team members who are coming up with brilliant ideas to make our tenure remarkably fruitful!

Friends, you have in your hands AOGS Times - NIRVANA , our monthly bulletin. We have tried our best to provide you with interesting academic topics, excerpts and pictures of our past programs, take home messages, some interesting news from our field, a few specimens of creativity, list of future programs and endeavours like **Rush Team** which we are planning to formulate looking at the present scenario!

This is an effort to bind together each and every aspect of our very own **'AOGS family'**

Isn't it rightly said **'a flower makes no garland'**! Thus this bulletin is not an outcome of the efforts put in by an individual, but is the immense effort put together by many. Hope you all will cherish this creation!

Climate change is a global phenomenon but we can feel it's effects on a local scale. As globe warms, summers are growing hotter, winters have become more severe and raining patterns have changed, from the past few years!

This all impacts our health.

In this summer times, we must follow all the measures to prevent and treat heat stroke. **Stay Hydrated, Stay Safe , Stay Healthy!**

TEAM AOGS 2022-2023

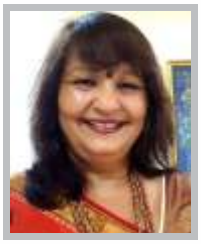
Dr. Alpesh Gandhi
Immediate Past President FOGSI

Dr. Kamini Patel
President

Dr. Nita Thakre
Hon. Secretary

President - Elect
Dr. Mukesh Savaliya

Vice President
Dr. Snehal Kale



Hon. Treasurer
Dr. Lata Trivedi

Hon. Jt. Secretary
Dr. Shashwat Jani

Clinical Secretary
Dr. Akshay Shah

MANAGING COMMITTEE MEMBERS

Dr. Arti Gupte

Dr. Beena Patel

Dr. Chintan Gandhi

Dr. Darshini Shah

Dr. Hetal Patoliya

Dr. Jayesh Patel

Dr. Naimesh Patel

Dr. Nisarg Dharaiya

Dr. Parth Shah

Dr. Praful Panagar

EX-OFFICIO

Dr. Jignesh Deliwala

Dr. Munjal Pandya

CO-OPT. MEMBERS

Dr. Dipesh Dholakiya

Dr. Hemant Bhatt

SPECIAL INVITEE

Dr. Parul Kotadawala

Dr. Tushar Shah

Dr. Sanjay Shah

Dr. Mehul Sukhadia

Dr. Mahesh Jariwala

Dr. M. C. Patel

Dr. Sunil Shah

PAST PROGRAMME

INSTALLATION CEREMONY

PAST PROGRAMME

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INSTALLATION CEREMONY

NEW HORIZONS

RUSH TEAM

Looking at the present scenario with ever-rising cases of violence against doctors, it is high time that we have atleast some level of defense ready to deal with such situations when they suddenly arise. The managing team has thus proposed the formation of an AOGS RUSH team. This resolution was passed last year during FOGSI's Managing Committee Meeting, to provide a measure of safety and backup to our members in high-stress situations.

The team will help in 3 situations: medical, medicolegal, and in case of a family crisis of any of our members. The plan is to have multiple teams so they can easily approach any given area within 15-20 minutes.

We would like both senior, experienced members, as well as young, dynamic members to join. Also, AOGS members with political or media influence will be of great help.

Whatsapp groups will be made through which we can contact the teams as required.

This is entirely on a voluntary basis. Those members who wish to participate can contact the AOGS office (079-26586426), or Dr Alpesh Gandhi (9825063582), or Dr. Kamini Patel (9426048748).

AOGS YOUTH COUNCIL

As the new team of AOGS takes over under the able leadership of Dr Kamini Patel, we propose to move forward with a new look and new additions to our esteemed association. In that spirit, we plan to launch an AOGS Youth Council, especially for our young obstetricians and gynecologists.

Conceptualized by Dr Alpesh Gandhi, the aim of this council is to include young members as a permanent part of our AOGS managing committee. This will help them understand the organization's workings, learn administrative and management techniques, make new acquaintances, and eventually groom future leaders.

Proposed criteria:

- The youth council will consist of 10 members
- The person has to be a member of AOGS
- Age less than 40 years
- The posts will be based on selection and not elected.
- Each member is allowed to serve a maximum of 3 terms, so as to allow new members to participate.

We invite young members who are interested to contact the AOGS office (079-26586426) or Dr Alpesh Gandhi (9825063582).

MEDICAL NEWS UPDATE

The “Supercold” Phenomenon

As Australia relaxed COVID-19 safety measures, a “super cold” is sweeping the nation. Since COVID-19 can manifest much in the same way as a cold, the new illness is causing confusion and raising fears of SARS-CoV-2 infections. Experts believe the phenomenon is the result of first encounters between new viruses and immune systems re-entering the world after isolation. Experts say the super cold's stunning spread is due to the collision of immune systems that have been in a nearly 2-year period of isolation overwhelmed by a host of new germs all at once.

A similar super cold effect was reported in November of last year in the U.K. as residents first ventured out from lockdown.

In India too, as schools reopen and mask mandates relax, a large number of cases with flu-like symptoms have been seen, with classic symptoms of an upper respiratory tract infection- runny nose, sore throat, sticky eyes, as well as fever, bodyaches and headaches in some.

These symptoms sound a lot like those of COVID-19, although COVID-19 has a few symptoms that do not accompany a cold or a flu, such as a loss of taste or smell.

MEDICAL NEWS UPDATE

WMA on Violence Against Doctors in India

World Medical Association writes to PM seeking solution to attacks against doctors

In the wake of Dr. Archana Sharma's suicide, the World Medical Association (WMA) has expressed its concern about the safety of doctors in India.

In their letter, WMA President Dr Heidi Stensmyren said, “It must be clear that any treatment outcome that is detrimental or fatal must first be properly and professionally examined before conclusions about civil and criminal liability can be made.” With law enforcement agencies getting involved before negligence was determined, Dr Stensmyren described it as “an apparently ambiguous legal situation”.

Agreeing with the request of the Indian Medical Association (IMA) to enact unambiguous and effective lawful means to stop attacks on physicians and other health personnel, Dr Stensmyren said, “Countering non-negligent treatment errors with prosecution in the first place is not only unjust but will also have grave consequences for the treatment of the population as it will lead to risk-avoiding, defensive medicine and as such to reduced treatment options for seriously ill or endangered patients.”

“For many years now, we observe an increasing rate of violence against healthcare facilities and health professionals in India. This is a serious situation. Attacks become even worse during the Covid-19 pandemic, in a time when healthcare needed the most support and protection. There have been violent attacks on personnel – people have been wounded, intimidated, and even killed. This is unacceptable. We stand with the Indian Medical Association in asking the Indian government for better protection for health personnel,” said Dr Otmar Kloiber, WMA secretary-general, in a video message from the ongoing council session of the organisation.

“It must be clear that when something happens in healthcare – and errors can happen – that those are being examined through scientific scrutiny, fairness, and objectivity. There is no room for self-justice,” he said.

This is the second time the WMA has intervened to discuss violence against Indian doctors.

In 2019, the WMA had written to the Prime Minister Narendra Modi and Health Minister Harsh Vardhan stating that it is worried about the increasing trend of violence against health professionals in India.

The letter comes after 73-year-old Dr. Deben Dutta, was allegedly beaten by workers of Teok Tea Estate, where he volunteered his services after retirement just a few years ago. The tea workers were allegedly furious that he was not in the estate hospital when a colleague died. Dr. Dutta died moments after he was rescued by the police later.

Source: Indian Express, April 2022; The Hindu, September 2019

One HPV Vaccine Dose Prevents Cervical Cancer: WHO

By Reuters Staff, April 12, 2022

LONDON (Reuters) - A single dose of human papillomavirus (HPV) vaccine is enough to protect against cervical cancer, a World Health Organization group of experts has said.

At the moment, two- or three-dose regimens are recommended, but following a meeting on immunization pratices last week (https://bit.ly/3xfjecl), the WHO's Strategic Advisory Group of Experts on Immunization said the evidence showed one dose is as effective.

"This could be a game-changer for the prevention of the disease; seeing more doses of the life-saving jab reach more girls," the WHO said in a statement.

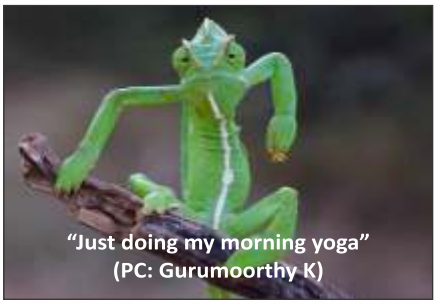
EVENTS CALENDAR

ACOG annual meeting- 6th -9th May 2022 at San Diego, California.
RPL conclave- 7th May at Hyderabad
AOFOG Bali- 23rd to 26th May at Bali, Indonesia
Online masterclass:

- Masterclass in OBGY ultrasound from 11th to 15th May. Approved by ISUOG.
- Masterclass in 3D/4D OBGY ultrasound on 13th May (1 day course). Approved by ISUOG.
- Advanced diploma in IVF and Reproductive medicine from University of Schleswig- Holstein- Kiel, Germany. 25th to 29th May.
- Masterclass in Ovulation induction protocols in IUI and IVF by University of Schleswig- Holstein- Kiel, Germany, 27th May. (1 day course).

IN A LIGHTER VEIN

WILDLIFE WITTICISMS



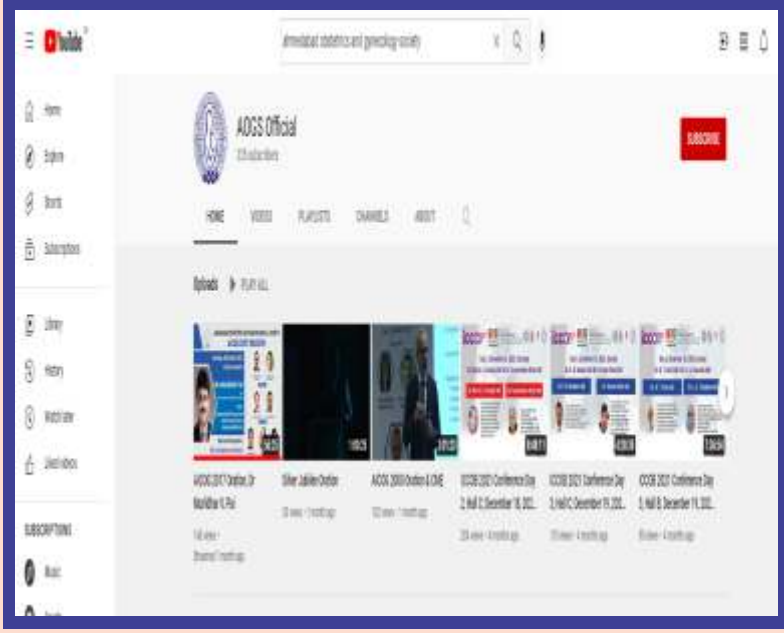
FUTURE PROGRAMS

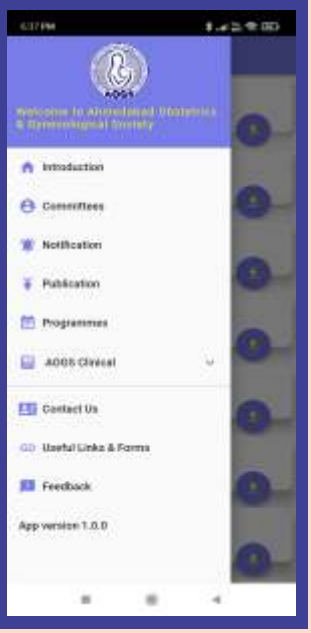
- **13th May** : **Movie - "Jayeshbhai Jordaar"**
- **17th May** : **Managing Committee Meeting**
- **22nd May** : **CME on Robotics in Association with Zydus Hospital**
- **2nd June** : **Webinar on 'I care for contraception' in association with family welfare committee**
- **12th June** : **CME on PIH & PPH in association with Sun Pharma**
- **19th June** : **Mix Bag CME in association with Emcure Pharma on anemia in Pregnancy, Recurrent Pregnancy Loss, Mastering the challenges in Endoscopy, Luteal Phase Support.**

CANDLE LIGHT PROTEST

Health Checkup Camp at Gulbai Tekra Ved Bhavan Jointly
Organised by Ahmedabad Medical Association Ladies Club and Ahmedabad Obstetrics and Gynaecology Society (AOGS)

We request all members to download the AOGS app from play store or apple store to get updates on AOGS events and CME's.
Please also subscribe to our YouTube channel for complete recordings of talks and orations.





PAST PROGRAMME

CME: Genetics & Its Know how !

Date : Sunday, 24th April 2022 : Time: 9:30 am to 1:15 pm

In charge: Dr. Akshay Shah

Coordinators : Dr. Naimesh Patel, Dr. Chintan Gandhi

Venue:

Glorious Reasturant and Banquet

Sahitya Arcade, Opp. Magma Reasturant, Odhav Ring Road, Ahmedabad.

9:30 -10:30 am	: **Breakfast**	
Session -1	: **Chairperson :** Dr. Mukesh Savalia, Dr. Snehal Kale	
10:30 – 10:50 am	: **Topic: 1st Trimester Scan & Its Importance**	Dr. Sonal Panchal
11:00 – 11:20 am	: **Topic: Screening for Downs Syndrome : Utility of Double Marker & NIPT**	Dr. Viral Mahesh Pandya
11:30 – 11:50 am	: **Topic: Choose your Genetic Tests Wisely**	Dr. Gaurav Shashtri
Session – 2 12:00 – 1:00 Pm	: : **Panel Discussion:** **Chairpersons:** Dr. M.C.Patel, Dr. Lata Trivedi **Moderator:** Dr. Janak Desai **Topic: 1st Trim /2nd Trim Intersting Genetic Cases** **Panellists:** Dr. Girish Patel, Dr. Mayank Chaudhari, Dr. Vipalee Trivedi, Dr. Parth Shah, Dr. Jay Vaishnav, Dr. Swati Thakkar, Dr. Riddhi Mehta, Dr. Mekhla Agrawal	
1:00 pm onwards	: **Lunch**	







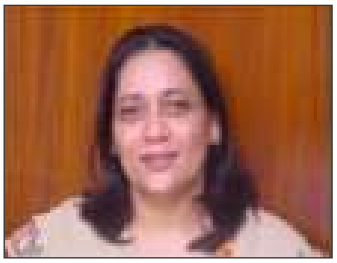









PAST PROGRAMME



FIRST TRIMESTER SCAN

Dr. Sonal Panchal

- Consultant, Dr. Nagori's Institute for infertility&IVF-Ahmedabad, India
- Master, Ultrasound in OBGYN Ian Donald Interuniversity school of medical ultrasound.
- Professor, Dubrovnik International University
- National Academic director, Ian Donald School, India.
- Director, Center of Excellence, Ian Donald InterUniversity School of Medical Ultrasound, Ahmedabad. India
- National advisory board member for International journal of infertility and fetal medicine, Jaypee publication
- Reviewer for Journal of Human reproductive sciences
- Published 35 papers in national & international conferences & journals.
- Delivered more than 800 lectures
- Contributed in & authored several books, more than 120 chapters
- Keen interest in infertility and gyneac ultrasound.

Scans are done during first trimester of pregnancy are done for

• Confirmation of pregnancy • Location of pregnancy • Early detection of multiple gestation

• Assessment of viability and progress of pregnancy • Evaluation of abnormal early pregnancy

Pregnancy can be confirmed by beta hCG but confirmation of its intrauterine lacation and viability can be done by ultrasound only. Transvaginal is the preferred route for this scan.

Scan done as early as 6 weeks of pregnancy shows yolk sac and embryonic pole in the gestational sac and abnormality of the morphology or growth rate of any of these can be an indicator of poor pregnancy prognosis. Sothe early pregnancy scan is beyond the presence of cardiac activity.

Early diagnosis of ectopic pregnancy and confirming exact location of the pregnancy can prevent unnecessary anxiety and intervention and can also be life-saving in cases of interstitial, cervical and scar pregnancies.

First trimester scan is the best for diagnosing multiple pregnancy, mapping the sac locations and deciding the amnionicity and chorionicity.

Detailed anatomical study of the growing fetus has helped to understand the development of fetal organs and also diagnose major malformations early in first trimester and to take timely decision for the continuation or otherwise for the pregnancy.

Nuchal scan is also a scan done in the first trimester. This consists of assessment of nuchal translucency, nasal bone, tricuspid regurge and ductus venosus flow. These are also very sensitive parameters and measurements and documentation should be done very precisely. Apart from this first trimester scan is now considered an early anomaly scan and detailed assessment of the fetal anatomy is the way for early diagnosis of fetal structural abnormalities too that may represent chromosomal or nonchromosomal syndromes.

Screening for Downs Syndrome : Utility of Double Marker & NIPT

Dr. Viral Mahesh Pandya

- Specialist in Foetal Medicine & Foetal Therapy
- FOETUS Foetal Evaluation & Therapy by UltraSonography
- Nehrunagar & Maninagar, Ahmedabad

Globalization and technological advances have made the Down's syndrome screening program more accessible to expectant parents. Tests which can be offered include ultrasound screening and maternal serum tests like Dual Marker and Non-Invasive Prenatal Screening. It is essential that parents make an informed decision in choosing the appropriate screening test for their unborn. The clinician's role is indispensable for pre-test and post-test counseling, as no test results are a simple yes/no. A protocol-based, practical approach makes it easy for the clinician in a busy day-to-day practice. It also optimizes the implementation of Down's syndrome screening program and improves the standard of care across all populations.

SELECT YOUR TEST WISELY

Dr. Gaurav Shastri

Ph.D. Genetics

Dr Gaurav Shastri is a Consulting Geneticist with experience of more than 12 years.He obtained his Ph.D (Doctorate) from South Gujrat University by doing research on Leukaemia Genetics.Since 2007 he is in the field of Medical Genetics with concrete determination in the field. After completion of his fellowship in reproductive genetics at Genetic Diagnostic Centre Mumbai and FRIGE house Ahmedabad, in 2011 he started his own genetic diagnostic lab named Gene Care, He is the founder of Gene Care Genetic Diagnostic lab Surat which is a now a part of Sterling Accuris Diagnostics since 2020 and Heading Genetic Department. He is a life time member of Indian Society of Human Genetics and also a member of Association of Genetic Technologist (AGT- USA/CANADA). He is Eminently qualified and experience in Cytogenetics, Molecular Genetics, Genomics and Genetic Counselling.He is having an experience of analysing and reporting of more than 70000 samples for karyotyping and FISH only. His expertise and deep knowledgearein Reproductive Genetics, Prenatal Diagnosis, Preimplantation Genetic Diagnosis and Cancer Genetics.he has undergone many advancedtraining on reproductive health solution by using NGS and Microarray platform.He has published research papers in national and international journals and is on the review board for several journals, He has mentored More than 25 students for their research work. he has also under gone NABL ISO 15189:2012 auditor Certification program.

Key Areas: Reproductive Genetics, Prenatal Genetic Diagnosis, Preimplantation Genetic Diagnosis (PGS/PGD), Cancer Genetics

In Humans only 1% to 1.5% of the total DNA codes for protein and rest 99% is Non Coding. For the analysis of this 1% of coding Segment of DNA there are various platforms and methods are available.

One for all or all for one test leads you nowhere in Genetics. Its very Important to understand individuals clinical presentation and Need of genetic Test to offer. So its very important to select and understand advantage and limitation of different Test and platform available for Genetic Test. karyotype , old but still the gold standard technique which provides an Hawk Eye View with its biggest advantage to detect balanced abnormality in the genome which may cause unbalanced event in the progeny. FISH, Fluroscence Insitu Hybridization is a probe based technology to detect specific chromosomal aneuploidy or Microdeletions. Its rapid and best when used in Collaboration with karyotype. Chromosomal Microarray is a technology where thousands of probes are placed on a glass slide for specific regions and Covers majority of regions of the genome. It provide genome view at a glance and Its ability to detect small Deletions and duplication in the whole genome makes it more preferable in study of Product of conceptions and in case of developmental Delay, intellectual disabilities. Next generation sequencing is the new hope and face of genetic testing technology. It's ability to sequence the entire genome or a specific region of Gene or the entire gene or multiple genes in single go and even from a few nanogram of DNA sample makes it more robust and unique. It is capable of Giving AN answer TO THE MYSTERY where many other technologis fails. Just like each and every human being is different the need of genetic test and platform is different from individual to individual. And that's why clinical and familial history plays a crucial role in advising the test and also to find answer whether its Cancer or Thalassemia, Infertility or Congenital abnormality, Muscular dystrophy or Neurological disease, all are stored in GENE'S so is the answer for treatment, better management and prevention, So get screened and safeguard your future and future of your generation By selecting the Right Test.

INSPIRATIONAL THOUGHTS :

Dr. Hemant Bhatt

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In this era of materialistic modern life we encounter host of day to day problems, stress and strain. We consider that life is full of misery and sorrow- Whether it is the issue of getting BU permission for our clinic(!) or appearance of our kid for any competitive exam or starting a new business, any fateful event in the family or of our patient etc.

Sometimes we feel that there is only a dark tunnel and there is no ray of hope at the end. We feel that all the literatures and the men of philosophy are wrong & deceitful as they lecture day in and day out about the light at the end of the tunnel. Let me narrate some glorious examples of individuals and personalities who were embroiled in same kind of stress and strain at some point of time in their life. But instead of giving it up , they put their feet firmly on the ground. They raised themselves like the Phoenix from the ashes, reshaped dreams and work they were doing and they reached to the height of Glory, name and fame eventually.

I would like to give the example of the famous Gujarati author 'Jay vasavada'. As a student he was genius and was expected to score as the meritorious student in board exams in all over Gujarat in 12th std. He was particularly proficient in Science and Maths. But as luck had it he failed in 12th science exams and even in Maths paper he got 'zero'.. !! He was shown absent in 'Sanskrit' paper exam. He tried for re-evaluation of his papers at the secondary Board office at Gandhinagar but his application and representation where rejected. In those days the supplementaries and the answer sheets were not shown to either the student or their family members. He went to the court to get justice but even there lawyers privately mocked about his talent. He failed to get any reprieve from the court also. Eventually he decided to fight against the system. From science he changed the stream, got first class. He got Masters' degree in management. He became the first non science student to get the first prize in one of the exam of 'Bhabha Atomic Research Centre (BARC), a top scientific institution. He became principal of the best business management commerce & computer college at the age of 27 only. And one day he was called by the top educationalists to give sermon on the present education policy !! He started writing in newspapers and magazines, blogs and eventually now he is considered as one of the best contemporary Gujarati author....What an inspirational story...!!

A jew boy was ordinary in study. He didn't get admission in best school for film making i.e. U.C.L.A. He got admission at California state university with a subject of English.But, he didn't succeed in study & left study in midway. At last, he decided making films on his own way. He made 'JAWS','E.T., INDIANA JONES & JURRASIC PARK. He is none but Steven Spielberg...!!

Merlin manro, supposedly most beautiful woman on the earth was dropped by 20th century Fox because Production chief considered her unattractive, small, a lady with narrow eyes & bit obese...!!

When most celebrated Psychoanalyst Sigmund freud wrote down his most popular book 'Interpretation of dreams'.Only 600 copies of it were sold in 8 yrs & he earned only 250 dollars. Today it is considered as 'Bhagvad Gita' of psychoanalysts....

A boy wanted to be the captain of a football team in his school. But he was not even selected in the team..!! He went to study Latin in Academy school but he failed there. He fought student election in the Harvard University but lost. He also fought election in student Council. There also he lost. He left the Standford university Business School without completing the study. But he never became disappointed. He went on to become USA's 34th most popular President. He was none other than John F Kennedy...!

At one time sachin was considered finished, Amitabh Bacchan was considered gone case. But Sachin came back with vengeance, hit a double century in one day international, became a part of World cup winning team.

Amitabh came back with a bang through KBC & still working with a zeal at the age of 78...!!More than what we are working in our daily life right now.

लहरों से डर कर नौका पार नहीं होती,
कोशिश करने वालों की कभी हार नहीं होती।

नन्हीं चींटी जब दाना लेकर चलती है,
चढ़ती दीवारों पर, सौ बार फिसलती है।
मन का विश्वास रगों में साहस भरता है,
चढ़कर गिरना, गिरकर चढ़ना न अखरता है।
आख़िर उसकी मेहनत बेकार नहीं होती,
कोशिश करने वालों की कभी हार नहीं होती।

डुबकियां सिंधु में गोताखोर लगाता है,
जा जा कर खाली हाथ लौटकर आता है।
मिलते नहीं सहज ही मोती गहरे पानी में,
बढ़ता दुगना उत्साह इसी हैरानी में।
मुट्ठी उसकी खाली हर बार नहीं होती,
कोशिश करने वालों की कभी हार नहीं होती।

असफलता एक चुनौती है, इसे स्वीकार करो,
क्या कमी रह गई, देखो और सुधार करो।
जब तक न सफल हो, नींद चैन को त्यागो तुम,
संघर्ष का मैदान छोड़ कर मत भागो तुम।
कुछ किये बिना ही जय जय कार नहीं होती,
कोशिश करने वालों की कभी हार नहीं होती।

-Harivanshray Bachhan

Threatened miscarriage and Preterm labour- A Clinical Challenge

Dr. Charmila Ayyavoo

MD DGO DFP PGDCR
Chairperson, Clinical Research Committee, FOGSI 2016-18
Director, Aditi Hospital& Parvathy Ayyavoo Fertility Centre, Trichy
5,Usman Ali street, TVS Tolgate, Trichy-620020
9843177299; dr.charmila@gmail.com

Introduction:

Threatened miscarriage is defined as bleeding in early pregnancy up to 20 weeks of gestation with a closed cervix and presence of foetal heart activity in ultrasound examination. [1,2]

It is prevalent in one in five pregnancies. [3]The prevalence of threatened miscarriage is not known in India but the rate of spontaneous miscarriage is identified by a study done in Karnataka. In this study, the rate of miscarriage per 1000 ongoing pregnancies between 6-12 weeks is 101.9 to 115.3 and between 12-20 weeks is 60.3 per 1000.[6]

The common reasons for a threatened miscarriage are extremes of maternal age and chromosomal abnormalities. The less common causes are mendelian and polygenic multifactorial aetiologies, luteal phase defects, thyroid abnormalities, uncontrolled diabetes mellitus, uterine anatomical and pathological abnormalities like intra uterine adhesions, leiomyomas, Mullerian fusion defects, cervical insufficiency, infections, acquired and inherited thrombophilias. Very rare causes are exogenous agents like radiation, alcohol, caffeine, contraceptive agents, chemicals, trauma, psychological stress, common medications and smoking.

In India, one of the common reasons identified for miscarriages are older mothers and higher educated women.[6]

Clinical features:

Period of amenorrhoea, positive urine pregnancy test and bleeding per vagina are the presenting symptoms of threatened miscarriage. Patient can have pain. The precipitating factors need to be identified.[8]

Clinical challenges:

There are challenges in the clinical features and in the evaluation of the condition. Bleeding per vagina does not lead to a spontaneous abortion always. It does not guarantee a live birth also. Evaluation of the condition is also not straight forward. The evaluation and management need to be individualized for each patient.

Spontaneous abortion can happen if there is bleeding per vagina. If foetal heart activity has been established, the chances are reduced to 2-3% in low risk pregnancies. In women with high risk like older mothers and patients who have undergone infertility treatment, presence of foetal heart does not guarantee a good outcome. If there is sub chorionic haemorrhage, the miscarriage rate is around 15% [7]

Evaluation:

An ultrasound is done. A trans vaginal ultrasound is preferable If unacceptable, trans abdominal scan can be done after explaining the limitations.[9]

The viability of the pregnancy is confirmed. If viability is not confirmed, an attempt is made to prevent a false positive diagnosis. [10] This is facilitated with the usage of ultrasound and biomarkers.

Trans vaginal ultrasound: Society of Radiologists in Ultrasound Panel [10]

- Check for fetal heart rate
- If no fetal heart is visible, see for fetal pole
- If fetal pole is seen, measure crown rump length [CRL]
- If CRL is less than 7 mm and no fetal heart – ultrasound after 7 days
- If CRL is more than 7mm and no fetal heart- second opinion for viability
- If no fetal heart or fetal pole, measure gestational sac diameter [GSD]
- If GSD less than 25 mm, scan after 1 week
- If GSD more than 25 mm, [no fetal pole]- second opinion

Trans abdomen ultrasound

- If no fetal heart visible, measure CRL

- Repeat scan after 2 weeks
- If no fetal pole, measure GSD
- Repeat scan after 2 weeks

Precautions

- Do not use last menstrual period [LMP] for diagnosis of miscarriage
- Before diagnosing complete abortion at first scan, be aware of PREGNANCY OF UNKNOWN LOCATION
- May need beta human chorionic gonadotropin [HCG] estimation for follow up

Pregnancy of uncertain viability:[10][Society of Radiologists in Ultrasound Panel]

Pregnancy of unknown viability is an entity which needs to be remembered while investigating a threatened miscarriage. The diagnostic features are as follows:

- CRL of 7mm and no heart beat
- Sac diameter is more than 25 mm and no fetal pole
- No yolk sac at first scan and after 2 weeks, no fetal pole and no heart beat
- Yolk sac seen and after 11 days, no fetus and no heart beat

The features which should raise a suspicion are:

- Enlarged yolk sac – more than 7mm
- Less than 5mm difference between GSD and CRL
- Repeat ultrasound after 7-10 days

Chromosomal abnormality is suspected if the following features are present:

- Thick nuchal translucency
- Absent nasal bone
- Abnormally fast or slow heart rate
- Structural malformations

Biomarkers:

Several biomarkers have been studied that can be used to predict the outcome in threatened miscarriage. They are serum progesterone, estradiol, HCG, pregnancy associated plasma protein [PAPP-A] and cancer antigen [CA]125. Serum CA125 is considered better for prediction. Serum progesterone and HCG are less accurate after the viability of the fetus is established. [19]

Ultrasound needs to be combined with biomarkers for an accurate prediction of threatened miscarriage. [19]

The presence of foetal heart activity and lack of adverse prognostic factors convey a favourable prognosis.

Management [2]

- If the fetal heart is visible and even if there is an ongoing bleeding, it is better to wait for 14 days unless there is heavy flow or increasing pain.
- If the bleeding has subsided, a repeat ultrasound is needed after 14 days to confirm an ongoing pregnancy.

Preterm labor:

Introduction:

There is a need to predict preterm labour in women because it contributes to almost 1 million deaths worldwide creating a great economic burden. Children born preterm have lifelong problems.

Benefits of prediction

- Help to guide antenatal management decisions.
- Reassurance.
- Identify at risk.
- Planned interventions like tocolysis, steroids, in utero transfer and magnesium sulfate for neuro protection.
- Accurate prediction will avoid unnecessary and harmful treatments.

Predictors of preterm labour are:

- Biochemical markers in blood, urine,cervical secretions and amniotic fluid.
- Ultrasound based tests.

The biological basis for preterm labour is the following:

- Uterine stretch
- Congenital or acquired cervical insufficiency
- Decidual haemorrhage
- Infection and inflammation
- Cervical ripening
- Foetal membrane disruption

Principles of management: If the patient is asymptomatic, there should be modalities to identify silent labour. If the patient is symptomatic, there should be a method to identify whether preterm delivery is imminent.

Risk factors for preterm birth [PTB]

Maternal factors:

- Ethnicity.
- Age of the mother
- Certain lifestyle and environmental factors
- Late or no health care during pregnancy.
- Smoking.
- Drinking alcohol.
- Using illegal drugs.
- Domestic violence, including physical, sexual, or emotional abuse.
- Maternal infections
- Bleeding
- Uterine fundal abnormalities
- Cervical insufficiency
- Maternal autoimmune diseases
- Gestational hypertension

Foetal factors:

- Multi fetal pregnancy

- Hydramnios
- Fetal anomalies

Prediction of preterm birthis mandatory if there is history of previous preterm birth, previous late miscarriage and excisional surgery on the cervix has been done.

Prediction:

Cervical ultrasound and foetal fibronectin measurement are best performing tests for prediction at this point of time.

Cervical length changes[11,12]

- Detected by ultrasound before inspection or digital exam.
- Remains constant between 14-28 weeks.
- 50th centile is 35 mm & 5th centile is 20 mm.
- Short cervix: 25 mm or less
- No cut off is confirmatory.
- Only 18% of women with cervical length less than 25mm at 24 weeks delivered at a gestational age less than 35 weeks. Almost 50%of women with cervical length less than 13mmat 24weeks deliveredat less than 35 weeks.
- Gold standard is transvaginal ultrasound measurement.
- Image should fill 75% of the screen.
- Bladder should be empty.
- Anterior and posterior lips of cervix should be of equal width.
- Funnel length should not be included.
- Internal os to external os should be measured.

Universal screening:

- Not recommended by many groups.
- In 2 clinical trials with universal screening, pregnant women with 30 mm length cervices were treated with vaginal progesterone and showed benefit.[13]
- FIGO (International Federation Of Obstetricians and Gynaecologists)Guidelines: [14]

Sonographic Cervical length screening in all pregnant women is advised by FIGO for the prevention of preterm birth.

- The following are the recommendations: [14]
- Done at 19 – 23 6/7 weeks using transvaginal ultrasound.
- Women with a cervical length < 25 mm should be treated with daily vaginal progesterone.
- Universal cervical length screening and vaginal progesterone are a costeffective model for the prevention of preterm birth.

Targeted screening:

Targeted screening is advised when there is a past history of preterm birth and multiple pregnancy.[15]

If there is a past history of preterm birth, the screening modalities are still unclear. It is better to screen for a short cervix at an appropriate time. Prophylactic treatment in the form of cervical encerclage or vaginal progesterone can be started.

In multiple pregnancy where there is a higher chance for preterm labor, there are no established recommendations for prediction and prevention. If on screening ultrasound, the cervix length is less than 25 mm, progesterones or cervical pessary may help. The pathogenesis of preterm labor onset in multiple pregnancy is proposed to be increased uterine distension or an endocrine environment where there aremore estrogen, progesterone and sex steroids compared to singleton pregnancies.

In patients with prior preterm singleton birth and current twin pregnancy with normal cervix length, there is no consensus regarding screening and treatment as prior preterm birth is an independent and additive risk factor.[15] If there is a prior preterm birth, there is a 69% risk of repeat preterm labor pains in multiples and 50% risk in singleton. Treatment of this condition is unclear.FIGO endorses routine cervix length screening without an exclusion for multiple pregnancy.[16]

Fetal fibronectin: [fFN] [20]

- The next test which can be utilized to predict the occurrence of preterm birth is the measurement of fetal fibronectin from a swab from the posterior fornix of the vagina through a speculam. There is a qualitative testing which is considered positive if fFN is more than 50 ng/ml. It is a solid phase immunochromatographic assay. There is a newer quantitative assay which is more prognostic at extremes of levels. This test kit can be stored at room temperature.
- Fetal fibronectin is an extracellular matrix glycoprotein which promotes adhesion at the placental and decidual chorionic interfaces. It is not normally seen in cervical secretions between 25-35 weeks. It can be identified when the interface is disrupted in early labour. The concentration of fFN & risk of preterm labour are linearly related.

If there is a high risk for PTB, a single cervix length measurement is doneat 16-24 weeks. If it is less than 25mm, interventions are needed.[17]

In symptomatic women, cervix length measurement is

not beneficial. A quantitative fFN may help in such conditions. If there is a negative fFN, it rules out preterm birth in the next seven days. Fetal fibronectin will also help in classifying whether a patient is at low risk or high risk for PTB. In high risk cases, sequential testing may be done. Cervical length is measured and if it is between 15-30 mm, fFN quantification testing will help in classification of risk levels. If fetal fibronectin is between 10-49, patient is not at high risk. If the levels are more than 500, she is at high risk for PTB. [18]

Conclusion:

Threatened miscarriage and preterm labor may be considered as a continuum of obstetric complications. The risk factors need to be identified at the earliest and management is done for each patient in an individualized basis. If proper treatment is instituted at the proper time, it will result in a good outcome for the mother and the fetus.

References:

1. Saraswat L, Bhattacharya S, Maheshwari A, Bhattacharya S. Maternal and perinatal outcome in women with threatened miscarriage in the first trimester: a systematic review. BJOG: An International Journal of Obstetrics & Gynaecology. 2010 Feb;117(3):245-57.
2. NICE guideline Published: 17 April 2019 www.nice.org.uk/guidance/ng126
3. Everett C. Incidence and outcome of bleeding before the 20th week of pregnancy: prospective study from general practice. Bmj. 1997 Jul 5;315(7099):32-4. and 3-16% can subsequently abort. [4];
4. Sotiriadis A, Papatheodorou S, Makrydimas G. Threatened miscarriage: evaluation and management. Bmj. 2004 Jul 15;329(7458):152-5. Many pregnancies which are clinically diagnosed [about 15%] can result in spontaneous loss and many more can be lost before they are clinically recognised.[5]
5. Patki A, Chauhan N. An Epidemiology Study to Determine the Prevalence and Risk Factors Associated with Recurrent Spontaneous Miscarriage in India. J Obstet Gynaecol India. 2016;66(5):310-315. doi:10.1007/s13224-015-0682-0
6. Dhaded, S. M., Somannavar, M. S., Jacob, J. P., McClure, E. M., Vernekar, S. S., Yogesh Kumar, S., Kavi, A., Ramadurg, U. Y., Moore, J. L., Wallace, D. P., Derman, R. J., Goldenberg, R. L., & Goudar, S. S. (2018). Early pregnancy loss in Belagavi, Karnataka, India 2014-2017: a prospective population-based observational study in a low-resource setting. Reproductive health, 15(Suppl 1), 95. https://doi.org/10.1186/s12978-018-0525-4
7. Maso G, D'Ottavio G, De Seta F, Sartore A, Piccoli M, Mandruzzato G. First-trimester intrauterine hematoma and outcome of pregnancy. Obstetrics & Gynecology. 2005 Feb 1;105(2):339-44.
8. Checklist for evaluation of Threatened miscarriage, endorsed by Family Welfare Committee, FOGSI 2009-12
9. Ectopic pregnancy and miscarriage: diagnosis and initial management NICE guideline Published: 17 April 2019 www.nice.org.uk/guidance/ng126
10. Doubilet PM, Benson CB, Bourne T, Blaivas M. Diagnostic criteria for nonviable pregnancy early in the first trimester. New England Journal of Medicine. 2013 Oct 10;369(15):1443-51.
11. Iams, J.D., 1996. The length of the cervix and the risk of spontaneous premature delivery. New England Journal of Medicine, 334(9), pp.567-573.
12. Thomson AJ, Royal College of Obstetricians and Gynaecologists. Care of Women Presenting with Suspected Preterm Prelabour Rupture of Membranes from 24+ 0 Weeks of Gestation: Green-top Guideline No. 73. BJOG: An International Journal of Obstetrics & Gynaecology. 2019 Aug;126(9):e152-66.
13. Fonseca EB,Progesterone and the risk of preterm birth among women with a short cervix. New England Journal of Medicine. 2007 Aug 2;357(5):462-9.
14. International Journal of Gynecology and Obstetrics: 128(2015)80-82
15. Recurrence of preterm birth in twin pregnancies in the presence of a prior singleton preterm birth.Ananth CV ;J Matern Fetal Neonatal Med. 2008 May;21(5):289-95.
16. FIGO Working Group On Best Practice In Maternal-Fetal Medicine , International Federation of Gynecology and Obstetrics ;Int J Gynaecol Obstet. 2015;128(1):80. Epub 2014 Oct 18.
17. Pre Term Labour and Delivery Clinical Guideline V1.7 February 2019
18. Watson HA, Carter J, David AL, Seed PT, Shennan AH. Full dilation cesarean section: a risk factor for recurrent second-trimester loss and preterm birth. Acta Obstetricia et Gynecologica Scandinavica. 2017 Sep;96(9):1100-5.
19. Rekha N. Pillai, Justin C. Konje, Douglas G. Tincello, Neelam Potdar, Role of serum biomarkers in the prediction of outcome in women with threatened miscarriage: a systematic review and diagnostic accuracy meta-analysis, Human Reproduction Update, Volume 22, Issue 2, March/April 2016, Pages 228–239, https://doi.org/10.1093/humupd/dmv054
20. Berghella V, Saccone G. Fetal fibronectin testing for prevention of preterm birth in singleton pregnancies with threatened preterm labor: a systematic review and metaanalysis of randomized controlled trials. American journal of obstetrics and gynecology. 2016 Oct 1;215(4):431-8.

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