



AHMEDABAD OBSTETRICS AND GYNAECOLOGICAL SOCIETY

# AOGS E-TIMES

DECEMBER 2020

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](mailto:drrajalthaker@gmail.com)

**Hon. Secretary**

**Dr. Sunil Shah**

+91 90999 77077

[sunilshah0501@gmail.com](mailto:sunilshah0501@gmail.com)

President - Elect

Dr. Jignesh Deliwala

+91 98250 44819

[jadeliwala@yahoo.co.in](mailto:jadeliwala@yahoo.co.in)

Vice President

Dr. Kamini Patel

+91 94260 48748

[drkamini Patel@hotmail.com](mailto:drkamini Patel@hotmail.com)

Hon. Treasurer

Dr. Mukesh Patel

+91 98253 68946

[drmukesh5369@gmail.com](mailto:drmukesh5369@gmail.com)

Hon. Jt. Secretary

Dr. Munjal Pandya

+91 97129 11784

[munjal171184@yahoo.co.in](mailto:munjal171184@yahoo.co.in)

Clinical Secretary

Dr. Sanjay Shah

+91 98240 57071

[gynaecare\\_2005@yahoo.co.in](mailto:gynaecare_2005@yahoo.co.in)

Managing Committee Members :

Dr. Arati Gupte Shah

Dr. Darshini Shah

Dr. Kirtan Vyas

Dr. Mahesh Jariwala

Dr. Mehul Sukhadia

Dr. Nivedita Vaja

Dr. Parth Shah

Dr. Shashwat Jani

Dr. Snehal Kale

Ex-Officio :

Dr. Anil Mehta

Dr. Mukesh Savaliya

Co-Opt. Members :

Dr. Chaitanya Nagori

Dr. Dipesh Dholakiya

Special Invitee :

Dr. Chirag Amin

Dr. Geetendra Sharma

Dr. Hemant Bhatt

Dr. M. C. Patel

Dr. Nita Thakre

Dr. Parul Kotadawala

Dr. Tushar Shah

FOGSI President :

Dr. Alpesh Gandhi

Editors :

Dr. Rajal Thaker

Dr. Munjal Pandya

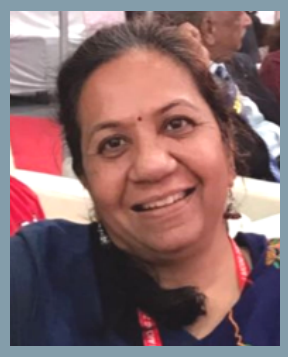
Dr. Arati Gupte Shah



Painting by Dr. Pinky Dhaival Naik

2nd Floor, Ahmedabad Medical Association Building, Ashram Road, Ahmedabad - 380009.

Phone : 079 - 26586426 | E-mail : [office@ahmedabadobgyn.org](mailto:office@ahmedabadobgyn.org) | [www.ahmedabadobgyn.org](http://www.ahmedabadobgyn.org)



**Dr. Rajal Thaker**  
President

## PRESIDENT'S MESSAGE

Dear AOGS member,

Once again we are happy to present the AOGS E-times of month of December 2020 that has a painting by Dr Pinky Dhaval Naik on its cover page.

"Finally it comes to an END" -The extraordinary year of 2020 which completely redefined every attribute of our lives-Restraint, Repression, Sustenance, Survival, Sensitivity, Patience, Humanity, Relationships, Social Values, Compassion and so much more !

We should not hate 2020 because we had great opportunities to learn crucial lessons of life. We have learnt to live with minimal. We have survived challenges. We have healed and coped up. We have adapted like never before. So, we all need to salute 2020 to help us to grow.

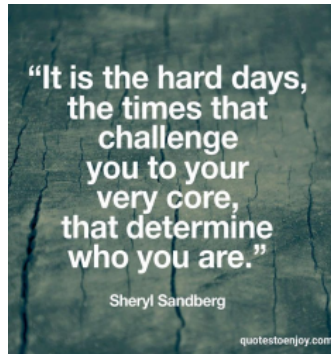
Hats off to all corona warriors for their phenomenal contributions and relentless efforts towards the wellbeing of the society.

Thanks to the technology that has helped us to connect even during locked-down.

Life is a challenge and it will a challenge even in 2021.

Wishing you all the best to embrace a safe, secure New Year that brings positivity & happiness to each and everyone of us !

Dr Rajal Thaker  
President AOGS



**We are in process of digitalisation of AOGS. Please upload your data through following link**

[https://docs.google.com/forms/d/e/1FAIpQLSeanSUcvalatfs3Gd0tSWOIWtBa1KS1-xbgq6pTmCkPnTrk7A/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSeanSUcvalatfs3Gd0tSWOIWtBa1KS1-xbgq6pTmCkPnTrk7A/viewform?usp=sf_link)



**Dr. Sunil Shah**  
Hon. Secretary

## HON. SECRETARY'S MESSAGE

Dear AOGS friends,

Wishing you all a very happy, healthy and fun-filled new year. Hope we can delete all bad events of Covid pandemic in Year 2020 and year 2021 comes with new rays of hope. Already many vaccines for Covid has been approved by GOVT for it's emergency use and it works well. We should support the efforts done by Government.

We have learnt many lessons in this Covid era. On that basis team AOGS is working hard to progress and digitalization of many aspects.

We team AOGS request all the members to fill the Google form/physical form for the digitalization of data for all the future functioning.

Wishing you all a healthy Winter.

Stay safe, keep social distance, wear mask.

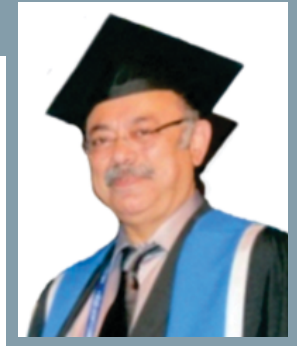
Dr. Sunil Shah  
Hon. Secretary

## iMumz : The Pregnancy Companion



- Director ART Rainbow IVF
- President Indian Society of Prenatal Diagnosis and Therapy
- President South Asian Federation of Menopause Societies
- Imm. Past President Indian Society of Assisted Reproduction
- Past President FOGSI, ASPIRE, IMS
- Regional Director South Asia Ian Donald School of USG
- Professor Dubrovnik International University, Croatia
- Editor-in-Chief SAFOG & SAFOMS Journals & many books
- Past Vice Chairman ICOG
- Member of FIGO Committee of Reproductive Endocrinology & Infertility & FIGO Working Group on RDEH
- Initiator: Club 35 Plus Adbhut Matrutva iMumz App (Winner of #AatmanirbharApp Challenge 2020)

- Prof. Sarajevo School of Science and Technology
- Director Ian Donald School of Ultrasound. (India)
- V.P. WAPM (world association of prenatal medicine)
- Director Ian Donald School of Ultrasound. (India)
- Vice President SAFOG (2019-2021)
- President In SARG
- Past President ISPAT (2017-2019)
- Past President ISAR (2016-2017)
- Member FIGO guidelines committee
- Past President FOGSI (2008-2009)
- Dean I.C.M.U. (2008) / Past President IFUMB
- National Tech. Advisor for FOGSI-G.O.I.—McArthur Foundation EOC Course
- Managing Director GLOBAL RAINBOW HEALTH CARE, Agra
- Director ART-RAINBOW-IVF (Agra & Delhi)



**Dr. Jaideep Malhotra**  
MD, FICOG, FICS, FMAS, FIUMB, FRCPI, FRCOG

**Prof. Narendra Malhotra**  
M.D., F.I.C.O.G., F.I.C.M.C.H., F.R.C.O.G., F.I.C.S., F.M.A.S., A.F.I.A.P.

Pregnancy is one of the most eventful and important journeys in human life. Little did we know that a pregnant mother's womb environment defines the health, immunity, and brain architecture of her baby. Today the research on this womb environment has proven that the nine months are the most crucial months in defining the individual's health and emotional personality as an adult. Who else will understand this better than the third generation gynecologist Dr. Jaideep Malhotra, who initiated Adbhut Matrutva initiative in creating a holistic approach towards pregnancy & sensitizing women and doctors both towards it and this led to the development of the iMumz App story.

Here is the story of the iMumz app, which was declared the second best health app of the country in the prestigious AatmaNirbharApp competition. This app is trusted by 1000+ doctors and has enabled 60,000+ expecting mothers to deliver healthy, happy and intelligent babies. This app is currently available in Hindi and English languages.

It was the 2016 summer Olympics and the whole nation enthusiastically watched the Badminton finals between P V Sindhu and Carolina Marin. India's P V Sindhu won the silver medal and India with 120 Crore population ended up winning two medals. This led to a discussion among students in an IIT hostel and started thinking about the reasons behind this dismal performance. Someone said sports culture in India, Infrastructure etc. but one student just declared that it's all in the DNA of the westerners. Figure 1 shows how India can produce world class sports persons with the right epigenetics. Which triggers the correct DNA(Genetics). It's not all in your genes. It's how the good genes are triggered by epigenetics.



[Fig1: These great sports persons have modified their genetics by programming in mother's womb & hard work]

### iMumz: Creating a safe womb environment for healthy Baby & healthy mothers

This discussion fascinated two IITians, Ravi Teja and Mayur Dhurpate and made them dig more, if the DNA is actually the dictating factor. With extensive research, they stumbled upon many studies that pregnancy is the most crucial phase in human life which dictates the health, immunity, and personality of humans and has the power to actually alter the DNA. Both of them then decided to leave their high paying job offers and use their skill set to build the platform which can enable the expecting mothers to deliver healthy and happy babies to win championships for the country.

Dr. Jaideep Malhotra and Dr Narendra Malhotra are third generation Obstetrician and have delivered more than 20,000 babies in their career of 35 years. Both became the president of FOGSI in the year 2008 & 2018 - the largest body of Gynaecologists and Obstetricians with 38,000+ members. With an experience of delivering 20,000+ babies, they strongly realize the lack of holistic care to the pregnant women and its impact on the future generation.

With that vision, Dr. Jaideep Malhotra encouraged thousands of Obstetricians to provide holistic care to pregnant women through innovative protocols and gave the theme of Adbhut Matrutva and Incredible motherhood which involved Garbh Sansakars.

Rajesh Jagasia is a senior meditation coach who taught more than 2 Lakh people how to meditate. He realized the importance of mindful pregnancy in shaping the future generations and mentored Mayur and Ravi Teja with his experience as a CXO trainer.

Dr. Jaideep, Mr. Rajesh, Mayur and Ravi came together and worked for 6 months to launch the iMumz app on November 2nd, 2019. (Figure 2 the founders of iMumz app with Rtn Dr Narendra Malhotra)



[Fig 2: From Left to Right – PHF Rtn President Dr. Narendra Malhotra, Dr. Jaideep Malhotra, Rajesh Jagasia, Ravi Teja, Mayur Dhurpate]

**The Imumz app**

iMumz app is a unique app, recommended by 1000+ doctors, for providing best care in pregnancy. This app comes with its nine months scientific Baby Care Program which includes a nutritional diet, stress busting meditations, harmonising music, baby bonding exercises for a healthy baby and a safe delivery.

Voted as India’s best AatmaNirbhar pregnancy health app creating healthy, happy, and intelligent babies -

This app also holds live sessions with doctors every day and so far 125+ doctors have answered more than 20,000 questions of expecting mothers.

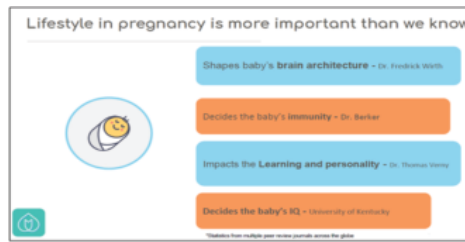


[Fig 3: 1000 plus iMumz Doctors]

What the App does: is shown in the below two figures. Basically the app acts as a pregnancy guide & companion to the mother to be and takes care of all the problems a pregnant woman may be facing (Fig 4). The app advises women on the right life style which will help in the healthy development of the baby in utero. (Fig 5 & Fig 6)



[Fig 4: Pregnancy Problems]



[Fig 5: iMumz Life style advices]

**What our users are saying:**

Here is what the expecting mothers and doctors have to say about the iMumz app -  
 “With iMumz, I get all the motherly love and care. It exactly tells me what to do each day to make myself positive, relaxed, and bond

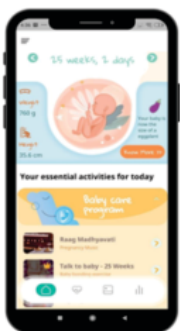
with my little one” - **Chayanika, Bangalore**

“All my friends ask me the same question. How your child is always smiling and hardly cries.. I strongly believe that iMumz app made this possible” - **Priyanka, Chandigarh**

“Stress and nutrition impacts the baby's development in the womb. We see pregnant women only once in a month and they need care every single day. That's why I recommend all the pregnant women to use iMumz” - **Dr. Anita Chaudhary, Varanasi**

“I've been recommending the iMumz app to my patients from the last one year. I see a tremendous impact of this app on the patients who are using this. They are so blissful, positive and there are no complications in them.” - **Dr. Indu Madhusudhan, Bangalore**

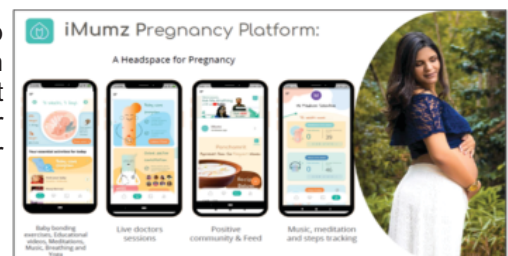
Rotary club Agra Taj City is propagating and promoting this App amongst pregnant women of India and we hope this App will help in Rotary's call for safe motherhood and help pregnant women to get best antenatal advices and help them cope the stress of pregnancy and fear of delivery. Every mother & baby count and iMumz helps every mother as a pregnancy companion.(Fig 7)



[Fig 7: iMumz app]



**2nd Position**  
 PM Narendra Modi's  
 AatmaNirbarApp Challenge



[Fig 6: iMumz Platform]

In the recently concluded “AtmaNirbhar Bharat apps” and “Make in India” call by PM Shree Narendra Modi Ji the app conceptualized & developed by Rtn Ann Dr Jaideep Malhotra was awarded 2nd prize of Rs. 15 Lakh rupees and is now recommended by the Government of India as a Pregnancy care app.



## Tips for Young Budding Gynaecologist

### Dr. Kawita Bapat

MBBS, MS, FICOG  
Gynaecologist (Gold Medalist)  
Obstetrician & Infertility Specialist  
Specialist in One Day Hysterectomy  
Bapat Hospital  
AHD-30 Bapat Square, Sukhliya Indore

We belong to the clan of hard working people, Most of us chosen this profession as choice not by chance.

Allow your passion to become your purpose and one day it will become your profession. If you make your profession and passion same, you will love your work and by doing what you are passionate about consistently, you will remember how to exercise your passion muscles. So make your profession same.

Develop an interesting, relevant and a niche skill that is desirable, a skill set is a combination of abilities, qualities and experiences you can apply to perform well. These can include soft skills such as interpersonal skills, communicational skills as well as technical & non technical skills. Setting specific goals to improve your skills helps you stay on track with your development. Make sure your goals are measurable, achievable and relevant to your profession or your goals.

Everybody needs a mentor, who is experienced; who is respected and who has influence and who is inspire you to improve your skills.

Make a vision & Plans especially for today, tomorrow, for week, month, a year and have 5 year plan to achieve your goals. Moreover, goal does not be too big and long term they can be small and empowering. Furthermore, you need the right mindset. Besides, you need to push yourself towards your goal no one other than you can push your limit. Also, you should be willing to leave your comfort zone because your true potential is going to reveal when you leave your comfort zone.

Take the slightly inconvenient back road with less traffic, Take out time for Fitness, happy healthy diet plans & all the extracurricular activities which make you happy and foremost thing value friendship, spend time with friends.

Surround yourself with people who admire and inspire you to be better and leave those who breed negativity. If you put all your energy into negative people... your life will be negative. If your attention is on WHAT IS WRONG with your life... If your attention and energy is on the negative people and the negativity they bring, that will invade your life.

#### **Manage work and home peacefully:**

Give your family your best. Give your work the rest. Take a vacation every three months. Especially in the first few years. Trust me. Time away = burnout prevention.

Watch out for financial incentive traps. Extra call, selling your vacation weeks, working extra shifts may be very appealing in the beginning; but you cannot put a price tag on protecting your well-being and remaining joyful in medicine. Say yes to things early in your career, which will earn you the right to say "no, thank you" later; Say yes to things that fall within your primary focus; the enemy of productivity is a distraction.

Make your clinical work count twice; quality, safety, research and education projects are much easier accomplished if in line with your clinical work.

When you fail, ask for feedback from people smarter than you; this allows you to fail forward.

Connect with colleagues; they will be your lifelines when hard times come. We are in the business of humanity; hard times exist.

Early in your career, say yes to things that will

- a. Put you on a stage;
- b. Put your name in print; and,
- c. Put you on national committees. Say no to things that require time but do not result in any of these things.

Routinely connect with your chair or direct report. Do not assume she/he knows what you are working on or what you hope to achieve. Face to face time is invaluable.

Practical intelligence is a much higher predictor of success than IQ, work on it, Constantly reinvent, Read more, Write more, Learn to invest, Don't stop learning, Failure is a part of learning process. In the real world, very smart people fail, and mediocre people rise. Part of what makes people fail or succeed are skills that have nothing to do with IQ. Also, the idea that intelligence can be gauged by an IQ test is erroneous.

**"Think like a queen. A queen is not afraid to fail.  
Failure is another stepping stone to greatness."**



# Repeated IVF Failure

## Dr. Manish Banker

Medical Director, Nova IVF Fertility  
Past President ISAR

While advancements in assisted reproductive technology (ART) have allowed more couples to achieve viable pregnancy, at the same time, a new challenge of recurrent implantation failure (RIF) has emerged. Multiple failed IVF cycles can leave couples frustrated and desperate for explanations.

The success rate of reproductive treatment methods depends on many different factors, most important being maternal age and associated oocyte quality, male factor and sperm quality, embryo quality and uterine pathologies and receptivity. Embryo implantation is therefore primarily dependent on the embryo quality, endometrial receptivity and transfer efficiency.

There is no universally accepted definition of RIF and different IVF centers use different criteria for defining patients with RIF.

Collective data from papers report implantation rates in different ART clinics strongly suggest that the maximum implantation rate is between 40% and 60% and it is obvious that not every good quality embryo would implant successfully in each cycle. According to the PGD Consortium, ESHRE, RIF is a failure to achieve pregnancy after  $\geq 3$  unsuccessful transfers of top quality embryos or transfers of  $\geq 10$  embryos in total in multiple transfers. However, with the increasing trend for transferring only one or two embryos and the introduction of blastocyst culture, a couple is considered to have RIF if she fails to conceive after 2 embryo transfer attempts or after transfer of 4 good quality embryos.

Causes of RIF: They may be multifactorial; predominantly being

### a. Embryo related:

- Chromosomal abnormalities: Although morphological screening helps to select and grade the embryos, embryos with good morphology may be aneuploid and this may lead to RIF. Embryo quality is influenced by oocyte quality (dependent on maternal age, response to stimulation) and sperm factors (semen quality and DNA fragmentation). Parental chromosomal abnormalities like translocations may also lead to genetic aberrations in the embryos causing failure to implant.
- Stage of development: The implantation potential of a blastocyst is well recognized to be greater than that of the day-2 or -3 embryo, mainly because of natural selection of better quality embryos for further development.

b. Uterus related: Uterine factors like septae, polyps, submucous fibroids, intrauterine adhesions, adenomyosis and congenital anomalies may all affect implantation and lead to RIF

c. Infective pathology like visible hydrosalpinges or endometritis leading to deranged endometrial microflora and a direct embryotoxic effect may cause implantation failures

d. Hormonal or metabolic disorders (uncontrolled diabetes, thyroid disease, variations in the prolactin level, etc.)

e. Immunological factors like Thrombophilias or antiphospholipid syndrome: They are linked with repetitive pregnancy loss. Their role in RIF remains uncertain

f. Lifestyle factors like smoking, BMI

g. **Idiopathic RIF (impaired cross-talk between endometrium and embryo):** Unexplained failure to achieve pregnancy after ET of good quality embryos, without any obvious pathology / abnormality in uterine cavity and endometrium and without any other obvious reason in couple, patient-partner and embryos may be due to impaired receptivity. Embryo-implantation is only possible for a short period of time when the hostile uterine lining transforms to a hospitable receptive surface to accept the embryo called the Window of Implantation. This dynamic process of genotypic and phenotypic changes of the endometrial cells facilitates two-way cross-talk with the embryo which leads to successful apposition, attachment, penetration and implantation and possibly development and growth of a viable conceptus. In women with RIF, WOI may be deranged in 25-40% cases.

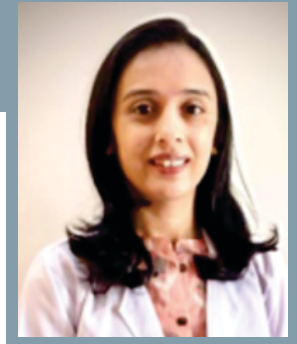
### Diagnosis and management:

A multidisciplinary approach should be adopted in the management of a couple with RIF. It should involve not only an experienced fertility specialist but also a senior embryologist and, where appropriate, a reproductive surgeon and a counsellor. The following therapeutic options may be considered:

- Embryo selection and blastocyst transfer: In women with RIF, extending embryo culture to day 5 or 6 (if not performed in previous cycles) in order to transfer the embryo at the blastocyst stage increases the implantation rate by enabling better selection of embryos and with better synchronicity between the embryo and endometrium.
- Genetic screening: Aneuploidy screening may be offered to couples with RIF to select euploid embryos and improve implantation rates. Parental karyotype should be considered in couples with RIF to screen for structural rearrangements like translocations/deletions which may be detected in the embryo using PGT-SR. Metabolic changes in the culture medium of embryos can also be measured determining what the embryo consumes or secretes (e.g. amino acids, proteins and oxygen consumption) and these parameters have been shown to correlate with embryo viability. Recently non-invasive methods of pre-implantation genetic screening are in use to avoid invasive biopsy.
- Male factor: Evaluation of sperm DNA integrity testing as a DNA fragmentation index may be also offered to couples with RIF. Antioxidant therapy, corrective lifestyle measures and sperm selection using MACS and PICSI can be beneficial in such cases.
- Thorough screening to rule out uterine factors and hydrosalpinges in women with RIF and offering corrective surgery like hysteroscopy or salpingectomy to correct any pathology contributing to the clinical problem.
- Endometrial receptivity testing (ERA): Diagnosing the correct window of implantation in the so-called unexplained RIF may help to improve the clinical outcome by performing a personalized ET (pET). ERA is performed in a natural/HRT cycle and gives the receptivity status by testing the expression of 248 genes in the endometrium.
- In women with RIF, the details of previous embryo transfers should be reviewed, paying particular attention to any technical difficulties encountered and performing mock ETs. Difficult embryo transfer may be due to cervical stenosis or acute anteversion/retroversion or acute ante-flexion/retroflexion of the uterus and in such women corrective dilation, application of a tenaculum to correct version and use of rigid catheters for easy negotiation helps.
- Therapies like endometrial scratching, Laser assisted hatching, use of IVIG, intralipid therapy, LIT, G-CSF infusion, Platelet-rich Plasma [PRP] have not shown much scientific evidence in recent literature to advocate its usage in RIF

Therapeutic approaches should be evidence based, directed to improve the function of the endometrium, correct the uterine pathology, identify the appropriate implantation window and to transfer the morphologically/genetically screened embryo along with appropriate psychological support in couples with RIF to achieve optimal results

## Approach to a Case of Small BPD (Biparietal diameter):



**Dr. Mayank Chowdhury**

Fetal Medicine Consultant  
 Heading Fetal Medicine Department  
 Mayflower Women's Hospital

**Dr Swati Thakkar**

Fetal Medicine Consultant  
 Fellow Mediscan ,Chennai ( Prof. S. Suresh )  
 King's Hospital, London (Prof. Kypros Nicolaides)  
 Dr Hiren Doshi's Clinic , Mayflower Women's Hospital

### Introduction:

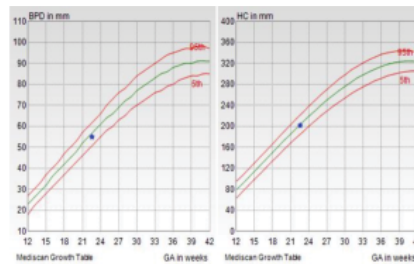
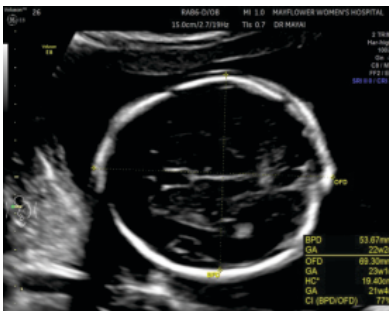
Biparietal diameter (BPD) is one of the basic biometric parameters used to assess fetal size. BPD together with head circumference(HC),abdominal circumference(AC), and femur length(FL) are computed to produce an estimate of fetal weight and fetal size.

HC is better measurement if use alone for assignment of gestational age as compare to BPD and FL alone , and this is common pitfall in dolico-cephalic head where BPD is wrongly considered as measurement for gestational age or microcephaly. Head can be moulded due to various factors in normal condition also and that is main reason why HC is better as perimeter .HC will be un altered in normal situations and altered in abnormal situations.

### Technique:

BPD should be measured on an axial plane which shows thalami and cavum septum pellucidum.

HC can be measured along with BPD, OFD as a diagonal method or elliptical method. Caliper placement is done not on skin but on edge of skull bone at the level of thalamus . Caliper is placed on outer edge on one side and inner edge on other side conventionally.



Normal BPD and HC as per gestational age

### Diagnosis:

Small BPD is defined as biparietal diameter less than 5th percentile for the period of gestation. To label it as small BPD one must confirm the last menstrual period (LMP) date and regularity of the menstrual cycle, as one of the reason for small BPD could be wrong dates.

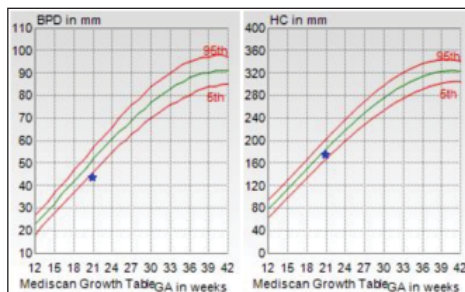
If the dates or gestational age is

confirmed and the BPD is less than 5th percentile for the period of gestation then further biometry as well anatomy should be checked in detail.

### Causes:

It can be isolated or associated with other features like altered head shape. Commonest causes of small BPD are:

- Wrong dates , Constitutional ,Microcephaly , Open neural tube defect ,Breech presentation
- Excessive pressure on maternal abdomen during scan(by probe)
- Dolicocephaly head (Cephalic Index < 75 ) is a misnomer in prenatal period , it is used actually by pediatrician in postnatal period to describe head shape.



Dolicocephaly : here BPD is less than 5th centile but HC is on normal centile

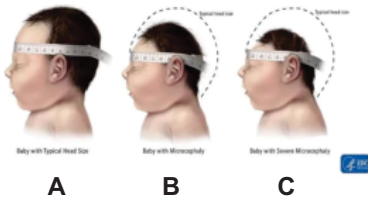
- In case of Open neural tube defect , BPD is smaller not only in second trimester but also in first trimester due to loss of cerebrospinal fluid.

- Microcephaly in utero is conventionally defined as a fetal head circumference (HC) 3SD (standard deviation) below the mean for gestational age, which can be primary ('developmental') microcephaly or secondary ('destructive') microcephaly.

- Microcephaly can be associated with aneuploidies , Mendelian syndromes(Bloom syndrome, Lissencephaly syndrome, etc.),Prenatal Infections(Rubella ,CMV, Zika virus infection),Prenatal exposure to drugs (Foetal alcohol syndrome, fetal hydantoin syndrome).
- The main problem regarding the prenatal diagnosis of microcephaly is late onset and diagnosis by ultrasound .Diagnosis is usually made in late second or third trimester. Sometime suspected in mid-trimester (around 20 wks ) and rarely it is diagnosed in midtrimester

**Prognosis and Management:**

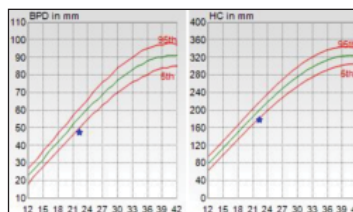
- Detail history must be taken.
- Dating of pregnancy and biometry during scan should be done as per standard method.
- Thorough anatomical scan with detail neurosonography should be done
- Couple must be counselled about the condition.
- Open neural tube defect carries poor prognosis.
- In case of Microcephaly:
  - In the absence of associated anomalies, patients are counselled on the basis of the Head circumference. If this is between 2SD and 3 SD below the mean for gestational age, there is a very good chance that infant is normal. Below 4 SD, the prognosis is guarded and such infants are at increased risk of neurologic compromise. Other feature of microcephaly is immature ventricle, sloping forehead and enlarged subarachnoid space



**Schematic of neonate**  
Abnormal sloping of forehead in profile view image B and C . Image A is normal



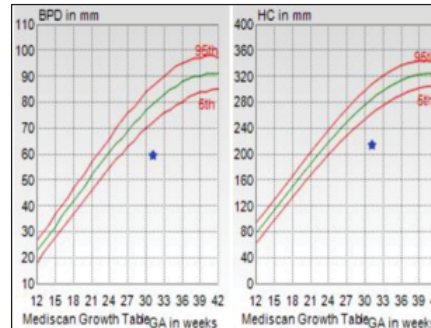
**Evolving microcephaly here BPD and HC is < 3rd centile and cerebellar hypoplasia (h/o microcephaly in previous pregnancy )**



**Normal head profile in 2nd trimester**



**Image shows sloping forehead in 3rd trimester and 2nd trimester**



**Severe microcephaly BPD and HC well below 5 SD with normal other biometry as per gestation**



**Normal profile in 1st trimester**



**Sloping forehead in 1st trimester**

- Serologic studies, such as TORCH may be useful in ruling out antenatal infection.
- Invasive testing should be offered for karyotyping and array.
- Fetal brain MRI at ≥32 weeks’ gestation for diagnosis of abnormalities of neuronal migration and Ultrasound scan should be done every 4 weekly to monitor evolution of head circumference.
- If there are other associated abnormalities, delivery should occur in a tertiary care centre. Timing and mode of delivery should not be influenced by the presence of isolated microcephaly.

**Genetics and recurrence risk:**

- The recurrence risk for microcephaly depends on the underlying cause.
- If the microcephaly is due to an aneuploidy, such as trisomy 18, the recurrence risk is approximately 1% in addition to the maternal age-related risk.

**Newborn**

- Newborns with isolated microcephaly do not usually show evidence of neurologic deficits or seizure as compared to microcephaly due to other causes, such as chromosomal abnormalities or infection.
- Postnatal imaging of the brain through the use of computed tomographic or magnetic resonance imaging is reasonable in most cases.

**References:**

- Small biparietal diameter in fetuses with spina bifida on 11–13-week and mid-gestation ultrasound K. KARL, B. BENOIT, M. ENTEZAMI, K. S. HELING and R. CHAOUI,UOG 2012.
- Callen’s Ultrasonography in obstetrics and Gynecology 6th edition
- Center for disease control and prevention, national center for birth defect and disability





## Diabetic Fetopathy: Quick Review

**Dr. Munjal Pandya**  
Assistant Professor,  
AMC MET Medical College,  
Ahmedabad, Gujarat



**Dr. Janki Pandya**  
Assistant Professor,  
AMC MET Medical College,  
Ahmedabad, Gujarat

- Prevalence of fetal malformations in diabetic mother: around 4-8%
- Systems affected: Central nervous system (CNS), cardiovascular system (CVS), skeletal system, genito-urinary (G.U.T.) and gastro-intestinal system (GIT).
- Impact in 3rd trimester: Fetal macrosomia (Birth weight is usually more than 4 kg, fat deposition over abdominal, inter-scapular regions), leading to shoulder dystocia, birth injuries and neonatal asphyxia

### **Etio-Pathogenesis**

- Activation of hexosamine biosynthetic pathway in response to maternal hyperglycemia, or hypoxia → accelerated oxidative stress in fetus → derangements at multiple levels ranging from gene expression to apoptosis and organ formations.
- Other possible mechanisms: decreased catalase activity, functional deficiencies of arachidonic acid and myoinositol, raised non-enzymatic glycosylation of embryonic proteins and abnormal levels of trace metals.

### **Examination and USG**

- Clinical examination: unduly raised fundal height in relation to gestational age
- USG and Doppler Studies: fetal biometry, phenotypic and visceral signs of diabetic fetopathy, assessment of amniotic fluid and placenta and its grading. Estimated fetal weight and abdominal circumference above 90th percentile suggests fetal macrosomia.
- USG markers suggestive of fetopathy: reduced head circumference/abdominal circumference ratio, neck thickening, thickening of head and abdominal subcutaneous tissue and cardiomegaly
- Phenotypic signs: increased scapular width along with increased thickness of neck and abdominal subcutaneous tissue.
- Visceral Signs: fetal hepatomegaly, cardiomegaly, cardiomyopathy and pancreatic enlargement.

### **Congenital malformations and other complications**

#### Congenital malformations:

- HbA1C less than <8.5%: anomaly rate of only 3.4%
- HbA1C >8.5%: anomaly rate of 22.4%.
- *Caudal regression syndrome*: Most common congenital anomaly found in infants of diabetic mothers. Sacral agenesis and caudal regression syndrome are pathognomonic of diabetes, approximately 256 times more common in GDM patients.
- *Holoprosencephaly*: in around 1-2% of GDM cases, which is 200 times higher as compared to eu-glycemic patients.
- *Neural tube defects*: Spina bifida, hydrocephalus and other CNS defects are almost twice common in GDM patients, along with 3 fold rise in cases of anencephaly.
- *Congenital heart defects*: 2.8 times higher in diabetic mothers as compared to healthy mothers.
- Others: hallucal polydactyly, anorectal atresia/stenosis, heterotaxy, thymus hypo/aplasia and multicystic dysplastic kidneys

#### **Early neonatal complications:**

- Hyperbilirubinemia, transient hypoglycemia, polycythemia, Respiratory distress syndrome (RDS) and cardiac complications (Transient hypertrophic cardiomyopathy with subaortic stenosis and congenital heart failure)
- Pulmonary Maturity: lag period of 3-4 weeks
- Pancreas: islet cells hyperplasia may return to normal within first few days in neonatal period.

#### **Pre-conceptual Prevention of diabetic embryopathy**

- Occurrence of congenital malformation usually starts before 7 weeks of gestation.
- Fuhrmann et al: incidence of congenital malformation was 0.8% in patients with intensive control over glucose levels in pre-conception period as compared to 7.5% in patients with strict metabolic control after 8 weeks of gestation.
- Prepregnancy counselling: Diet, Exercise, Importance of maintaining eu-glycemia



## Public Private Partnership for Elimination of Paediatric HIV

In Order to reach the goals of national PPTCT program and Global Plan i.e. “Zero new Infections by 2021”, universal coverage of pregnant women with HIV counselling and testing services is adopted as the primary strategy by National AIDS Control Program(NACP).

By the end of 2019-20.96% ANC testing coverage in Gujarat against the total estimated HIV positive pregnant. ANC HIV testing coverage in Public sector is around 88% and ANC HIV testing coverage in Private healthcare facility is around 12 %. A key reason for this coverage gap is limited engagement of private sector. Around 62.7% pregnant women availing institutional deliveries in private facilities in Gujarat.

Earlier SAATHII started working in Svetana PPTCT project from Oct 2015 with a focus on private health sector in all districts of Gujarat, whereas from Jan 2018, Svetana phase II has been launched and as per instruction of NACO, SAATHII is working in entire state towards scaling up PPTCT program in public and private both health sectors.

GSNP+ is looking for 33 Districts of Gujarat and 2 UTs (Daman & Diu and Dadra Nagar Haveli) with the coordination of GSACS, DDSACS and DNHSACS. In this regards we expected to saturate all private hospitals providing ante natal delivery and post-natal care services to start Facility Integrated Counselling and Testing Centre (FICTC) in the PPP model.

The role of Svetana Project will be to provided support in establishing and scaling up private healthcare facilities under PPP model, including such steps:

- Mapping and identifying potential sites
- Assessment and finalization of sites
- Establishing systems of documentation and reporting as per SACS/NACO and GFATM protocols.
- Link sites to parent ICTCs for training and other hand-holding of PPP site staff in service delivery and reporting
- Other technical support to strengthen quality at sites through supportive Visits, Supportive Monitoring Visits, Counselling and Medical Mentoring, and Routine Data Quality Audit (RDQA) in the PPP sites
- Facilitate Joint monitoring by DAPCU and the Project

With this reference you are requested to please provide Support to engage private healthcare facilities under Model –C data Sharing model and be part of initiating FICTCs in PPP mode at your hospital and contribute for the national goal of Eliminating Paediatric HIV transmission. where Svetana Team providing Sensitization to medical/Para medical staff on national guidelines, providing reporting format and reporting system, Linkages for Confirmatory HIV testing with SA-ICTC for Client/Patients/Pregnant women screened positive by HIV test kit (if Client/Patients/Pregnant women desire) further linkages to ART centre for care and support services.

# PAST PROGRAMME



## Ob & Gy societies joining in

### SOGOG

President- Dr. Meenakshi Patel  
 Secretary- Dr. Dipesh Dholakia  
 Joint Secretary- Dr. M.C. Patel  
 Treasurer- Dr. Hemant Bhatt

### Ahmedabad Obs & Gyn Society

President- Dr. Rajal Thaker  
 Secretary- Dr. Sunil Shah

### Bhuj Obs & Gyn Society

President- Dr. N. N. Bhadarka  
 Secretary- Dr. G. K. Hirani

### Godhra Obs & Gyn Society

President- Dr. S. P. Patel  
 Secretary- Dr. Alpesh S. Patel

### Jamnagar Obs & Gyn Society

President- Dr. Neeta Mandhai Sata  
 Secretary- Dr. Nita Rada

### Baroda Obs & Gyn Society

President- Dr. Pallavi Satarkar  
 Secretary- Dr. Amita Umesh Shah

### Ananmula



Date : 24<sup>th</sup> December 2020



Time: 3.00 PM to 5.00 PM

This webinar is granted 1 ICOG credit point

Dr. Alpesh Gandhi  
President

Dr. Atul Ganatra  
Vice President

Dr. Jaydeep Tank  
Secretary General

Dr. Shobha N. Gudi  
Chairperson

## FOCUS ON CONTRACEPTION

### Chairpersons

Dr. Meenakshi Patel  
President,  
SOGOG

Dr. Rajal Thaker  
President  
AOGS

Dr. N. N. Bhadarka  
President  
Bhuj OGS

Dr. Neeta Sata  
President  
JOGS

Dr. S.P. Patel  
President  
Godhra OGS

### Speaker

Dr. Shobha N. Gudi  
Chairperson, Family welfare  
committee, FOGSI 2019-21

### Guest of Honor

Dr. Rohit Bhatt  
Past President  
FOGSI

Dr. M.C Patel  
Past Vice President  
FOGSI

### Topic

Expanded basket of Choice & FOGSI - I - Care

### Interactive Session on Enhancing Contraceptive Prescriptions in Pandemic

#### Panelists

Dr. G. K. Hirani

Dr. Pallavi Satarkar

Dr. Kruti Deliwala

Dr. Sujat Vali

Dr. Rajesh Merada

Dr. Anand Bhagde

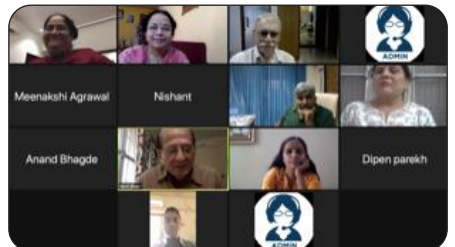
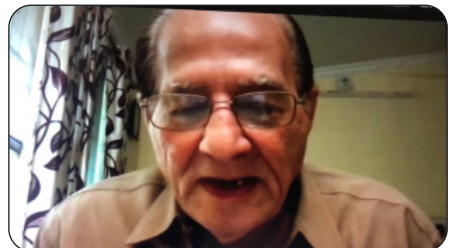
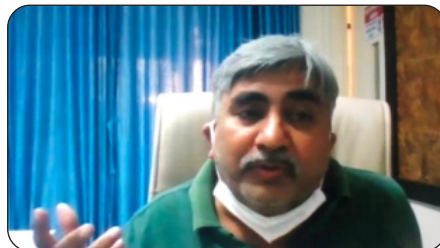
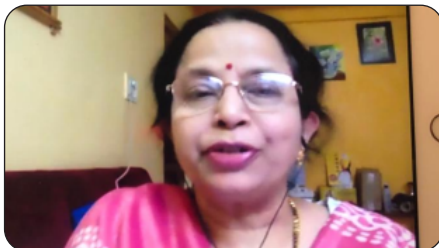
Link : <https://webcastlive.co.in/contraceptionupdate/>

**Disclaimer:**

This e-mail message is intended for HealthCare Practitioner (HCP) registered in India. This e-mail message is confidential and may also be privileged. It is intended solely for the addressee. If you are not the intended recipient you are hereby notified that any disclosure, copying, distribution or taking any action in reliance on the content of this information is strictly prohibited and may be unlawful. If you have received this message in error you are requested to delete it from your system and to contact the sender by replying to this message immediately. Pfizer shall not be liable for the improper transmission of this message nor for any damage sustained as a result of this message. Pfizer shall not be responsible in case of any cancellations, delays of the Webcast due to any reason beyond Pfizer's control, including but not limited to the experts unavailability, website or any technical issues.



**Pfizer Limited.**  
 The Capital - A Wing, 1802, 18th Floor, Plot No. C-70, G Block, Bandra Kurla Complex, Bandra (East), Mumbai 400 051, India.  
 For the use only of Registered Medical Practitioners or a Hospital or a Laboratory



## FUTURE PROGRAMMES

Date : 08.01.2021



### AOGS SILVER JUBILEE ORATION

**SPEAKER**

**Dr Rani Bang**

MBBS, MD (ObGyn), MPH

**TOPIC**

Community Based  
Approach to Reproductive  
Health



8<sup>TH</sup> JANUARY 2021  
FRIDAY



8:30 PM ONWARDS

CHAIRPERSONS



**Dr Rajal Thaker**  
President, AOGS



**Dr Sunil Shah**  
Hon. Secretary, AOGS



PROGRAM CO-ORDINATOR  
**Dr. Munjal Pandya**

VISIT BELOW LINK FOR AOGS SILVER JUBILEE ORATION

<http://enlacecode.com/live/index.php/webinar/register/aogs-silverjubilee>

OR

**YouTube Live** <https://youtu.be/nvdGLQAIBL0>

OR

**LIVE** <http://www.facebook.com/groups/aogsofficial>

Date : 22.01.2021

Case Discussion  
on  
Scar Ectopic  
Abdominal Pregnancy  
Adherent Placenta

Panel Discussion  
on  
Non Haemorrhagic  
Maternal Collapse

Date : 24.01.2021

AOGS - SOGOG

Oration:  
Dr Purnima Nadkarni

SOGOG  
Oration:  
Dr Alpesh Gandhi



## CONGRATULATIONS

**Congratulations Team FOGSI and Dr. Alpesh Gandhi For certificate of awards for efforts on 'Anaemia Mukt Bharat'**



## CONGRATULATIONS

**Dr. Babubhai Patel**  
for his book  
'Safemotherhood: How much Safe?'  
Published by Eliva Press, NY, USA



## CONGRATULATIONS

**Dr. Jignesh Chandrakant Shah**  
**IMA Distinguished service award for the year 2019-20**



## CONGRATULATIONS

**Dr. Mahesh Gupta**  
COMOC MG (developed to control Atonic PPH) being accepted as technique and publications in two prestigious journals



## CONGRATULATIONS

**Dr. Rajal Thaker**  
Third Prize  
Slogan competition E-conclave of HIV AIDS committee of FOGSI

