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JULY 1, 2019 ₹60



INDIA TODAY



RNI NO. 2858775 REGISTERED NO. DL(DND)-11/6068/2018-20; UIC-88/2018-20; FARIDABAD/05/2017-19 LICENSED TO POST WITHOUT PREPAYMENT

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WANTED A LEARNING REVOLUTION

THE PROPOSED NATIONAL EDUCATION POLICY
RIGHTLY PUSHES FOR RADICAL REFORMS. BUT IT
NEEDS A RAPID ACTION PLAN TO TAKE FLIGHT

Akanksha IVF Centre

A PARADIGM SHIFT IN TERMS OF IVF TREATMENTS



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Thousands of infertile couples could benefit from new innovations in IVF procedures that can dramatically improve the success rate of having a baby through artificial reproduction

IVF INNOVATIONS & ADVANCEMENTS Choosing the right protocol

Antagonist Protocol: When used during IVF treatment for patients with supposed normal responses, the GnRH antagonist protocol could significantly reduce the incidence of OHSS while yielding similar ongoing pregnancy and live birth rates compared with those of the GnRH agonist standard long protocol

Minimal Stimulation: Utilization of such protocols that utilize lower doses of injectable gonadotropins results in comparable pregnancy rates with decreased medical complications and cost compared with more standard COH protocols

Selection Methods to Isolate the best Sperms:

- Physiological Intracytoplasmic Sperm Injection (PICSi)
- Intracytoplasmic Morphologically Selected Sperm Injection (IMSI)

- Microfluidics
- Magnetic activated Cell Sorting (MAC)

Single Embryo Transfers:

Multiple gestation pregnancies are clearly associated with increased health risks, both to mother and child, as well as increased medical costs. At Akanksha IVF Centre using SET there is no decrease in the pregnancy success rate while almost eliminating multiple gestation pregnancies

Frozen Embryo Transfer

Using frozen embryos in all IVF treatments rather than as a last resort could lower the risk to both mother and baby. A significant increase in pregnancy rates and live birth rates (LBRs) and a marked decrease in the risk of OHSS and perinatal and maternal morbidity with a freeze-all strategy has been seen.

The fact that only the healthiest embryos survive the freezing and thawing process could also increase the likelihood of the pregnancy.

Human oocyte cryopreservation (Egg freezing)

Human oocyte cryopreservation (Egg freezing) is a procedure to preserve a woman's eggs (oocytes). This technique has been used to enable women to postpone pregnancy to a later date - whether for medical reasons such as cancer treatment or for social reasons such as employment or studying.

Embryo Glue

Embryo Glue is an embryo transfer medium used in the final step of IVF treatment. Embryo Glue is made with a substance – **hyaluronan** – that makes the embryo more likely to stick to the lining of the womb. In Embryo Glue it acts like a bridge between the embryo and the womb, which helps them stick together. It's rich in the carbohydrates, amino acids and protein, all these are needed by the embryo to develop properly, and it also helps to thicken the Embryo Glue, which reduces how much the embryo can move around

Endometrial Receptivity Array (ERA)

Human implantation is a complex process requiring synchrony between a healthy embryo and a functionally competent or receptive endometrium. Microarray technology has allowed identification of the transcriptomic signature of the window of implantation (WOI). This technology has led to the development of a molecular diagnostic tool, the ER array (ERA) for diagnosis of ER. Use of this test in patients with recurrent implantation failure (RIF) has shown that the WOI is displaced in a quarter of these patients and use of a personalized embryo transfer (pET) on the day designated by ERA improves reproductive performance

Time Lapse Imaging

A novel IVF procedure called Time Lapse Embryo Imaging has been introduced. The innovative procedure prove to dramatically increase the success rate of having a baby through Assisted Reproductive Technology (ART). This

newly developed procedure ascertains the optimal embryos to transfer into the womb based on the amount of time that the fledgling embryo takes to grow from one stage into another stage. Embryos with appropriate time-periods between the two critical stages have been shown to be the optimal embryos to transfer and result in the highest take-home baby rate. "The beauty of this technology is that the information is provided by a non-invasive process."

"According to **Dr K D Nayar, Chief Consultant at Akanksha IVF Centre**, it is the paradigm shift in terms of IVF technology, which has become a game changer for everybody to have such an uplift in live birth rates.

Akanksha IVF Centre has pioneered the paradigm shift in IVF technology. First, we use sequential culture media to successfully grow embryos to the blastocyst stage (day 5 or 6).

We have further shown that blastocyst stage embryos have markedly higher implantation rates compared to day 3 embryos. Secondly, the ability to successfully vitrify (rapid freezing method) these blastocysts with a greater than 98% survival rate. As we began transferring these frozen and thawed blastocysts, we found pregnancy rates were higher than we had ever achieved with IVF, and at the same time miscarriage rates were very low, resulting in significantly higher live birth rates for women even in their early forties.

Assisted Hatching (Thinning) of Embryos:

This procedure involves making a thin gap in the zona pellucida of a cleavage stage embryo prior to performing the embryo transfer. Through laser gap or a small slit in the zona of an embryo, it will improve the hatch out of the embryo out of the shell so that implantation can be easy.

Assisted hatching of embryos. To help embryos implant in a woman's uterus and increase the chances of pregnancy success, Hatching is mainly required for the embryo to implant in the lining of the uterus. By using assisted hatching improves the chances for a couple to achieve pregnancy successful with IVF.

Who Should Use Assisted Hatching with IVF?

- Frozen embryo transfer (FET)
- Women with advanced age > 37 years
- Poor quality of embryos
- Previously repeated implantation failure after IVF treatment (unknown reason)
- Elevated FSH

At Akanksha IVF Centre, we believe that family is for everyone and we do everything we can to help you achieve your dream. Our dedicated IVF Specialists, embryologists, nurses, support staff and other specialists all work together to ensure you get the very best fertility treatment – and as you get to know them, you'll soon feel like part of the Akanksha family. At Akanksha IVF Centre we always remain focused on the individual needs of each and every patient.

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