



"GENESIS" was held at Goa. It was organized by of Asian Society of Continuing Medical Education.

The objective of the CME was to update the practicing doctors about recent development in the field of Assisted Reproduction Technology (ART), IVF, fEpilepsy. Level of morbidity and mortality due to Epilepsy and its associated spectrum of complications and Status Epilepticus management as the syndrome is now highly visible across all societies within India.

The session was open with an introductory session by Asian Society of continuing Medical Education and followed by the scientific agenda.

<b>Date</b>	:	5 <sup>th</sup> – 7 <sup>th</sup> Feb 2016.
<b>Venue</b>	:	Grand Hyatt, Goa.
<b>Total Participants</b>	:	85
<b>Chief Guest</b>	:	Dr. Jagdish Prasad
<b>Guest of Honour</b>	:	Dr. R S. Sharma

## SPEAKERS

### Faculty Name (s) :

1. Dr. Anver Kuliev
2. Dr. Don Leigh
3. Dr. Sonal Panchal
4. Dr. Chittaranjan Andrade
5. Dr. Hanmant Barkate
6. Dr. Parisa Asavadi
7. Ramendra Singh
8. Hari G. Ramasubramanian
9. Mohit Rao

## Topics:

1. PGS/PGD- The Future of IVF.
2. Am I ready for IVF? - Addressing the mental health & psychological condition of infertile couple.
3. Planning and selecting best embryo-Options And Strategies
4. Innovation. Introspection and Implementation- Bio similar the future of IVF
5. It's down to the numbers- Utilizing different marketing tools to optimize patients reach
6. Imaging Infertility- Using the Latest Ultrasound technology for diagnosis and optimizing IVF result.
7. The Ethical policies & practices in ART, PC, & PNDT and its implications.
8. Single cell- Journey from biopsy to results for single gene disorder and HLA typing.
9. Conceptualization to publication Research publication – How to go about it.
10. The mind readers- Understanding the unspoken truth

**1. Dr. Anver Kuliev** Talked on **PGS/PGD- The Future of IVF**. The scientific session was based on: -

- A high percentage of human embryos are chromosomally abnormal
- PGS technology allows us to biopsy IVF embryos and test for chromosomal normality
- A recent evidence that trophectoderm biopsy and PGS using one of the newer genetics technologies (aCGH, SNP or qPCR) increases IVF success rates
- Prospective randomized trials of no PGS vs. PGS for aneuploidy using trophectoderm biopsy in conjunction with these new genetics technologies are needed
- PGD – routine screening tests that assess embryos and/or oocytes (unfertilized eggs) – tell doctors if an egg or embryo is genetically normal before it is selected for implantation in the uterus.
- The tests can identify genetic irregularities in an embryo or oocyte ranging from Down syndrome and cystic fibrosis to muscular dystrophy, sickle cell anaemia.

- Metabolomics is a way of testing embryos for viability. Researchers think that embryos which result in live births have specific metabolic rates that can be used to identify normal from abnormal embryos.
- By passing light waves through the culture in which embryos are stored, researchers are able to score each embryo's metabolic rates and rank its viability.

2. **Dr. Chittaranjan Andrade** talked on **Am I ready for IVF? - Addressing the mental health & psychological condition of infertile couple**. The scientific session focussed on:-

- Psychological impact of infertility
- The stress of the non-fulfilment of a wish for a child has been associated with emotional sequelae such as anger, depression, anxiety, marital problems, sexual dysfunction, and social isolation.
- Couples experience stigma, sense of loss, and diminished self-esteem in the setting of their infertility
- Couples scrutinize their behaviours, habits, and lifestyle to try to understand why they have not been able to conceive.
- At some time during the infertility evaluation and treatment, couples may feel intense anger.
- They may feel very angry when they hear a pregnant woman display disgust or unhappiness with her pregnancy; when they see women with an unwanted pregnancy seeking an abortion; or when they observe a mother or father abusing their child.
- While many couples presenting for infertility treatment have high levels of psychological distress associated with infertility, the process of assisted reproduction itself is also associated with increased levels of anxiety, depression and stress.
- Women presenting for IVF were more depressed, had lower self-esteem and were less confident than a control group of fertile women and, after a failed IVF cycle, experienced a further lowering of self-esteem and an increase in depression relative to pre-treatment levels.

3. **Dr. Don Leigh** Talked on **Planning and selecting best embryo-Options and Strategies**. The scientific session was based on: -

- Cell regularity - degree of regularity of size of blastomeres. It is generally best if the size of the individual cells (referred to as blastomeres) in the embryos are similar in size. If they are not, it is better if they are *close to* the same size, as compared to very different in size.

- Fragmentation, also called blebbing, is a process where portions of the embryo's cells have broken off and are now separate from the nucleated portion of the cell. It is preferable to have little or no fragmentation.
- An embryo is multinucleated if more than one nucleus can be seen in any individual cell on either day 2 or day 3. After day 3 it is extremely difficult to identify the presence of multinucleation.

**4. Dr. Parita Asvadi Talked on Innovation. Introspection and Implementation- Bio similar the future of IVF.** The scientific session deliberated following:

- A bio-similar is a bio- therapeutic product which is similar in terms of quality, safety and efficacy to an already licensed reference bio- therapeutic product.
- A biological product or drug produced by genetic engineering techniques and claimed to be "similar" in terms of quality, safety, efficacy to a reference innovator product.
- Bio-similar is a medicinal product which is similar to a biological medicinal product that has already been authorised (the 'biological reference medicinal product').
- The active substance of a bio-similar medicinal product is similar to the one of the biological reference medicinal product. The name, appearance and packaging of a bio-similar medicinal product may differ to those of the biological reference medicinal product. It may also contain different inactive ingredients.

**5. Mr. Ramendra Singh Talked on It's down to the numbers- Utilizing different marketing tools to optimize patients reach** The scientific session stressed on: -

- Acquiring new patients is the lifeblood of any practice. Practice marketing tools to ensure that you are proactively engaging prospective patients, and that your practice name is showing up where and how it must in order to attract prospective patients.
- Practice establish and maintain an active online presence, always monitoring your reputation throughout the web to ensure that it is top-notch. You have everything you need to pull in new patients using marketing tools like patient mapping, local search, social media, and patient referrals.
- Retaining current patients is the most effective and the least costly way to keep your practice thriving. The right patient retention solution will address and perfect key contributors for keeping patients loyal and active.
- As the care provider for your patients, you are their best resource for reliable information and education on topics pertaining to their health.

- During the space between visits to your office, patients are often disengaged from their health because valuable, trustworthy information isn't easy to find.
- The Targeted Care Campaigns that are now built into our all-inclusive platform help you achieve your goals for educating patients while simultaneously increasing your productivity, so you have more time to spend engaging patients face-to-face.
- These campaigns include a series of pre-written articles about critical healthcare topics presented within beautifully designed newsletter templates to allow you to automatically begin communicating vital medical information to your patients.

**6. Dr. Sonal Panchal Talked on Imaging Infertility- Using the Latest Ultrasound technology for diagnosis and optimizing IVF result.** The scientific session was based on: -

- Ultrasound imaging of the female pelvis has contributed greatly to the understanding, identification, diagnosis, treatment and management of numerous conditions.
- The introduction of endovaginal scanning represented a quantum leap in our ability to image the anatomy. The advent of Doppler imaging, both duplex and color, has enabled us to extend our evaluation much further.
- To perform a sonographic physiologic assessment of the structures we visualize. How we apply this technology is currently limited only by our imaginations.
- Transvaginal sonography (TVS) in the diagnosis of heterotopic pregnancy (HP) in the first trimester after in-vitro fertilization with embryo transfer (IVF-ET).
- The site at which embryos are released affects IVF outcome and an optimal EFD range exists; this observations suggest that US-guided ET could be advantageous vs. clinical-touch ET, as it allows to be more accurate in releasing embryos within the optimal EFD range.

**7. Hari G. Ramasubramanian talked on The Ethical policies & practices in ART, PC, & PNDT and its implications.**

The scientific session was deliberated on:

- The main purpose of enacting the act is to ban the use of sex selection techniques before or after conception and prevent the misuse of prenatal diagnostic technique for sex selective abortion.
- No laboratory or centre or clinic will conduct any test including ultrasonography for the purpose of determining the sex of the foetus.

- No person, including the one who is conducting the procedure as per the law, will communicate the sex of the foetus to the pregnant woman or her relatives by words, signs or any other method.
- Any person who puts an advertisement for pre-natal and pre-conception sex determination facilities in the form of a notice, circular, label, wrapper or any document, or advertises through interior or other media in electronic or print form or engages in any visible representation made by means of hoarding, wall painting, signal, light, sound, smoke or gas, can be imprisoned for up to three years and fined Rs. 10,000.
- Amendment of the act mainly covered bringing the technique of pre conception sex selection within the ambit of the act
- Bringing ultrasound within its ambit
- Empowering the central supervisory board, constitution of state level supervisory board
- Provision for more stringent punishments
- Empowering appropriate authorities with the power of civil court for search, seizure and sealing the machines and equipments of the violators
- Regulating the sale of the ultrasound machines only to registered bodies

**8. Dr. Don Leigh Talked on Single cell- Journey from biopsy to results for single gene disorder and HLA typing.**

The scientific session was based on: -

- Preimplantation genetic diagnosis (PGD) of single gene disorders, combined with HLA matching (PGD-HLA), has emerged as a tool for couples at risk of transmitting a genetic disease to select unaffected embryos of an HLA tissue type compatible with that of an existing affected child.
- One-step multiplex PCR to genotype a spectrum of STRs to simultaneously perform HLA typing and PGD for -thalassemia. This method is being routinely used for PGD-HLA cycles in our department, with a genotyping success rate of 100%.
- Reduce the optimization of the PCR method for each specific PGD-HLA family as well as the time to obtain molecular results in each cycle.

**9. Dr.Hemant Barkate Talked on Conceptualization to publication Research publication – How to go about it.**

The scientific session was based on:

- Research is always based on reliable data and the methods used to capture this
- data. Scientific methods facilitate this process to obtain quality output in research.
- Formulation of research problem is the first step to begin with research. It is at this

- stage, the researcher should have a clear understanding of the words and terms
- used in the research such that there are no conflicts arising later regarding their
- interpretation and measurements. This necessitates the understanding of the
- conceptualization process
- There is no one best way of conducting research. The attitude of a researcher should be to “Stand on the shoulders of the giants” according to Isaac Newton.
- Each study is unique, has its own strengths and weaknesses. Three common approaches used in research include: qualitative, quantitative and mixed (triangulation).
- They contain philosophical assumptions about knowledge claims, strategies for inquiry and specific research methods. When philosophy, strategies and methods are combined, they provide different frameworks for conducting research.

#### **10. Mohit Rao** Talked on **The mind readers- Understanding the unspoken truth.**

The scientific session was based on: -

Psychological assessment is similar to psychological testing but usually involves a more comprehensive assessment of the individual.

Psychological assessment is a process that involves checking the integration of information from multiple sources, such as tests of normal and abnormal personality, tests of ability or intelligence, tests of interests or attitudes, as well as information from personal interviews.

Collateral information is also collected about personal, occupational, or medical history, such as from records or from interviews with parents, spouses, teachers, or previous therapists or physicians.

A *psychological test* is one of the sources of data used within the process of assessment; usually more than one test is used.

Many psychologists do some level of assessment when providing services to clients or patients, and may use for example, simple checklists to assist for treatment settings; to assess a particular area of functioning or disability often for school settings; to help select type of treatment or to assess treatment outcomes; to help courts decide issues such as child custody or competency to stand trial; or to help assess job applicants or employees and provide career development counselling or training.