



AHMEDABAD OBSTETRICS AND GYNAECOLOGICAL SOCIETY

AOGS E-TIMES

JANUARY 2021

Theme : Catch them Young & Teach Them Right

Motto : Beti Bachhao, Beti Padhao Aur Bete ko bhi Samjhaao

President

Dr. Rajal Thaker

+91 98250 82646

drrajalthaker@gmail.com

Hon. Secretary

Dr. Sunil Shah

+91 90999 77077

sunilshah0501@gmail.com



Painting by Dr. Jagruti Sanghvi

President - Elect
Dr. Jignesh Deliwala
+91 98250 44819
jadeliwala@yahoo.co.in

Vice President
Dr. Kamini Patel
+91 94260 48748
drkaminipatel@hotmail.com

Hon. Treasurer
Dr. Mukesh Patel
+91 98253 68946
drmukesh5369@gmail.com

Hon. Jt. Secretary
Dr. Munjal Pandya
+91 97129 11784
munjal171184@yahoo.co.in

Clinical Secretary
Dr. Sanjay Shah
+91 98240 57071
gynaecare_2005@yahoo.co.in

Managing Committee Members

Dr. Arati Gupte Shah | Dr. Darshini Shah | Dr. Kirtan Vyas | Dr. Mahesh Jariwala | Dr. Mehul Sukhadia
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FOGSI President : Dr. Alpesh Gandhi

Editors : Dr. Rajal Thaker | Dr. Munjal Pandya | Dr. Arati Gupte Shah

2nd Floor, Ahmedabad Medical Association Building, Ashram Road, Ahmedabad - 380009.
Phone : 079 - 26586426 | E-mail : office@ahmedabadobgyn.org | www.ahmedabadobgyn.org



Dr. Rajal Thaker
President

President's Message

Dear AOGS Member,

Once again Team AOGS is happy to share the E-Times of January 2021 that has a painting by Dr Jagruti Sanghvi on its cover page and fluid art by Dr Janki Pandya - Dr Munjal Pandya on last page.

AOGS Silver Jubilee Oration by Dr Rani Bang was very well appreciated. We had also organized a CME on interesting cases and panel discussion. SOGOG and AOGS-SOGOG orations were also conducted. Those who have missed these academic sessions, don't worry ; you can still attend them through YouTube channel of AOGS on following link. <https://www.youtube.com/channel/UCbT8DTclHPDIZydLncWlyEQ/>

We have organized AOGS PG symposiums for PG students during February and few more episodes of Sambharna series in coming days.

As vaccines are now given to health care workers as well as to front line workers and number of persons having

COVID-19 infection is decreasing, Lets hope for the best for Happy and Cheerful time....

We are in process of making of I-card for our members. All those who have sent us their data either in soft copy or hard copy, I-card will be prepared based on the data that is provided. I-cards of remaining members will be prepared from the data that is available at AOGS office.

We have sent you all a letter for your suggestions/comment/objection regarding amendments that were proposed in GBM.

We are also trying hard to have E- elections for AOGS.



We have lost our active member Dr D J Shah. We convey sincere condolences to his family and our prayers for the departed soul.

As Valentine Day is celebrated but we shouldn't forget our own festival to welcome Spring season, that is Vasant Panchmi and also importance of Saraswati Puja on the same day. While celebrating valentine day, we should remember that, **'Be your own Valentine, always. Love yourself first. Show importance and respect to yourself. First pamper yourself, Complement yourself, and Look good always for yourself. The only thing that's yours is you, your body. Look after it. If you won't, others won't too.'**

Dr. Rajal Thaker
President, AOGS



Hon.Secretary's Message



Dr. Sunil Shah
Hon. Secretary

Dear AOGS members,

કોરોના નો હવે મૃત્યું ઘંટ વાગી ગયો છે. આત્મ નિર્ભર ભારતમાં નિર્મિત ૨-૨ વેક્સિન દરેક રાજ્ય, જિલ્લા અને ગામડે પહોંચી ગઈ છે. Let's support vaccine drive and take it soon. Many of our doctors friends have already taken and they don't have any complications or severe side effects. It's expected to be benefited at large to all within short span of time. Approximately 6 million people have been vaccinated so far in India, far ahead than any other countries in the world. Wishing all of you healthy, wealthy and Covid free coming year.

As in my previous conversation I have said that we are going for digitalization of AOGS and team AOGS is working hard for it. Please co-operate by filling up the forms send by SMS (Google forms) and via courier (hard copy) to you for seniors who are not comfortable with digital format, whichever way is convenient to you. Office staff or agency person may contact you in helping uploading your photo soon. Next AOGS

election is likely to be digital and very experienced agency has been appointed by office. We have also managed I-card with QR code which will help in maintaining data of all CMEs, GBM, credit points etc. It's team AOGS goal to complete this before we step down and handover office to new team.

Let's hope to meet all dear friends in person for CME and conference within few months.

Jai Hind! Long live AOGS.

Dr. Sunil Shah.

Hon. Secretary AOGS

“Adolescent PCOS & its Dermatological manifestations”



Dr. Ashwini Bhalerao-Gandhi
MD, DGO, DFP, FCPS, DNB, FICOG

- Consultant Gynaecologist, P.D.Hinduja Hospital & Hinduja Healthcare Surgical, Mumbai
- Vice President, The Federation of Obst & Gynec. Societies of India (2013)
- President, The Mumbai Obst & Gynec Society (2012-2013)
- Chairperson of Adolescent Health Committee of FOGSI (2004-08)
- National Convener & Trainer, Adolescent Friendly Health Services (WHO, GOI, FOGSI Initiative - 2006 to 08)

Dr. Ratna Sharma
M.B.B.S, M.S,

- Clinical Associate at P.D.Hinduja Hospital since March 2015,
- Worked as consultant gynecologist at Sanjeevani Multispeciality Hospital Guna M.P (June 2014 to Feb 2015)
- M.S OBGYN from BJMC Ahmedabad (2011 to 2014)



INTRODUCTION

PCOS has now become a major concern in today's era due to its rising incidence especially in young Indian women. It has an impact on physical and mental health of girls, and may even progress to adult PCOS, or it may be a self limiting condition.

INCIDENCE

A cross sectional study was conducted by Dr Beena Joshi et al, in a sampled census block of Mumbai to assess the prevalence of PCOS among 778 adolescent girls . The prevalence of PCOS in them was 22.8% by Rotterdam criteria, 10.7% by AES. Global prevalence of PCOS is highly variable, ranging from 2.2% to as high as 26%.

ETIOPATHOLOGY

Its etiology is thought to be multifactorial, and is influenced by epigenetic, genetic and environmental factors. Other associated factors seen are history of IUGR or macrosomic rapid weight gain in childhood, premature pubarche, sustained abdominal adiposity in young girls.

CLINICAL PRESENTATIONS

PCOS is a disorder of ovarian dysfunction often characterized by menstrual irregularities, relatively high androgen levels leading to acne, hirsutism, alopecia. Features of insulin resistance like acanthosis nigricans, visceral adiposity and impaired glucose tolerance are also seen.

TABLE I - Different diagnostic criterias for PCOS:

- 1.NIH (1990) = simultaneous presence of menstrual dysfunction and clinical / biochemical hyperandrogenism
- 2.Rotterdam (2003) = requires presence of atleast 2 out of 3 criteria
 - a) Menstrual dysfunction
 - b) Clinical/biochemical hyperandrogenism
 - c) Polycystic ovarian morphology
- 3.AES (2006) = requires presence of clinical/biochemical hyperandrogenism and either
 - a) Oligo/anovulation or
 - b) Polycystic ovarian morphology

PCOS is a diagnosis of exclusion. It is important to rule out other causes like:

- a) Primary Thyroid Disorders b) Hyperprolactinemia c) Congenital Adrenal Hyperplasia d) Androgen secreting tumors e) Severe insulin resistance syndrome f) Cushings Syndrome g) Idiopathic Hirsutism

Table II - Principles of Management of Polycystic Ovary Syndrome are as follows -

- Weight reduction
- Exercise
- Life style changes
- Treatment of menstrual irregularities
- Treatment of acne and hirsutism
- Use of insulin sensitizers
- Prevention of long term sequelae

ROLE OF ORAL CONTRACEPTIVE PILLS

OCPs are the first line option in the pharmacological treatment of PCOS. These combined pills regulate the menstrual cycles, lower the risk of endometrial hyperplasia, significantly reduce acne and hirsutism. The OCPs used are a combination of Ethinyl Estradiol (EE) and newer progestins like desogestrel, gestodene, cyproterone acetate, drospirenone. Combined OCPs regulate GnRh pulses and suppress FSH and LH resulting in decreased ovarian stromal proliferation and reducing ovarian steroidogenesis and androgen production. The various progestins vary in their potency and their androgenicity. OCPs treat the symptoms of PCOS through various mechanisms - Estrogen increases the production of SHBG thereby decreasing the level of circulating free androgens; Progestogens counteract the unopposed estrogen thereby reducing endometrial hyperplasia; Progestins such as drospirenone and cyprotenone have antiandrogenic action by inhibiting 5alpha reductase activity or through androgen receptor blockage hence significantly reduce acne and hirsutism. Drospirenone decreases the adiposity there by improving insulin resistance. OCPs reduce the risk of both ovarian and uterine cancer by combating endometrial hyperplasia.

METFORMIN

Metformin is an insulin sensitizer, and it mainly acts on the liver. It reduces hyperinsulinemia, increases SHBG, reduces ovarian steroidogenesis, reduces hyperandrogenism, improves ovulation and restores menstrual regularity and also has cardiovascular benefits. Metformin can be used as monotherapy or in combination therapy by combining it with OCPs and/ or anti androgen drugs. Minor side effects like nausea, diarrhea can be minimized by gradually titrating the dose of metformin. Dosage should be 500mg once a day after food for one week followed by twice a day for one week and then thrice a day. Duration of metformin therapy is not yet established.

MYO INOSITOL

Recent studies are suggestive of the role of myoinositol in reversing the pathophysiology of PCOS, by decreasing insuling resistance thereby improving SHBG level, increasing insulin sensitivity, improving pathways of glucose utilization, overall regulating the HPA axis. Myoinositol helps in restoring menstruation, restores ovulation, decreases acne and hirsutism.

VITAMIN D

According to recent studies an inverse association has been established between 25(OH)D levels and insulin resistance, features of hyperandrogenism and circulating levels of androgens in women with PCOS. Dietary supplementation with vitamin D or other analogues improves insulin sensitivity, reduces circulating testosterone, regularizing normal menses and improving parameters of ovarian folliculogenesis and ovulation.

COSMETIC INTERVENTION

Apart from the usage of antiandrogens and OCPs with anti androgenic properties, other modalities for dealing with hirsutism are LASER therapy electrolysis or topical treatment with eflornithine cream. For removal of already existent hair mechanical modalities like hair plucking, shaving, waxing, depilator creams or LASER are the treatment options. LASER technique is a newer and promising treatment for long term hair removal and also can cover larger surface areas.

For acne management nonhormonal options like benzoyl peroxide, isotretinoin, antibiotics, adapelene etc may be used as per dermatologist's advice. Treatment of acne and hirsutism requires patience, regular followup, as well as compliance for treatment.

Management of Acne

In adults and adolescents with PCOS and acne, it is suggested to use topical medication along with pharmacological interventions based on the clinical presentation of acne as early as possible in consultation with a dermatologist.

In adolescents with PCOS and acne, it is suggested to use oral contraceptives (cyproterone acetate, drospirenone or desogestrel as progestin component) based on the clinical presentation of acne, in consultation with a dermatologist.

CONCLUSION

Therapeutic approach to the adolescent 'CANDIDATE FOR PCOS' deserves further exploration, since early intervention may provide a window of opportunity for preventing the early and late sequelae of this syndrome. Many a times multidisciplinary approach becomes vital for managing various aspects related to PCOS!

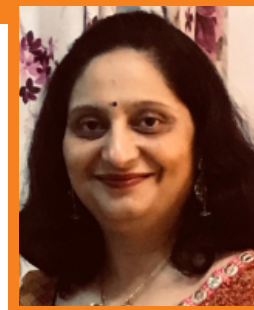
Ensuring Safe Motherhood



Dr. Priti Kumar

- Chairperson, Safe Motherhood Committee- FOGSI
- Core Member-Prevention of Violence against women cell of FOGSI (2018-2020)
- Director- Sunflower Medical Centre Lucknow
- Organising secretary: AICOG 2020, Lucknow

Dr. Bhavana Khara Member, Safe Motherhood Committee- FOGSI



Safe motherhood encompasses multiple steps to ensure that every woman receives all information and services to achieve optimal health of the mother and baby during pregnancy, delivery, and the postpartum period. The journey starts with adolescent girls who are future mothers, therefore, adolescent health is an important predecessor to healthy motherhood.

India is the first country to declare a National Safe Motherhood Day (11th April every year). to implement various health care programs and to raise awareness among women and healthcare workers regarding proper antenatal, intranatal, and postnatal care of mother and adequate access to all services and care. From 2000 to 2017, the global Maternal mortality rate has been declined by 38% (from 342 deaths to 211 deaths per 100000 live births).

The program uses a multiprong approach of health and non-health strategies to emphasize the need for maternal health services, extend family planning services, and improve the status of women.

Components of Safe motherhood practices include:

- Education on safe motherhood
- Prenatal care (care during pregnancy) and counseling with a focus on high-risk pregnancies
- Promotion of maternal nutrition
- Provision of regular antenatal services.
- Adequate delivery assistance in all cases
- Provisions for obstetric emergencies including referral services for pregnancy, childbirth, and abortion complications
- Postnatal care (care after childbirth)

The role of nutrition cannot be undermined in pregnancy. Along with the overall increase in the calorie intake required for both mother and the growing fetus, the focus is also laid upon increasing the intake of protein, iron, calcium, and vitamins rich food items. The risks associated with childbearing for the mother and her baby can be greatly reduced if a woman is healthy and well-nourished before becoming pregnant. During pregnancy and while breastfeeding, all women need more nutritious meals, increased quantities of food, more rest than usual, iron-folic acid or multiple micronutrient supplements, even if they are consuming fortified foods, and iodized salt to ensure the proper mental development of their babies. Modified diets are prescribed in cases of fetal growth restriction and gestational diabetes.

Importance of rest and to reduce workload and stress, maintaining personal hygiene are also promoted on routine check-ups. For prevention of transmission of STD/ HIV (PMTCT prevention of mother to child transmission), voluntary counseling and testing and appropriate treatments are provided.

Anemia during pregnancy is one of the important factors associated with several maternal and fetal complications. Among the various causes of anemia in women, iron deficiency is the most common cause, Hemoglobin estimation is the most practical method of diagnosing anemia. Compulsory hemoglobin estimation is mandatory at 14-16 weeks, 20-24 weeks, 26-30 weeks, and 30-34 weeks of pregnancy for all pregnant mothers (minimum four Hb estimations) is indicated under routine antenatal checkups.

Hemoglobin cut off for anemia during pregnancy (ICMR-1989)

Normal (g/dL)	Mild (g/dL)	Moderate (g/dL)	Severe (g/dL)	Very Severe (g/dL)
11 or high	10-10.9	7-9.9	4-6.9	<4

Serum ferritin is a sensitive indicator of IDA in pregnant women. Concentration below 30µg/L indicates early iron depletion.

For prophylaxis in pregnant women daily, one iron and folic acid tablet starting from the fourth month of pregnancy (that is from the second trimester) continued throughout pregnancy (minimum 180 days during pregnancy). Each tablet containing 60 mg of elemental iron + 500 mcg of folic acid, sugar-coated, red-color. Similarly, in the lactation period daily, one iron and folic acid tablet to be continued for 180 days, postpartum. Therapeutic doses include Two tablets of Iron and Folic Acid tablet (60 mg elemental Iron and 500 mcg Folic Acid) daily. Haemoglobin can be reassessed at end of 4 weeks. Postpartum anemia screening is an important part of safe motherhood practices.

In India, one of the most populous country globally, rates of GDM are estimated to be 10-14.3% which is much higher than the west. Long- term clinical effects of GDM are important contributors to the burden of non-communicable diseases in future. National guideline for diagnosis and management of Gestational Diabetes endorses the single step test recommended by WHO for diagnosis of GDM using a 75gm glucose, through Oral Glucose Tolerance Test (OGTT) irrespective of the last meal with a threshold value of 2-hour BS > 140 mg/dL. The first testing should be done during first antenatal contact as early as possible in pregnancy. The second testing should be done during 24-28 weeks of pregnancy if the first test is negative.

Hypertensive disorders of pregnancy and complications are the major causes of maternal and perinatal morbidity and mortality. Universal screening is recommended. Primary clinical assessment for screening and prediction of preeclampsia can be objectively performed by 'easy to use' HDP-Gestosis score. Process of risk scoring involves all the existing and emerging risk factors in the pregnant woman.

- ✓ Score 1, 2, and 3 are allotted to each clinical risk factor as per its severity in the development of preeclampsia.
- ✓ With careful history and assessment of women, a total score is obtained from time to time.
- ✓ When the total score is =/ > 3; the pregnant woman should be marked as 'At risk for Preeclampsia'.

Pregnancy introduces a significant risk of VTE events. All antenatal patients should undergo risk assessment at the first visit, any hospital admission, and immediately after delivery.

All high-risk pregnancies with medical disorders should receive multidisciplinary team inputs.

Postnatal care for both mother and baby includes cord care, prevention of hypothermia, neonatal care with lactation assistance, family planning services, and management of complications associated with delivery. This is also an appropriate time to talk about safe contraception practices. Contraception counseling and highlighting the significance of preconception counseling is like marching a step ahead in the journey of safe motherhood.

Indicators of safe motherhood include- the percentage of institutional deliveries, deliveries attended by SBA and cesarean rates, infant mortality rate, contraceptive prevalence rate, and antenatal coverage rate. Behavior change communication (BCC), Birth preparedness, and complication readiness are the important determinants of safe motherhood. It includes basic emergency obstetrics care to deal with vaginal delivery complications, administration of drugs, and Comprehensive emergency obstetrics care with cesarean delivery, anesthesia, and arrangement of blood and blood products.

The critical first step is to ensure women's rights with autonomy in deciding to seek and obtain maternal health care. This includes the removal of legal and financial barriers, the establishment of adequate transportation, and information and education campaigns on safe motherhood to remove social barriers to women's access to maternal health care. This will enable them to access a full range of services to go safely through pregnancy and childbirth.

Safe motherhood decreases maternal and infant mortality and morbidity. Hence there is a need to implement many efforts and turn the dream of a healthy mother and baby a reality.

Safe Motherhood is practiced not so much in words as in attitude and actions.

Past, Present and Beyond... A Thought to Share



DR. BHARATI BHATT
M.D. SENIOR CONSULTANT

RETIRED ASSOCIATE PROFESSOR OB-GYN.
AND HEAD OF UNIT, B.J.M.C. AND CIVIL HOSPITAL, AHMEDABAD.

I am very grateful to LORD ALMIGHTY that he brought me in this world at a time when science had started unfolding its secrets before the world. He made me witness the changing trends in diagnostic and therapeutic modalities with increasing understanding about pathophysiology especially in obstetrics & reproductive biology.

When I was a resident there were limited modalities available to diagnose various obstetric problems and their solution. Take for example Placenta Previa. The diagnosis was entirely clinical based on only 3 magical words of historic truth "PAINLESS - CAUSELESS - RECURRENT BLEEDING" and "NO PELVIC EXAM IN A CASE OF A.P.H. IN 3RD TRIMESTER OF PREGNANCY WHEN THE POSITION OF PLACENTA IS UNCERTAIN", and believe me when I say that our teachers taking rounds in LOBOUR ROOM would just look at the patient observe the patient, gently put the hand on Abdomen, spell out the diagnosis without conflict pass order of management and they were never wrong !!! An example of Supreme Power of Observation & Clinical Acumen.

In case of diagnostic dilemma we used fall back on "Double set up examination" as L.A.C.S. was not frequently performed, as it is now especially when perinatal outcome could not be guaranteed or presence of dead foetus.

Science and scientists were not at rest during this period. They were busy finding out easy answers & solutions for the diagnosis as a result we got various X-Rays and placentography, as you are well aware. But this was of an academic interest and was not available in L.R. at the hour of need.

Then, when I became a teacher, Sonography had started creeping in obstetric practice. You know the rest Today it has made tremendous advance, without its help a clinician is blind !! It has totally replaced age old methods of observations and palpation and captured the specialty entirely and has replaced the mind storming process of making clinical diagnosis.

Why am I telling you all this?

As a teacher, I do feel that younger generation need to know the voyage of diagnostic evolution, PLACENTAPREVIA has gone through, for reasons

- 1) When you are up against wall as either machine not available / machine not working / no net work / remote place etc. etc. etc.... you can fall back on this now so called – historical methods which had stood the test of time then.
- 2) Please do not stop here. Observe and evolve !
Try to find quicker and safer method of diagnosis which can be applied to entire pregnant population all the time. I mean 24 X 7.
- 3) Tomorrow we may have answers to intricacies of implantation and intrauterine environment deciding site of placentation. The clinical application of which may eradicate low placentation and Placenta Previa.

THUS PLACENTA PREVIA MAY HELP SCIENCE TO COMPLETELY ERADICATE ITS OWN EXISTENCE WITH THE HELP OF SCIENCE

Oligohydramnios & Sonography



Dr B.I. Patel
(MD,DGO)

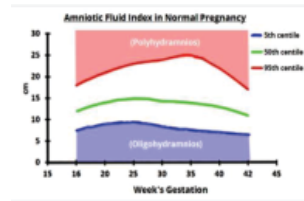
Fetal Medicine expert

Incidence:

- 1: 100 pregnancies < 24 weeks gestation
- 25% common in major anomalies.
- 10% common in borderline cases.
- 2% common in normal.

Dr. Vipalee Trivedi
(MD,DGO)

Fetal Medicine expert



Ultrasound Diagnosis:

- Diminished amniotic fluid volume (AFV): relative to GA amniotic fluid surrounding fetus is low.
- Amniotic fluid volume of < 500 mL at 32-36 wks GA: Amniotic fluid volume depends on; GA therefore, best definition may be AFI < fifth percentile.
- Single deepest pocket (SDP) of < 2 cm & Amniotic fluid index (AFI) of < 5 cm or < fifth percentile.
Little or no clear pocket of amniotic fluid, overcrowding of fetal parts difficult to differentiate oligo from anhydramnios.

Pathophysiology:

In early pregnancy, AF contains electrolytes, with progression, molecules like proteins, carbohydrates, lipids & urea will be present. In first trimester it produced via placenta (maternal plasma, nutrients & growth factors). In later half fetus is main source of amniotic fluid is urination, placenta & lungs. With growth more urine produce, & reaches its peak ~ 32 wks. After 36 wks AF declines naturally. Fetal breathing & swallowing of AF which get processed through kidneys leads to urination, this cycle repeats. Any problems in these processes leads to either oligo or poly, or PROM leads to oligohydramnios.

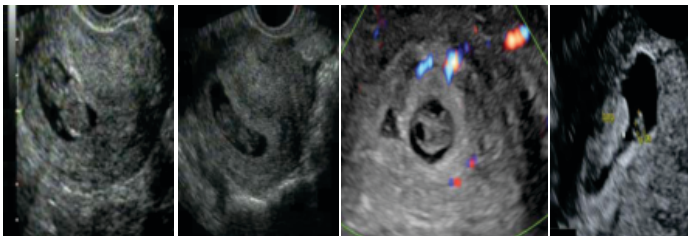
Investigations:

- Detailed ultrasound examination.
- In cases of unexplained oligohydramnios, amnioinfusion may be useful in allowing detailed examination of the fetus and in some cases to demonstrate that the cause was rupture of membranes.
- Invasive testing for karyotyping should be undertaken if there are relevant fetal abnormalities.

Etiopathology:

There are essentially 4 major causes of oligohydramnios at < 24 weeks' gestation :

- PROM: Normal fetal growth, anatomy & fetal Doppler, with maternal history of vaginal loss of clear or blood-stained amniotic fluid.
- Utero-Placental insufficiency: IVT leads to hypoperfusion: Fetal growth restriction with Doppler evidence of high impedance of flow in the uterine & / or umbilical arteries & redistribution in the fetal circulation.
- Renal abnormalities: Renal agenesis (Potter's syndrome), Non-functioning fetal kidneys, e.g., bilateral MCDK, Obstructive uropathy: LUTO.
- Genetic/chromosomal anomalies/Viral infections/Idiopathic



How to assess AFV during first trimester?

GS-CRL < 5 poor prognosis
 Problems of YS, create abnormal AFV in extraembryonic celome
 Problems of embryo, create abnormal AFV in amniotic cavity.
 Uterine art PI if > 3.25, leads to poor placentation, produce early oligohydramnios.
 Inward projecting bump is considered early vasculopathy & chance of early pregnancy oligohydramnios.

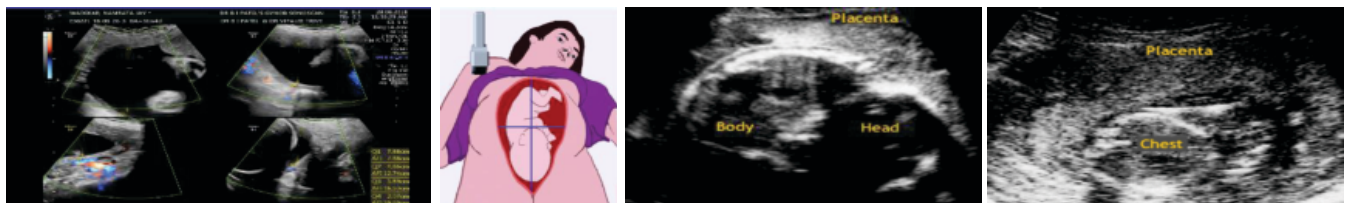
AFI (Amniotic Fluids Index) Quantitative assessment:

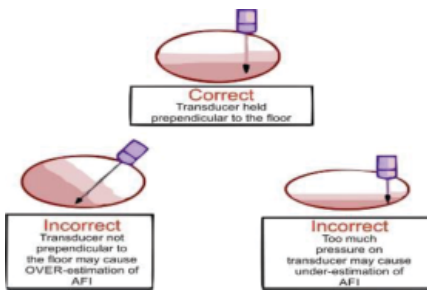
Four quadrants:

This score denotes AFI. Generally speaking, an AFI of < 5 cm it is considered below normal.
 Supine position & Ut. viewed as 4 quadrants.
 Transducer should hold perpendicular to floor & aligned parallel to maternal spine.
 Vertical depth of largest clear amniotic fluid pocket is measured in mm.
 Pocket should exclude cord & fetal limbs.

1987 –Phelan et al: Four quadrant-classification

- < = 5cm ----Oligohydramnios
- 5 - 8cm ----Borderline
- 8 - 20cm ----Normal
- > = 20cm ----Polyhydramnios



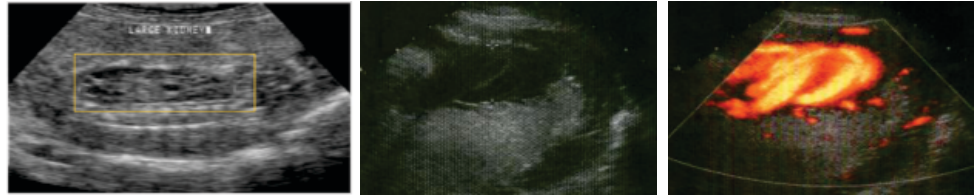


Diagnostic criteria for:

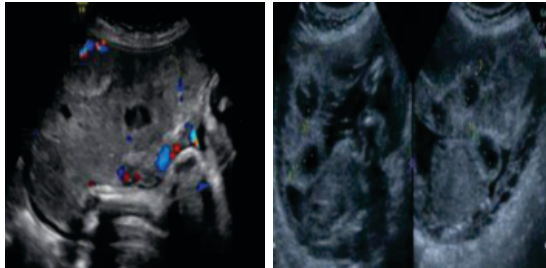
- 1) < 28wks subjective is best
- 2) If liquor is seen all around the fetus it indicates normal.
- 3) If fluid filled space can accommodate one more fetus it is polyhydramnios.
- 4) If the fluid space on one side of the fetus it is oligohydramnios.
- 5) Subjective assessment is effective, but > 28wks 4 quadrants method is best.

Measurement of the deepest vertical pocket (DVP) in any of four quadrants, not counting the fetal parts or umbilical cord, measured in cm. Normal range for DVP is 2cm-8 cm (better for multi fetal pregnancies), If < 2 cm indicating probable oligohydramnios.

Color Doppler is useful in distinguishing between oligohydramnios & anhydramnios, where all the translucent areas in the amniotic cavity are filled with loops of umbilical cord.



Placental vasculopathy: see the intraplacental IVTs cause of hypoperfusion: leads to IUGR & oligohydramnios.



USG is an ideal tool for accurately & repeatedly assessing AFV, assessment & it become integral part of fetal BPP assessment & it has excellent predictive values for predicting, fetal tolerance to labor:

- 1) Meconium-stained fluid
- 2) Abnormal tracing of fetal heart
- 3) Congenital abnormalities
- 4) Admission to NICU

An increased incidence of cord compression is associated with oligohydramnios; leads to variable decelerations, causes fetal distress guides for timely CS delivery.

Follow up:

- Ultrasound scans every 1-3 weeks to monitor fetal condition & assess AFV. In cases of PROM assessment of lung growth may be useful in predicting pulmonary hypoplasia.
- Therapeutic amnioinfusion is not useful.
- In uteroplacental insufficiency assessment of fetal growth & Doppler of umbilical artery, DV & MCA will help to decide time for delivery.
- Earlier is the oligohydramnios, poorer is the prognosis. Isolated full-term oligohydramnios, does not always shows poor outcome, Management individualized on bases of parity, cervical bishops score and patient preference. Maintain maternal hydration with oral or IV hyperalimentation, which will improve AFV by improving uteroplacental perfusion. "An isolated or so-called "borderline AFI" (5-8 cm) is not an indication for labor induction. Labor induction has been shown to increase rate of cesarean delivery, particularly for primi woman with an unripe cervix.
- Fetal mortality rates are 80-90% due to oligohydramnios diagnosed in II trimester, as result of major congenital malformations & pulmonary hypoplasia secondary to PROM. Midtrimester PROM often leads to pulmonary hypoplasia, fetal compression syndrome, & amniotic band syndrome. Amnio-infusion at regular intervals is probably needed for terminal alveolar development.
- Frequent assessment of amniotic fluid volume is important to discriminate normal from IUGR. Oligohydramnios frequent finding of IUGR which is secondary to decreased fetal blood volume, renal perfusion, & subsequently, fetal urine output. severe oligohydramnios definitely increased risk for fetal morbidity.
- In post term pregnancies AFV is an important predictor of fetal well-being so monitoring suggested every week. AFV assessment is helpful in identifying post-term fetuses in jeopardy. Crowley & O'Herlihy -1984 - in post-term patient, is not having > 3cm single clear vertical pocket of AFV, there was statically significant increase in meconium staining & fetal distress.
- AFI declined rapidly at the rate 33%/wk. AFV decreases significantly as GA advances beyond term.

Prognosis:

- Depends on gestational age at diagnosis, cause and gestational age at delivery. In oligohydramnios < 24 weeks' gestation the prognosis is generally poor.
- Bilateral renal agenesis, multicystic or polycystic kidneys are lethal abnormalities, usually in the neonatal period due to pulmonary hypoplasia.
- Preterm rupture of membranes at ≤ 20 weeks' gestation is associated with a poor prognosis; about 40% miscarry within 5 days of membrane rupture due to chorioamnionitis, and, in the remaining 60% of pregnancies, more than 50% of neonates die due to pulmonary hypoplasia.
- Uteroplacental insufficiency resulting in oligohydramnios at ≤ 24 weeks' gestation is very severe and the most likely outcome is intrauterine death. With reasonable maturity cesarean section or vaginal delivery depending on gestational age, fetal size and degree of fetal compromise as defined by Doppler and or cardiotocography.
- PROM: expectant management and vaginal delivery if cephalic presentation.

Management:

No effective treatment is currently available. Healthy pregnancy of third trimester with idiopathic cause has good outcome & required just sonography monitoring. Improvement in hydration. PROM at 26-28wks maternal monitoring (for signs of infection+ steroids) sonographic monitoring for re-filling of AFV pocket.

Recurrence:

- Renal abnormalities: agenesis or multicystic 1-3%, infantile polycystic 25%.
- Preterm rupture of membranes: 10-25%, but can be reduced by cervical cerclage and progesterone

Genetically Inherited Disorders: SCA Type 2: Case Report



Dr. Arati Gupte - Shah (MS, MICOG)

- Consultant and Director : Pulse IVF, Maninagar, Ahmedabad
- Consultant : Khushi IVF, Thaltej, Ahmedabad
- Visiting Consultant at Gupte Hospital, Pune

A patient, Mrs X, aged 30 years, came for preconceptional counseling. Her husband, Mr Y, also 30 years old, said his family has a history of Parkinsonism. His mother died at a relatively young age due to this, and his brother had recently developed symptoms as well. They wanted to make sure their offspring would not suffer from the same.

On taking a detailed genetic history we found that multiple members of the husband's immediate family suffered from a Parkinsonism- like illness. Mr Y's brother, 32 years old, had developed symptoms- an abnormal gait and difficulty walking- about 1 year ago. His mother had a similar illness that she suffered from for about 15 years before she passed away 1 year back at the age of 52. She had a brother who was also affected and passed away at the age of 50. this brother's son, Mr. Y's cousin had a neurodevelopmental delay since birth, and passed away at the age of 15. although Mr Y's grandparents weren't affected, his grandfather's brother, his 2 sons (Mr Y's uncles) as well as one son's daughter (Mr Y's cousin) were all affected. The symptoms they described were typically of difficulty in walking, progressing to loss of motor control, frequent falls, eventually leading to the patients being bedridden, then respiratory complications, and eventually death.

The patient's pedigree analysis showed the presence of affected individuals in every generation. Given that Parkinsonism per se is rarely genetically transmitted so frequently from generation to generation, we initially advised whole exome sequencing to determine the cause of the disease. However, Mr Y's brother's genetic report showed he was positive for a gene called SCA2, and hence a clinical sequencing was done for Mr Y to specifically look for SCA2.

Diagnosis:

His report showed he was positive for SCA2 or Spinocerebellar Ataxia type 2.

SCAs have been classified into at least 43 subtypes depending on their genetic locus. SCA 2 is 2nd most common, with an incidence of 15% worldwide¹. Age of onset is usually the late 30's or early 40's but it can present earlier if number of CAG repeats is greater².

Although SCA2 is considered as an adult-onset disease, an infantile or pediatric phenotype has been described in some populations as a result of large CAG expansions¹.

Clinical presentation³:

One of the earliest features to present is the ataxic gait and postural instability, followed by dysarthria.

There is slowing of saccadic eye movements.

Resting tremor, hyperreflexia, dystonia and rigidity are also seen, mimicking Parkinsonism.

Other symptoms are:

- Peripheral neuropathy, ● Painful muscle cramps, ● Sleep disorders ● Cognitive decline ● Psychiatric disturbances

Progressive clinical features result from the neurodegeneration of cerebellum and extra-cerebellar structures including the pons, the basal ganglia, and the cerebral cortex.

Genetics

SCA 2 is an autosomal dominant disorder, which is why its presence is marked in every generation of Mr Y's family. There is also a 50% chance of his offspring inheriting the same mutation².

The disease is caused by the abnormal expansion of Cytosine-Adenine-Guanine (CAG) repeats in the ATXN2 gene on chromosome 12. this causes the expression of abnormally long polyglutamine (polyQ) sequences.⁴

While CAG repeats upto 31 are normal, repeats between 33-34 signify a milder version of the disease with presentation at a later age. Repeats above 37 lead to a full-blown presentation¹. Mr. Y's report showed 47 repeats.

The number of CAG repeats can differ between offspring and between siblings of an affected individual.

The polyQ-expanded ataxin-2 is toxic to the human nervous system, causing the loss of biological functions and leading to cell damage and then cell death of the neurons present in the cerebellum, brainstem, spinal cord, and cortex³.

SCA also shows anticipation, which means that the chances of the next generation being affected at a younger age are more².

Management:

The patient was counseled regarding the disease and its progression. They were then given options for a safe conception:

- Natural conception with CVS in the first trimester. ● IVF with PGD to separate affected embryos ● Or use of donor sperm.

Mr Y also has a sister who is unaffected and he was advised to have her tested as well before planning a pregnancy.

References:

1. Antonella A, Rinaldi C et al. Multiple faces of SCA type 2. *annals of clinical and translational neurology*. 2017, vol 4;9.
2. Pulst SM, Spinocerebellar ataxia type 2. *GeneReviews*, University of Washington, Seattle. 2019.
3. Velázquez-Pérez L.C., Rodríguez-Labrada R, Fernandez-Ruiz J. Spinocerebellar Ataxia Type 2: Clinicogenetic Aspects, Mechanistic Insights, and Management Approaches. *Frontiers in Neurology*. V8.2017.
4. Pulst MS, Nechiporuk A, et al. Moderate expansion of a normally biallelic trinucleotide repeat in spinocerebellar ataxia type 2. *Nat Genet* (1996)

The Vaccine Of Happiness & Health In 2021!



Dr. Darshna Thakker

Senior Gynecologist & Internationally Licenced HYL –
Heal Your Life Teacher & Workshop Leader #doconmission

info@sarjanhealthcare.com | Founder – Sarjan Health Cafe

Happiness is an emotional state characterized by feelings of joy, satisfaction, contentment, and fulfillment. Each of us can have different definition & perception of HAPPINESS. WE, as doctors had a new set of challenges during the Pandemic Year of COVID 19 - 2020. Transition from 2020 to 2021 seems brighter with the silver line of the vaccine in that cloud of fear, loss and stress in the last year. More important aspect is building our immunity - physical and emotional and spiritual to sail through daily life with more happiness & health Coronaries! Happiness & health goes hand in hand! Let's take and give the vaccine of happiness with lifelong immunity with simple ABC.

Awareness & Acceptance of our own limiting belief system / thinking patterns

Be willing to learn, unlearn & re-learn – CHANGING our thinking patterns

Courage, Confidence & Consistency to move on

Questions to own self – From where do I operate? DO I operate from fear / insecurity / love / hope / faith / guilt? Each thought, when energized converts into an emotion and emotional disturbance leads to disease. This applies to us and our patients!

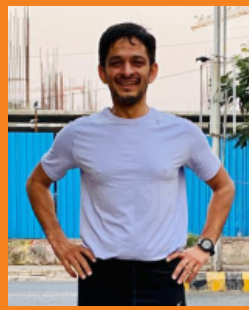
Feelings of gratitude boost immunity, lower blood pressure and speed healing. Dr Rollin McCraty of the Institute of HeartMath in the US is studying the link between emotions and physical health, and has found that, like love, gratitude and contentment also trigger oxytocin.

Working on our emotional health is just as important as taking care of our physical well-being. Research shows that emotional distress makes us more vulnerable to physical illness by impacting your immune system. Pause & ask, how I think, feel, and behave in daily life? Being mentally or emotionally healthy is much more than being free of depression, anxiety, or other psychological issues. The 7 dimensions of wellness are: social, emotional, spiritual, environmental, occupational, intellectual, and physical wellbeing.

Mental health refers to our ability to process information. **Emotional health**, on the other hand, refers to our ability to express feelings which are based upon the information we have processed. Our body responds to the way you think, feel, and act. This is one type of **“mind/body connection.” It's very essential to make this connection stronger for happy & healthy life.** I also look into each patient's case with the lens of emotional scan while taking history. That has helped thousands of patients for faster recovery with minimal medicine. Even after before & after surgery, when they are offered guided visualization, affirmations and meditation – they are greatly benefited in many ways. I extend my services to offer customized audio affirmations to patients in the ICU, patients with psycho somatic disorders and disturbed relationship dynamics. Such efforts give phenomenal results, the only prerequisite is one has to believe in it! Can we think about holistic approach in our Ob Gyn Practice? Yes, we can think and practice – if we are willing to change the thinking pattern & belief system. Our thinking pattern has great impact on our health and happiness to flow with the system of life. One needs to become aware that subconscious mind is like a computer - garbage in, garbage out! Its essential to filter what we feed in, may it be from any source of information / emotion. AS Louise Hay said **“POWER IS WITHIN”** to heal own-self and stay healthy!

A researcher from the University of Kansas has spearheaded a new investigation into the link between emotions and health. The research proves that positive emotions are critical for upkeep of physical health for people worldwide, above all for those who are deeply impoverished. 2021 brings a new set of challenges for us doctors - more patients having psychosomatic disorders in the post corona times [Social deprivation, loss of job / life, financial crisis and much more]. May it be child bearing, infertility or menopause – they all need happiness vaccine. Emotional History taking can give clue to find out root cause. IN cases of Recurrent illnesses, checking emotional scan gives faster & great results with **therapies like emotional release. SELF LOVE & Self-Acceptance** are the powerful ingredients of Happiness Vaccine. Are we ready to take & Give?

My Journey As An Ultra Runner



Dr. Pratish Sharda

**MS (Gynec)
ULTRA Runner**

Running started for me as a form of activity to improve my health but slowly it became my passion . Six months back I decided to join a team of runners who were thinking of running from Ahmedabad to Porbandar, a distance of 400 km.I wanted to test my strength and endurance and also challenge my mind.

I started training for it seriously along with my team members six months back.The method which we followed for this ultra run was MAF method which takes into account your heart rate and age and helps you to run in aerobic zone . Initially I found it very tough to run according to my heart beat and stay in aerobic zone but as days passed my pace and distance improved . I practiced running in different MAF zones.Each day of training was different. At times we ran slow , at times we did speed run, at times we ran for whole night , at times we ran an elevation and at times we ran on rough roads.All this to train our muscles , body and mind.

I had wanted to cross 100 miles (160 km) at the start but dedicated, disciplined training changed my goal and I decided to push myself as much as I could.Before run I took a two week recovery break so that the muscles could rest and support me during the run.

The event , which actually did not start as an event but later on became so due to support from people was self financed.And as nothing of this sort had been organised before we could not foresee and plan ahead for the many hurdles we faced during the run like dense fog in morning , harsh sun in afternoon , heavy traffic , food , hydration , lack of toilet facilities etc.But nonetheless we were all determined and wanted to chase what had become an obsession with us.

I started running on 22nd Jan and first 100km came to me easily . I was flying on the roads. Then fatigue and multiple injuries took over which slowed me down a bit . But my training helped and each time I fell I picked myself up to finish a flabbergasting distance on 296 km. I had to ultimately stop due to an ankle injury.

I and my team mates ran for a cause - to support the deafblind child through Sense International India organisation and our goal was to raise Rs. 4,00,000 .


I got my full body check up before I started the training , before run and after the run and I was pleasantly surprised to see that my cholesterol had come down and my HDL had increased from 40 to 75. That is the benefit of training and following the MAF method.I would like to add that since two year I am hypertensive and take my medicines regularly but I have not used that as an excuse to not exercise or run.I urge more and more people to make fitness a part of their daily routine cause I truly believe in ' Run before your body runs out.'

PAST PROGRAMMES

AOGS Silver Jubilee Oration - Date : 08.01.2021



AOGS CME - Date : 22.01.2021



AOGS CME
22/1/2021 | 3 TO 5 PM FRIDAY

ONE CREDIT HOUR FROM ICOG

CHAIRPERSONS
Dr Rajal Thaker, President AOGS | Dr Sunil Shah, Secretary AOGS
Dr Sanjay Munshi | Dr Jagruti Shah

CASE PRESENTATION: (EACH 13 MIN + 2 MIN Q-A)

DR TEJAS DAVE
ABDOMINAL ECTOPIC PREGNANCY

DR SAPANA SHAH
CESAREAN SCAR PREGNANCY: A PRECURSOR OF PAS DISORDERS

DR AMIYA MEHTA | DR PRERAK MODI | DR RINKY AGRAWAL
ABDOMINAL ECTOPIC PREGNANCY

E- certificate will be sent to registered email of registered participants

VISIT BELOW LINK TO JOIN THE CME
<http://enlacecode.com/live/index.php/webinar/register/aogs-cme>

PANEL DISCUSSION
NON HEMORRHAGIC MATERNAL COLLAPSE

MODERATOR
Dr Sadhana Gupta


PANELISTS
Dr Babu S Patel
Dr Cecil Kanuga
Dr Devang Patel
Dr Janki Pandya
Dr Jaishree Bamniya
Dr Manish Pandya
Dr Manoj Pandya

PROGRAM COORDINATORS:
Dr Munjal Pandya
Dr Kirtan Vyas



PAST PROGRAMMES

SOGOG Oration & AOGS - SOGOG Oration - Date : 24.01.2021




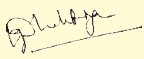
Feels honoured and has pleasure to award

SOGOG ORATION
for the year 2020-21

to


Dr Alpesh Gandhi

Date : 24th January 2021, Sunday
Subject :
Practical Safety Tips in Obstetrics

Dr Meenakshi Patel
President, SOGOG

Dr Dipesh Dholakia
Hon. Secretary, SOGOG





Feels honoured and has pleasure to award

AOGS - SOGOG ORATION
for the year 2020-21

to

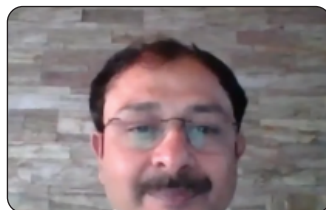
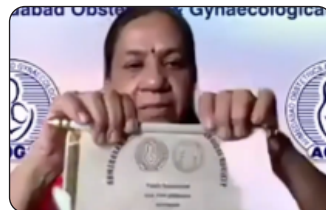
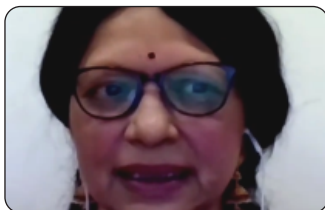
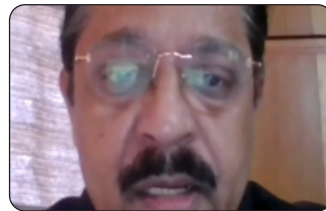
Dr Purnima Nadkarni

Date : 24th January 2021, Sunday
Subject :
Demystifying Ovulation
Induction Protocols in ART

Dr Rajal Thaker
President, AOGS

Dr Sunil Shah
Hon. Secretary, AOGS



• OBITUARY •

We have lost our active member
Dr D J Shah.
We convey sincere condolences to his
family and our prayers for the departed soul.



DR. DILIP J. SHAH

FUTURE PROGRAMMES



AOGS PG SYMPOSIUM

Inauguration: 7.30 PM

Welcome Address: **Dr. Rajal Thaker**

Blessing by:

Dr. Diptiben Shah

Dean - AMCMET Medical College, Ahmedabad

Dr. Pratik Patel

Dean - NHL Municipal Medical College, Ahmedabad



6th Feb 2021, Saturday
7.30 pm to 9.30 pm

LECTURE SESSION - 1

Time: 7.45 - 8.30 pm | **Obstetric Case**
 Topic: **Hypertensive Disorders of Pregnancy**

Dr. Pushpa Yadav - NHLMMC, Ahmedabad
Dr. Nitin Raithatha - PSMC, Karamsad
Dr. Ashwin Vachhaani - SMIMER, Surat

Students (NHLMMC - SCL)
Dr. Nilesh Makwana
Dr. Shyama Baranda
Dr. Pragna Damor
Dr. Kavya Patel

Time: 8.30 - 9.15 pm | **Gynec Case**
 Topic: **AUB**

Dr. Yamini Trivedi - AMCMET - LG, Ahmedabad
Dr. Nalini Anand - MPSGMC, Jamnagar
Dr. Maitri Shah - Medical College, Baroda

Students (AMCMET - LG)
Dr. Chirag Thummar
Dr. Roshni Patel
Dr. Hitakshi Kapatel
Dr. Himani Patel

Vote of Thanks: **Dr. Sunil Shah**

President

Dr. Rajal Thaker

Honorary Secretary

Dr. Sunil Shah

Co-ordinators

Dr. Munjal Pandya | Dr. Shashwat Jani | Dr. Parth Shah | Dr. Kirtan Vyas

WEBLINK: <https://scienceaboveall.com/AOGS/sunpharma/>

Educational partner



FUTURE PROGRAMMES



AOGS PG SYMPOSIUM WEBINAR - II

Inauguration: 7.30 PM

Welcome Address: **Dr. Rajal Thaker**

Blessings by:

Dr. C.B. Nagori

Dr. Dipesh Dholakiya



12th Feb., 2021, Friday

SESSION - 1

Time: 7:45 to 8:30 pm

Gynaec case: Fibroid

Faculty:

Dr Hina Oza - BJMC, Ahmedabad

Dr Dipti Modi, Medical college Baroda

Dr Rajshree Katke,

Grant Government Medical College &
sir JJ grp of hospitals, Mumbai

Students of BJMC

Dr Jalpa Rathod

Dr Riddhi Mehta

Dr Sephali Sah

Dr Viwal Lobo

SESSION - 2

Time : 8:30 pm to 9:15 pm

**Obstetric case:
Anaemia in Pregnancy**

Faculty:

Dr Haresh Doshi - GCS, Ahmedabad

Dr Umasingh- KGMU, Lucknow

Dr Jitesh Shah - SMIMER, Surat

Students of GCS Medical college

Dr. Himani Yadav

Dr. Nitin Gambhava

Dr. Ashka Joshi

Dr. Saksha Dholakia

President

Dr. Rajal Thaker

Honorary Secretary

Dr. Sunil Shah

Co-ordinators

Dr. Munjal Pandya | Dr. Shashwat Jani | Dr. Parth Shah | Dr. Kirtan Vyas



AOGS PG SYMPOSIUM WEBINAR - III



27th Feb., 2021, Saturday

Obstetric Case: Previous CS, Gynec case: Prolapse



Fluid Art by Dr. Munjal Pandya, Dr. Janki Pandya