वी इ वी tak

Newsletter

May 2018 | Issue 5

Law and Ethics

President's Message

Dear FOGSIans

Greetings!

We are the chosen ones, we are the best of the lot in our country, our profession is a divine profession, yet we are accountable for each and every move or decision of ours. In todays' changing scenario, we are not God, we are more of service providers with a difference, which we cannot equate with any other profession, because we are dealing with not one life, but two lives. So it becomes extremely important that we follow our systems of evidence-based medicine with sympathetic ethical Quality practice. It is easier said than done, but believe me there is no other choice and for this, it is critical that we understand that documentation, analysis and timely action are essential duties at our end. I have often heard people saying that we don't have time to do all this, which means that if you have not documented then actually you have not performed and in the court of law that is not going to hold us in good standing. Similar to what repercussions are happening in the implementation of PCPNDT law.

FOGSI this year has a theme of "Quality, Ethics and Dignity" for Doctors and I am sure each one of you will inch toward achieving these goals. We are assisting you in documentation by provision of a free APP (Digital FOGSI, Healthy India), we are also assisting you with paramedics training, and the North zone Yuva conference on Surgical skills is not only a conference, the programme is well organized and developed in such a way that all small nitty-gritties about the surgeries and theatres are discussed at length and all the systems and SOPs and ethical and legal issues arising are put in place to be followed properly.

I am sure from today itself we will start working toward all these, look after our hospital certifications, registrations, SOPS, make rush teams, and see that all quality parameters are in place. FOGSI is assisting you in all these and also providing social security and indemnity schemes, please enrol yourself for them and encourage other friends and members for the same. We also have a Legal cell, which helps you in your times of need with proper advice.

"Ethics is knowing the difference between what you have a right to do and what is right to do"

—Potter Stewart

Warm regards
Lots of Love
Om Shanti
Jaideep Malhotra

Ethics and Doctors

Dr Gayatri Gupta

Medical ethics: A system of moral principles that apply values to the practice of clinical medicine and in scientific research. These values include:

- **Respect for autonomy:** the patient has the right to refuse or choose treatment.
- **Beneficence:** a practitioner should act in the best interest of the patient.
- **Non-maleficence:** to not be the cause of harm. Also, "Utility" to promote more good than harm.
- **Justice:** it concerns the distribution of scarce health resources, and the decision of who gets what treatment (fairness and equality).

It is important to note that these four values are non-hierarchical, meaning no one principle routinely "trumps" another.

Other values

- **Respect for persons:** the right to be treated with dignity.
- **Truthfulness and honesty:** some cultures do not place a great emphasis on informing the patient of the diagnosis, especially when the diagnosis is serious. The principle of informed consent now takes precedence over other ethical values.
- **Informed consent:** the idea that a person must be fully informed about and understand the potential benefits and risks of their choice of treatment.
- **Confidentiality:** it is a patient–physician privilege—prevent physicians from revealing their discussions with patients.

Online business practices and privacy: Private medical records of online visitors should be secured from being marketed and monetized into the hands of drug companies and insurancers.

Vendor relationships: Drug company inducements, including gifts and food, and Industry-sponsored Continuing Medical Education (CME) programs influence prescribing patterns.

Referral with Fee splitting and commissions is considered unethical.

Cultural concerns: Some cultures have spiritual or magical theories about the origins and cause of disease.

Treatment of family members: Professional objectivity can be compromised when the physician is treating a loved one.

Sexual relationships: Sexual consent may conflict with the fiduciary responsibility of the physician.

Futility: Living wills, "expressed wishes", durable "powers of attorney" for health care and "substituted judgment"—The key question for decision-making surrogate is "What do you think the patient would want in this situation?"

Conflicts of interest: Physicians should not allow a conflict of interest to influence medical judgment.

Control and resolution: Hospital accreditation requires that ethical considerations are taken into account. Ethics committees—composed primarily of healthcare professionals, but may include philosophers, lay people and clergy should decide complex matters.

Importance of communication: Insurmountable "ethics" problems can often be solved with open.

Role of Atosiban in Preterm Labour

Dr Vimee Bindra

Preterm birth <34 weeks (early) is associated with majority of neonatal morbidity and mortality and also with infection and inflammation. Uterine inflammation activates contractile pathways leading to preterm labour. It is also one of the most common causes of cytokine-mediated cerebral injury. Tocolytic drugs suppress preterm labour and have the potential to postpone preterm birth hopefully to improve neonatal outcome. This may be by allowing the normal growth and development of the baby or by allowing time to administer magnesium sulfate for neuroprotection and gaining time for corticosteroid coverage for lung maturity. Atosiban is a nonapeptide, desamino analog of oxytocin; it is a competitive oxytocin receptor antagonist and is used to reduce uterine contractions in threatened preterm labour. It acts by competing with oxytocin receptors in the myometrium. Currently, use of tocolytics is restricted to in due course of 48 hours of glucocorticoid administration and/or transfer of the pregnant woman to a center with neonatal intensive care unit. Routine use of tocolytics in preterm labour is not advocated as they have not shown to reduce the rate of neonatal mortality or morbidity. So, maintenance dose of tocolytics is not used even if the tocolytics was used for the reasons mentioned above.

Role of atosiban has been studied in trials; some trials compared atosiban with no treatment and others compared atosiban with betamimetics. In 14 studies which involved 2,485 women, atosiban resulted in fewer maternal side effects, as compared to other tocolytics. The efficacy of nifedipine and atosiban is similar, but atosiban is usually first choice as tocolytic as side effects are similar to a placebo as compared to nifedipine, which can have some serious maternal adverse effects but atosiban is much more expensive. Atosiban should be the drug of choice for preterm labour, specially in patients who are at risk of cardiovascular complications, such as multiple pregnancy and heart disease. Also no fetal adverse effects are seen with atosiban usage, in particular no effect on baseline fetal heart rate.

FOGSI @ FIGO

Regional Congress of Middle East and Africa (Dubai on 11th–13th April)

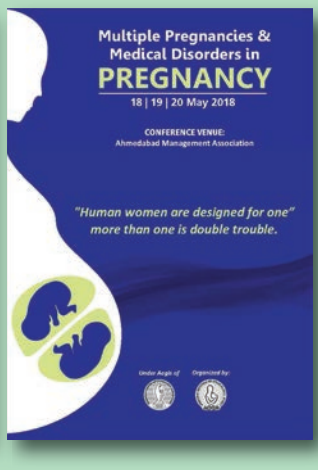
Prof Narendra Malhotra

An excellent congress attended by over 800 delegates (50 FOGSIANS) will all the top brains and FIGO office bearers. All FIGO committee meetings and it was good to see so many FOGSIANS on these committees: Prof. Alka Kriplani, Prof. PK Shah, Dr Nozer Sheriar, Dr Jaydeep Tank, Dr Madhuri Patel, Dr Suchitra Pandit, Dr Hema Divakar, Dr Neerja Bathla.

Dr CN Purandare FIGO President presided over the congress.

Other Indians who were invited faculty Prof Narendra Malhotra, Dr Laxmi Shrikhande, Dr Ritu Joshi, Dr Prakash Trivedi, Dr Nandita Palshetkar, Dr Rishma Pai, Dr Suvarna Khadilkar & Dr VP Paily.

UPCOMING events



Indian College of Obstetricians and Gynaecologists

Dr Parag Biniwale

Indian College of Obstetricians and Gynaecologists (ICOG) is the academic wing of Federation of Obstetric and Gynaecological Societies of India (FOGSI), one of world largest professional organizations of medical practitioners. ICOG was established on December 21, 1984 at Durgapur on the occasion of 28th All India Congress of Obstetrics and Gynaecology (AICOG). Late Dr CL Zaveri was the founder chairman till 1996, Late Dr CS Dawn was Vice Chairman and Dr MN Parikh was Founder Secretary.

- Over three decades, ICOG has grown leaps and bounds. There are a lot of activities planned for the fellows and members.
- Good Clinical Practice Recommendations (GCPR) based on Indian perspective are prepared with keeping in mind the rural and urban practitioners.
- ICOG Certificate courses in the-specialties of Reproductive Medicine, Gynecological Endoscopy, USG, Fetal Medicine, Vaginal Surgery and Critical Care in Obstetrics.
- ICOG Newsletters with review articles on various topics for the postgraduate students and specialists. These are practical ready reckoners which help clinicians on day-to-day basis.
- ICOG continued Medical Education (evidence, based) for the postgraduate students and specialists. ICOG funds these CMEs after necessary formalities which are important to maintain academic quality.
- MICOG-MRCOG – Revision course and examination to be conducted in partnership with Royal College of Obstetricians and Gynaecologists (RCOG) in India.
- MICOG-MRCPI course and examination to be conducted in partnership with Royal College of Physicians of Ireland (RCPI) in India.
- Visiting professorship from ICOG to any Teaching Institute in India. This gives students an opportunity to interact and learn from a senior professor from a distant medical college.
- Member or Fellow of ICOG can apply for ICOG Emcure Travel Award so that he/she can take short term-training of about 2–4 weeks anywhere in India.

How can ICOG reach out to the members?

FOGSI has 35000 members but only 1500 of them are ICOG fellows. There is a need to promote ICOG to FOGSI members so that more fellows are admitted to college. The promotion can be made through various FOGSI societies. If all academic activities of FOGSI and member societies are accredited by ICOG, reaching out to the members would be easy, and there would be a rise in ICOG fellows.

Research

In spite of the fact that FOGSI has a big member strength, we lack in having our own data. Thus, we have to rely on western data even though the circumstances are different than the west. ICOG being a college can have its own institutional ethics committee. Senior fellows can guide young MICOG-MRCOG/MRCPI aspirants to take up research projects, and we thus generate our own data, which may have impact on management of some clinical situations.

Certification courses

ICOG is running successful certification courses in Reproductive Medicine, Gynecological Endoscopy, USG, etc. for many years. New courses have been added, i.e. Fetal Medicine, Vaginal Surgery and Critical Care in Obstetrics considering the need of these upcoming subspecialties.

Website (www.icogonline.org)

ICOG website can be a good medium to reach out to the general members of FOGSI.

Liaison with other colleges

ICOG already has a good rapport with Royal College of Physicians of Ireland and Royal College of Obstetricians and Gynaecologists, UK and the combined examination MICOG-MRCPI and MICOG - MRCOG are in place.

I am a Proud FOGSIAN!!

How to Raise Standards of FOGSI Conferences to ESHRE and ASRM?

Dr Rupal Shah

The conferences in India, these days, are becoming more of social events than academic ones. We try to accommodate every one. There are pressures and political compulsions. We have three chairpersons for each session. We have 10 panelists and 2 moderators so that anyone left out can be adjusted. By trying to involve as many people as possible, we may be ensuring a good presence in the conference, but we cut off time from really knowledgeable speakers.

Even after alloting time for discussion on paper (in the brochure), that time is utilized to compensate for late starts, long introductions, and unnecessary comments by chairpersons. No time is actually given for discussion. We are told to clarify our queries in lunchtime with the speakers. Lunchtime is very hectic, and Indian speakers are busy in socializing and canvassing for upcoming election. Hardly available for answering questions, I have been able to solve some queries with foreign speakers though.

We are spoiling them also by surrounding them for pictures as if a picture with foreign dignitaries will make us more knowledgeable.

It has become a fashion show, an occasion for exchange of gifts and sweets, for shopping and for evening parties. Hundreds of photographs and selfies on whatsApp and Facebook which take a lot of time to see or even to delete. Well, it may be a call of today's virtual world, but all this is in the name of and at the cost of academics?

We take excursions to surrounding places during the conference, not before or after as we do not have time.

We waste time in giving mementos and pose for photographs, or keep posing if cameraman is changing batteries. Inaugurations are occasions to pat each other's back with a lot of superficial lectures by everyone on the stage about women empowerment and maternal mortality, etc. without new ideas. Same thing over and over.

Venue, food and entertainment programs are given top priority. We select which conference to be attended on the basis of whether it is in Goa or Udaipur or Khajuraho and not of the faculty.

I have been part of and guilty of doing the same thing. On introspection, I feel that enough is enough.

My suggestions:

- Compulsory discussion time. If no questions from audience, speaker can raise some queries to be answered by audience to instigate discussion.
- No chairpersons, only one compare per hall per day.
- Introduction in 3 lines. Rest should be common for all and can be put on a board outside the lecture hall (has lectured in many national and international conferences, has published several papers in national and international journals and has occupied many posts at local and state and national level).
- No mementos on stage. Put them in kit bag.
- Lunch should be working lunch, box packed and light to avoid chaos and prevent postprandial sleep.
- Put your presentation, not pictures, on social media for benefit of those who could not attend.
- Speakers may avoid saying some cliched sentences (at the outset. I thank organizers for giving me opportunity to speak on the topic which is very dear to my heart. I congratulate them for fantastic arrangements and hospitality and food. I love coming to india: Bengaluru, Mumbai, Surat, etc. as I have many friends here). They can mail the thanks later.
- Speakers slides can be given in the manual, hence no need to take pictures of slides.

Few Important Links

- https://www.figo.org/sites/default/files/uploads/wgpublications/ethics/English%20Ethical%20Issues%20in%20Obstetrics%20and%20Gynecology.pdf
- https://www.ncbi.nlm.nih.gov/pubmed/9447354
- http://www.obgyn.theclinics.com/article/S0889-8545(10)00009-4/abstract
- https://www.rcog.org.uk/en/guidelines-research-services/ethics-issues--resources/
- https://www.bmj.com/content/310/6992/1476.1
- https://www.sciencedirect.com/science/article/pii/S0301211597001929
- https://www.gfmer.ch/Endo/Lectures_08/ethical_aspects_of_reproductive_health.htm
- https://www.ncbi.nlm.nih.gov/pubmed/8799757
- https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Ethics/Ethical-Decision-Making-in-Obstetrics-and-Gynecology
- http://www.ajog.org/article/S0002-9378(15)00773-5/abstract
- https://www.slideshare.net/deepthyphilipthomas/medical-and-ethical-issues-in-obstetrics
- https://www.sciencedirect.com/science/article/pii/S1751721412001285
- http://www.tormeys.ie/news-a-events/library/113-medico-legal-matters-relating-to-obstetrics-and-gynaecology
- https://ayurlog.com/Archive/january_march/ssac/201502S043.pdf

Professor Dr S Sampathkumari

Emotional and Psychological Aspect of Surrogacy

Dr Piyush Malhotra

"Childbirth is more admirable than conquest, more emerging than self-defense, and as courageous as either one"

—Gloria Steinem

Obstetrics and gynecology, as it deals with all life passages—birth, reproduction, aging and health—has seen every major medical advance which created unexpected ethical dilemmas for our discipline.

Some of the major ethical issues are in assisted reproduction—it involves many issues like donor insemination, IVF, egg sharing, freezing, storing of embryos and embryo research. Donor insemination raises the issue whether the child should be told about his genetic father or not. One such issue of concern is SURROGACY.

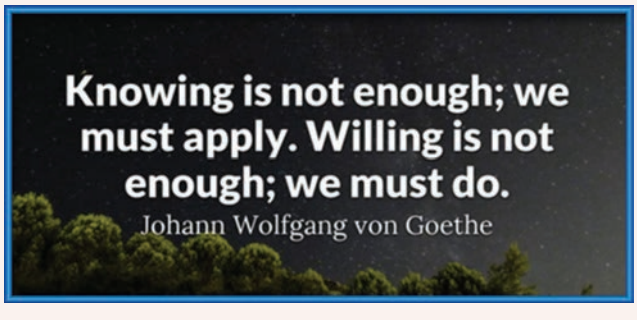
Commercial surrogacy has been legalized in India in 2002. Despite many serious issues have come into light which raised the question on surrogacy and its ethical aspect. With the decreasing rate of fertility in developed countries and easy availability of surrogates in India, the country has become a hub for such practice and poor women are exploited in lure of money.

Serious problem arises regarding responsibility of the child, in case the commissioning parents do not accept the baby. For example, in one instance, the foreign couple who got divorced, before the birth of the baby through surrogate, abandoned the child parentless and stateless. In other case, the commissioning parents who had twin pregnancy through surrogate refused to take the one with abnormality and took the normal one.

Surrogates undergo risks during pregnancy, similar to those of any other pregnant woman—miscarriage, ectopic pregnancy, common pregnancy complications, which may be increased by the risk of multiple pregnancy when IVF is used to create the embryo(s). However, the Surrogacy (Regulation) Act, 2016 has tried to overcome all the drawbacks of the earlier bill and has legally banned commercial surrogacy in India now. Only altruistic surrogacy is allowed, where the surrogate mother is a close relative of the commissioning parents.

However, one gray area in this concept of surrogacy which is yet to be put into light is the emotional and psychological well-being of surrogates. Reproduction being a sacred process, where the mother forms a unique emotional bond with the fetus (child) during the nine months of pregnancy, may undergo depression on surrendering the child. The impact on any natural child(ren) of the surrogate has never been considered. The issues of gamete donation (anonymity or openness) on the psychological well-being of the child has never been studied. Few studies have considered surrogate pregnancy as a high-risk emotional experience because many surrogate mothers may face negative experience. Therefore, it is recommended that surrogates should receive professional counseling prior to, during, and following pregnancy.

Hence, it has now become necessary to motivate people toward other alternatives also like adoption which is an emotionally healthy decision for both parties; also studies should be conducted about coercion and harm to collateral individuals, such as existing children of the surrogate and about emotional/psychological well-being of surrogate, her existing natural child(ren) and of the offspring (when he/she grows up) because even a small regret or guilt can lead to depression and can disturb one's mental health for life.



"Book Review"

Dr Kalyani Shrimali

Assisted reproduction is one of the fastest growing areas of medicine.

Textbook of Assisted Reproductive Techniques (ART) by David K Gardner is the book which hardly had any specialist practicing Infertility/Reproductive Medicine who would have not read.

The new 5th edition, comes conveniently as a set of two separate volumes, one for laboratory aspects and another for clinical applications. This new edition has many welcoming changes with several new and recent updates in accordance with the new progressive changes in the field of ART.

In the new edition, there are in total of 75 chapters in the two volumes. Volume 1 is on the laboratory aspects which adequately covers the advanced sperm selection methods like IMSI and PICSI that have emerged as potentially important tool for ART practitioners to improve clinical outcomes, such as clinical pregnancy rates and live birth rates.

The most important change in the book is the addition of recent guidelines for the setting up of ART laboratories which is the foundation of ART practice or set-up. Volume 1 also discusses the advances of time-lapse technology, pre-implantation genetic diagnosis and vitrification.

Volume 2 that is based on the clinical perspectives or applications includes new chapters on lifestyle factors which is the fastest growing concern for all of us. The most controversial as well as the the topic of interest for any ART specialist is to decide the ovarian stimulation protocol and dosage. The new edition discusses the tailored ovarian stimulation in depth.

In the era of vitrification which has made the clinics OHSS free clinics and allows the vitrification of extra-embryos also social freezing; the need of the hour is to know the protocols for thawed embryos cycles. Also need to know the detailed regimen, pros and cons of frozen embryo transfer, including obstetric outcome.

As always, the methods, protocols and techniques are presented by eminent international experts. They give our reader a worldwide perspective of Reproductive Medicine.

"Influenza Vaccine in Pregnancy"

Dr Indranil Dutta

Influenza has a heavy disease burden. Certain studies reported seasonal and pandemic H1N1 influenza in pregnant women and their newborns. Pregnant women are at an increased risk for influenza-related complications due to changes in their cardiac, respiratory, and immune systems. Maternal risk is highest at 3rd trimester. Regarding the infant, maternal disease increases the risk for premature labour and delivery, fetal loss, small-for-gestational-age infants, and low-birth weight infants.

Flu vaccines are available either as:

- A trivalent or quadrivalent injection (TIV or QIV), which contains the inactivated form of the virus.
- A nasal spray of live attenuated influenza vaccine (LAIV, Q/LAIV), which contains the attenuated or weakened form of the virus.

Recommendations

ACOG, CDC, RANZOG, and WHO have given positive recommendations for vaccine. FOGSI has also suggested vaccination from 26 weeks onward.

Optimal timing of vaccination

Pregnant women should be immunized as early as possible.

Adverse consequences of vaccination

No study shows adverse outcome.

Absolute contraindications

Anaphylaxis following a previous dose of any influenza vaccine.

Side effects

Mild side effects include soreness, tenderness, redness and/or swelling where the shot was given. Sometimes, patients might have headache, muscle aches, fever, nausea or vomiting, and tiredness feeling.

Additional benefit of vaccination

During pregnancy, active placental transfer of maternal antibodies makes influenza vaccine a highly effective measure to protect infants from influenza during the first 6 months of life.

Doctors should Look and Feel Beautiful Too!!!!

Dr Nidhi Singh Tandon
theskinart@gmail.com

I am a doctor, a dermatologist to be precise.... I work very hard to make my patient's look and feel beautiful. If you ask me what is beauty, I will define it as being the best version of yourself, loving yourself and feeling confident in your own skin.

But how important is keeping yourself fit and fab, especially for people who work day in and day out to take care of others as a part of their daily duties. I would say it is absolutely necessary to keep yourself fit and looking your best at any age.

Many of us are relentlessly busy and go through their shifts without drinking or eating. Many of us suffer stress, burnout, exhaustion and sleeping disorders. Relationships with family and friends also suffer as a result of the struggle to cope up with our multitasking fast-paced life.. This stress is invariably the part of our lives that we cannot change; but what we can change is how we deal with it. My answer to this is what I call **"SELF-LOVE".**

We can truly love others when we love ourselves first.

1. Exercise—it is a great way to fight stress. It not only improves metabolism and energy but also slows down the process of aging and keeps our skin youthful and glowing.
2. Keep up the antioxidants—we all know that oxidative stress and reactive oxygen species are responsible for aging.. To fight these, make sure you take antioxidants like vitamin C, vitamin E CoQ10 beta carotene, superoxide dismutase, etc. Also include brightly colored vegetables and fruits in your diet.

3. Sunscreens—Spf 30 or more with PA ++ (broad spectrum that includes UVA and UVB).
   - Re-apply your sunscreen every 3 hours after washing your face. Put sunscreen on even if not going out.
4. Be careful of what you apply on your skin.

Use moisturizers according to your skin type for optimal benefits. They maintain hydration, decreases fine wrinkles and roughness of the skin.

- Antiaging night creams can be applied containing retinoid, AHAs (alpha hydroxyl acids), antioxidants like vitamins C and E.
- Antioxidants
- Topical (vitamins C and E, kinetin, alpha lipoic acid, coenzyme Q10) and systemic (vitamins E, C and A, beta carotenes)–these are free-radical scavengers and protects the skin from oxidative stress.

At Your Dermatologist's Clinic

Go for regular medical clean ups. This not only keeps you feel relaxed and rejuvenated, but also your skin will show good results.

If you are in your thirties and above and feel that your skin is showing the signs of aging, I suggest you to start with some antiaging treatments beneficial for your skin after consulting a qualified dermatologist. Some of the treatments which can be helpful are as follows.

Noninvasive

1. Intense pulse light (IPL) devices emit polychromatic light in broad ranges of wavelengths. They are used for vascular lesions, pigmentation, and increase collagen and elastin fibers in the dermis.
2. RF skin tightening
   - Noninvasive way to obtain skin tightening
3. HIFU (high intensity focused ultrasound)
   - The most recent addition to skin tightening technology.

Minimally Invasive

1. Chemical peels: They cause injury to the skin at the required depth, allowing regeneration to take place, without causing permanent scarring.
2. Dermaroller: It is also known as microneedling. It eliminates imperfections by rebuilding collagen.
3. Nonablative skin resurfacing devices:
   - These devices emit light in pixilated fashion onto the skin, producing microthermal zones in the dermis.

Injectable Skin Rejuvenation

Botulinum Toxin

It slows down the visible aging process by helping in the management of certain dynamic facial lines and wrinkles.

Fillers

The products injected within or beneath the skin to improve its physical features by soft-tissue augmentation are known as fillers. They restore the volume and hence youthfulness to face.

PRP

Most popularly known as the vampire facial. This is simply a rage amongst Hollywood celebrities and is catching up fast here too.

This cocktail of growth factors is important in modulation of tissue repair and regeneration.

In the end, I truly believe that **"aging is a fact of life but looking your age is not."**

we must nourish and protect ourselves so that we can keep looking fit and fabulous at any age.

Tarot for May 2018

Aries: Take control of your emotions this month; this is the time to take a break; things might become monotonous; after some good results/achievements of the past months, this month might be static for you. Try to enjoy your success, and do not think too much about results this month.

Taurus: Good month for people born under this sign; in fact, whatever you touch will turn to gold this month. Promotion marriage celebration or, whatever is your goal for the month will be fulfilled.

Gemini: You need to exert caution this month. There is always a 'slip between a cup and a lip"; chances of things going wrong at the last moment. Do not take things for granted; Be careful and mindful of small things in work, good health indicated.

Cancer: Your boss might not be very good toward you; overwork and exertion are the words for you. Travel on the cards; good personal life and good health indicated.

Leo: Celebrations on the cards, marriage of self or near one is indicated. Professionally, it will be a satisfying month for you, but you need to be careful about your health.

Virgo: If expecting results of a competition/examination project bid, expect positive results. Travel relating to work/study indicated. If wanting to propose, the advice is to hold on for some time; generally a good month.

Libra: Good month for people born under this sign; you will get full support from your partner; romance is in the air for you. Meetings related to work will be fruitful. Expect favors from your bosses.

Scorpio: You will be starting something new; a change on the cards, new income increase in finances and more satisfying work. Travel on the cards. Children or younger siblings might be a cause for concern. Look after your health.

Sagittarius: This will be a great month for Sagittarians. Expect good rewards at work; promotion, elevation and rewards, expect all. If wanting to get married start preparing. Good time to plan a baby also if wanting to start a family. A very good month with all around happiness.

Capricorn: Might not be a good month emotionally; you might feel low and depressed. You might be let down by people close to you; you need to take things in your stride and move on. Some elder person in the family may need attention. Health also might pull you down a bit.

Aquarius: Try to think properly before you speak and act. Good month work wise. Travel will be pleasurable and fruitful. Good health and family fun.

Pisces: Your capabilities will be tested this month to the fullest. Work will be highly demanding and so will be your personal life; good point is that you will emerge victorious. Your hard work will yield rich dividends. Good health is indicated.

Rest is in God's hands; have a blessed May.

—Deepa Kochhar (Noida)
kochhar.deepa@gmail.com

Dear FOGSIans,
Happy Summery May!
March and April witnessed a lot of events and activities as the "Change of Guards" happened in all societies. It is my pleasure to welcome all the new teams of our societies and heartiest congratulations to the outgoing teams.

April also saw our "First YUVA FOGSI Conference", which was a grand success.

May is our month of Law and Ethics and we take a pledge to do our best for the patients. May will also have our second focused conference MMCON on Multiple Pregnancies and Medical Disorders.

In our newsletter, we have tried to incorporate many interesting articles, and I hope you all enjoy and do give us your feedback. This newsletter also shows that "We are proud FOGSIANS".

"A successful team beats with one heart"!

Neharika

Dr Neharika Malhotra Bora
Joint Secretary
FOGSI

Bacterial Vaginosis: An Underestimated Cause of Unexplained Infertility

Dr. A.A.Faruqui, Clinical Pharmacologist, Mumbai - 400050

INTRODUCTION: Bacterial vaginosis (BV) is a common disorder of the genital tract in women characterized by an alteration of the normal acidic lactobacilli predominant vaginal ecosystem with an increase in pH.[1] The infection is characterized primarily by paucity or depletion of the vaginal lacto-bacilli and their replacement by an outgrowth of different micro organisms including Gardnerella vaginalis (GV), anaerobic rods, pepto-streptococci, and mycoplasma species.[2] Bacterial vaginosis (BV) is the most common cause of abnormal vaginal discharge among women of child bearing age and is associated with adverse obstetric and gynecologic outcomes.[3] Common symptoms include Increased vaginal discharge that often smells like fish, the discharge is usually white or gray in colour, burning with urination may occur, mild itching.

Vaginal Flora in reproductive Indian women: The microbial species that inhabit the vaginal tract play an important role in the maintenance of health, and prevention of infection. Despite the close proximity of the vagina to the anus, the diversity of microbes present in the vagina is much lower than in the gut. Lactobacilli are the most common, particularly in healthy women.[4]

Using molecular-based techniques, it is known that healthy vaginal microflora does not contain high numbers of many different species of Lactobacillus. Rather, one or two lactobacilli from a range of three or four species (mainly L. crispatus and L. iners, but also Lactobacillus jensenii and Lactobacillus gasseri) are dominant, whereas other species are rare & lower in titer.[5]

In a study conducted in 132 women of Mysore, the predominant Lactobacilli species isolated were L. gasseri (46%), L. crispatus (40%) and L. jensenii (14%).[6]

In another study steered by Kiss et al in 200 healthy pregnant women, the most frequently occurring species were Lactobacillus crispatus and Lactobacillus gasseri, followed by Lactobacillus jensenii and Lactobacillus rhamnosus.[7]

Vaginal Lactobacillus microbiota of healthy

women in the late first trimester of pregnancy

Vaginal Lactobacillus microbiota of healthy

women in the late first trimester of pregnancy

Majority of cases of BV are asymptomatic and remain unreported and untreated. The role of asymptomatic compared with symptomatic BV in both gynecologic and pregnancy-related conditions have been less studied.[8]

PREVALENCE & ASSOCIATION OF BV WITH INFERTILITY: Prevalence of BV among women of reproductive age group is around 31.5%. Low education level and low socioeconomic status is a significant risk factor for bacterial vaginosis with 48.9% and 40.3% respectively.[3] Studies have reported a high prevalence of BV in both non tubal and unexplained infertility.[2]

In a study conducted by Singaravelu et al over a period of 6 months in 116 women with infertility problems at Sri Lakshmi Narayana Medical College and Hospital Pondicherry, it was observed that women with infertility problems showed abundance of Bacterial Vaginosis (Lactobacillus, 3.5%) compared to healthy women (Lactobacillus, 27.8%). Author of the study recommended the screening of vaginal flora as a routine for all women, especially in women undergoing infertility treatment.[9]

In another study conducted by Pramanik et al in 510 women with manifestations such as infertility, it was found that BV infection is associated with infertility and its absence leads to pregnancy, emphasizing its screening and treatment.[10]

In a study conducted by Salah RM et al in 874 infertile females, reported a high prevalence of BV amongst them compared to fertile women (45.5% vs. 15.4% respectively).[2]

Why BV leads to Infertility?

Mechanism by which BV may cause infertility includes plasma cell endometritis, tubal motility disorders and auto-immune infertility.[2]

LIMITATIONS OF EXISTING THERAPY: The most common oral treatment for BV in both pregnant and non-pregnant women is metronidazole. Simoes JA et al reported that high concentrations of metronidazole, greater than 5,000 µg/ml, completely suppress the growth of Lactobacillus and that concentrations of 1,000–4,000 µ/ml significantly inhibited the growth of Lactobacillus.[8]

Therapy with metronidazole or clindamycin alters the vaginal flora and predisposes the patient to development of vaginal candidiasis. Recurrence rate of BV remains high with use of antimicrobials and ***such treatments are not designed to restore the lactobacilli.*** Antimicrobial drug resistance remains a root cause for BV recurrence.[4]

The two topical treatments for BV like metronidazole 0.75% vaginal gel and clindamycin 2% vaginal cream; result in the resolution of lower genital tract infection but do not treat BV occurring in the upper genital tract.[8]

Significance of probiotics treatment in BV: Studies have suggested that the presence of H_2O_2 (hydrogen peroxide) producing vaginal lactobacilli may protect against BV by inhibiting the adherence of Gardnerella vaginalis and produce hydrogen peroxide, lactic acid and bacteriocins, which inhibits the growth of bacteria causing BV.[11]

A review by MacPhee et al recommends the inclusion of probiotics as part of the approach to disease prevention and as an adjunct to antimicrobial treatment.[12]

Neither the immune system nor antibiotics eradicate all of the microbes; therefore biofilm related infections may be persistent and women with BV tend to have high recurrence rates.

Role of Lactobacilli strain: L. gasseri and L. jensenii co aggregate with G. vaginalis (pathogenic bacteria) and block the adherence and/or displace previously adherent strains of G. vaginalis from vaginal epithelial cells. L. gasseri, L crispatus produce large amounts of H_2O_2 and inhibits the growth of G. vaginalis while L. rhamnosus increases colonization of lactobacilli and decreases the recurrence of BV.[11]

Macklaim et al. (2015) reported that treatment of BV with antimicrobial therapy and probiotic supplementation, namely Lactobacillus reuteri and Lactobacillus rhamnosus, increased the abundance of indigenous Lactobacillus iners and Lactobacillus crispatus. This observation opens up the possibility of harnessing specific bacterial strains in order to prime the vaginal microbiota in the pre- and peri-conceptual periods.[13]

Salah et al in his study had found that even after controlling for the different variables which influenced the pregnancy rate in patients with PCOD, BV still remained a significant factor impairing the pregnancy rate.[2]

CONCLUSION: Bacterial vaginosis (BV) is an extremely prevalent vaginal condition and the number one cause of vaginitis among both pregnant and non-pregnant women.[8] It is a new cause of unexplained infertility which has probably been underestimated.[2] The high prevalence of BV in infertile women may suggest either a possible role of BV on fertility or just an association between BV and infertility.[2] It makes sense to at least consider probiotic supplementation as part of a broader lifestyle intervention aimed at improving fertility as the potential for side effects is nearly nonexistent, and there are reasons to think that it could be helpful.

REFERENCES

1. Charles R.B. Beckmann Obsterics and Gynecology; chapter 26: vulvovaginitis, 6th edition, 241-245; 2010
2. Salah RM et al. Bacterial vaginosis and infertility: cause or association? Eur J Obstet Gynecol Reprod Biol. 2013 Mar; 167(1):59-63.
3. Singh A et al. Prevalence and risk factors of bacterial vaginosis among women of reproductive age attending rural tertiary care institute of Western Uttar Pradesh. J. Evolution Med. Dent. Sci. 2016; 5(43):2695 2701.
4. Cribby S et al. Vaginal Microbiota and the Use of Probiotics. Interdiscip Perspect Infect Dis. 2008; 2008: 1-9.
5. Lamont RF et al. The vaginal microbiome: new information about genital tract flora using molecular based techniques. BJOG. 2011 Apr; 118(5):533-49.
6. Madhivanan P et al. Identification of culturable vaginal Lactobacillus species among reproductive age women in Mysore, India. Journal of Medical Microbiology (2015), 64, 636–641.
7. Kiss H et al. Vaginal Lactobacillus microbiota of healthy women in the late first trimester of pregnancy. BJOG. 2007 Nov; 114(11):1402-7.
8. Nelson DB. Bacterial vaginosis in pregnancy: current findings and future directions. Epidemiol Rev. 2002; 24(2):102-8.
9. Babu G et al. Journal of Clinical and Diagnostic Research. 2017 Aug, Vol-11(8): DC18-DC22
10. Mania-Pramanik et al. Bacterial vaginosis: a cause of infertility? Int J STD AIDS. 2009 Nov; 20(11):778-81.
11. Falagas M et al. Probiotics for the treatment of women with bacterial vaginosis. Clin Microbiol Infect. 2007 Jul; 13(7):657-64.
12. MacPhee RA et al. Probiotic strategies for the treatment and prevention of bacterial vaginosis. Expert Opin Pharmacother. 2010 Dec; 11(18):2985-95.
13. García-Velasco et al. What fertility specialists should know about the vaginal microbiome: a review. Reprod Biomed Online. 2017 Jul; 35(1):103-112