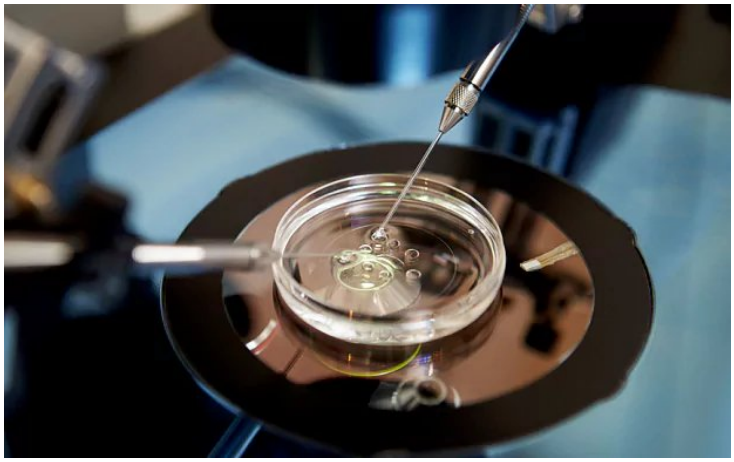
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The new age reproductive genetic techniques to drastically increase IVF success rate

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Although there are a lot of challenges which needs to be dealt while promoting ART, one must undergo some special tests to ensure the success. Every life is important and every parent deserves a healthy child! IGENOMIX has so far handled over 12,000 cases of ERA Worldwide. Challenges faced by Indian IVF industry and how IGENOMIX is bridging this gap through its advanced technology/services



The rapid advancements in science have revolutionized the world at large. These advancements have provided a ray of hope to human beings in the form of Assisted Reproductive Technology (ART). In Vitro Fertilization (IVF) is most common form of ART. IVF has turned up to be a blessing for those who have been deprived of the offspring. This artificial or assisted technique of bestowing parenthood has brought a smile on millions of faces. The couples who fail to conceive naturally opt for this assistive reproductive technique. More than that the biggest advantages of undergoing an IVF treatment is to have a successful pregnancy and a healthy baby! But in India, this is still a big matter of delicacy and awkwardness. It still contributes in giving serious psychological, emotional and social torment to the family, irrespective of the family's economic, educational or religious upbringing. It is a matter of great concern, worry and distress to witness increasing incidences of infertility cases. The much of it owes to the changing and uncertain lifestyles and the effects it brings upon the physiological and psychological health of people.

The big news is that the advancements in medical science has not only provided much success in the infertility treatment but has also provided impressive increase in IVF success rates over the years. But a sad reality attached with it is that the actual beneficiaries of such treatment are only a very small percentage of the needy owing to issues of awareness, affordability, access and assurance.

Some of the major problems faced by IVF industry in India are as follows:

- **Financial aspect:** The financial aspect cannot be ruled out when it comes to India. Inequitable distribution of access to care needs to be addressed properly. The fact is undeniable that IVF can be availed by the couples who are in a position of financial stability. An IVF cycle is quiet costly and it often requires more than one treatment cycles, which makes it unaffordable to near about 80% of the Indian population.

- **Social stigma:** There is a huge stigma attached to childlessness in Indian society, particularly for the women, and couples often find it difficult to do so as they apprehend family pressures. The couples who can even afford the treatment cost are also unable to get treatment for their infertility due to these family pressures.

- **Lack of skilled IVF specialists and embryologists in India:** There is a great need of specialization, when it comes to IVF. Very few gynaecologists perform IVF procedures and cycles. It is need of the hour to address the skill gap and technical expertise that has been created, to provide high quality results of the infertility treatment towards improving the treatment outcomes and patient safety.
- **No regulation:** There is absence of a regulatory framework for quality management of ART centres. Due to this, there is no monitoring of the services that are offered, resulting in poor outcomes.

- **Lack of awareness:** Infertility is still the biggest concern a couple has to face. People who are suffering from infertility are unaware of the IVF processes which can help them in conceiving.

- **Other ethical issues:** In India, people believe that life begins at conception. During IVF, there are some embryos which are unused, frozen, discarded, or used for experimentation; it may amount to killing of a life, which is contrary to both law and ethics.

- **False claims:** To be totally transparent in all its operations, the ART clinics must, therefore, let the patient know what the success rates of the clinic are in regard to the procedures intended to be used on the patient. False claims via hoardings and paper advertisements are a cheap way of attracting a patientthat is vulnerable and, therefore, easily swayed.

The new age reproductive genetic techniques would drastically increase IVF success rates.

Until now ultrasound was the only way of studying the endometrium but with more than 10 years of rigorous research IGENOMIX, the pioneers in Reproductive Genetics, came up with their patented test called Endometrial Receptivity Analysis (ERA) that studies the endometrium at a molecular level and has increased the rate of success of IVF up to 60%. “With the help of IGENOMIX’s ERA, I have acquired positive results in patients who had a history of implantation failures” says Dr. Uma Maheshwari, Bangalore.

Even after a successful implantation there are many cases where the pregnancy ends up in a miscarriage in the first trimester. This mostly occurs due to chromosomal abnormalities in the embryo. Over 50% of spontaneous miscarriages are caused by chromosomal abnormalities. There are few factors which significantly increase the risk of a chromosomal abnormality causing multiple IVF failures:-

- Women over 35 years of age
- Couples who have experienced several spontaneous miscarriages of unknown cause
- Couples with several cycles of IVF that have not achieved pregnancy
- Men with low sperm concentration
- Couples with a previous pregnancy with chromosomal abnormality

Pre implantation Genetic Screening (PGS) is highly recommended for these couples. PGS along with MitoScore enables selection of chromosomally normal embryos and also those embryos which have greatest chances of implantation therefore more likely to result in a successful pregnancy through IVF. “We finally have something to offer patients of recurrent implantation failure or recurrent IVF failures to improve pregnancy rates, based on scientific evidence. I cannot imagine working without ERA and PGS today” says Dr Nalini Mahajan, New Delhi.

Although there are a lot of challenges which needs to be dealt while promoting ART, one must undergo some special tests to ensure the success. Every life is important and every parent deserves a healthy child! IGENOMIX has so far handled over 12,000 cases of ERA Worldwide. Out of these about 2,500 of them were from India alone. “In general we find approximately 26% of patients as Non-Receptive and therefore suffering from repetitive implantation failure. In patients where result is receptive the rate of implantation is significantly higher, close to 45% and chances of a successful pregnancy are 60% with ERA”says Dr. Rajni Khajuria, IGENOMIX.