

When nature fails, test tube prevails!

Forty plus Farah Khan became mother of healthy three babies, with the help of a technique called IVF. Below Puja Dewan, consultant IVF at Max Healthcare tells all you need to know.

In-vitro fertilisation is a process by which egg cells are fertilised by the sperm outside the womb. Earlier, eggs were fertilised in test tubes. Hence, the name test tube baby got stuck to babies born with this technique. As the process requires financial commitment, it's usually recommended as last resort when other methods of conception have failed. When a couple tries to conceive naturally for a year without success, in medical speak its called infertility; it exists in one in seven couples. Factors like marrying late, delaying motherhood, stress, smoking habits, dietary factors and hormonal problems can cause infertility.

Women infertility factors

- Initially IVF was developed to overcome infertility due to problems of the fallopian tube—uterine tubes which carry egg produced in the ovary to uterus for fertilisation.
- Polycystic ovarian syndrome (PCOS) is an endocrinal disorder in which levels of male hormones go up in women. Women afflicted with this syndrome have irregular periods and have water filled cysts on their ovaries—organs that produce eggs in women.
- Conditions such as endometriosis where endometrial cells of the uterus are deposited outside the uterus, is a major cause for infertility in women.



Men infertility factors

- With the introduction of Intra Cytoplasmic Sperm Injection (ICSI) IVF is increasingly offered in cases of semen abnormalities like in counts, motility, absent sperms in semen or abnormally shaped sperms.
- If simpler techniques fail fertility specialists recommend IVF.

What happens in the technique?

IVF means fertilisation of an ovum (egg) outside the body and then transferring the embryo(s) into the uterus of the woman. An egg is exposed to 50,000 to 100,000 sperms in a test tube to assist fertilisation.

Steps involved

- Controlled ovarian hyper stimulation (COH): Hormonal injections given to stimulate ovaries to obtain eggs
- Follicular development tracking with sonology and blood test
- Egg retrieval from follicles in ovary under local or general anaesthesia and collecting semen sample
- Fertilisation of eggs in the laboratory with the collected semen sample.
- Embryo(s) transfer under ultrasound guidance into the uterus and pregnancy testing

Why women have twins or triplets with IVF?

Every month women produce a single egg. IVF involves stimulating women's ovaries to produce multiple eggs. With more number of eggs available, more number of embryos is likely to be produced in the laboratory. Many IVF specialists with consent of the couple put in more than one embryo even going up to five or more embryo in order to capitalise on higher pregnancy rates. Hence with IVF more numbers of twins and triplets are born.