

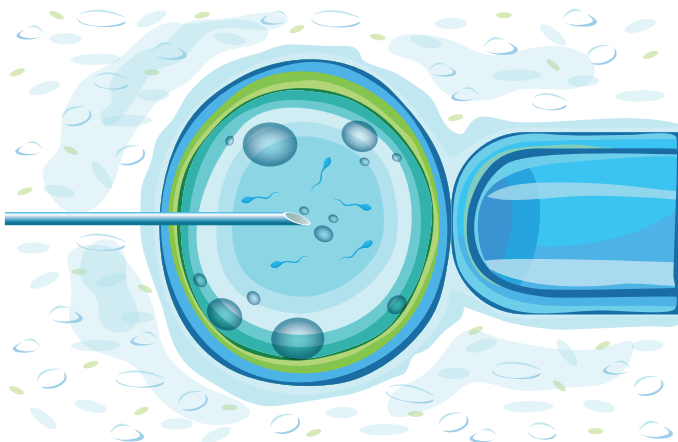


**9M**  
**FERTILITY**  
by ankura hospital

# IN-VITRO FERTILISATION (IVF)



In-Vitro Fertilisation, more commonly known by its abbreviation IVF is a widely known treatment for infertility; though it is just one of the many other procedures that can be employed to treat fertility concerns.



### **What is IVF?**

IVF is a procedure where, ova/egg from the female is fertilised with the sperm of the male outside the human body, in laboratory settings. Following fertilisation, the embryo is implanted into the uterus, to expect a successful pregnancy. This is a type of Assisted Reproductive Technology (ART).

### **How does IVF help in infertility?**

During a natural conception procedure, the sperm from a male fertilises the ova/egg of the female in the fallopian tubes- part of the female reproductive system. In case of any abnormality in the male or female reproductive systems, fertilisation can be attained outside the womb in a monitored environment.

## **When will my gynaecologist suggest me an IVF?**


A couple may face infertility concerns due to many reasons. Some of the reasons why your doctor may suggest an IVF include-

- Blocked or damaged fallopian tubes- This is the portion of the female reproductive system where the egg is fertilised by the sperm. In case of damage or block in these tubes, IVF can help.
- Low sperm count/ other impairments of the sperms
- Polycystic ovarian syndrome
- Endometriosis- abnormally thick uterine lining
- Unexplained infertility
- In case of any need for egg/sperm from a donor
- In case of suspected genetic disease

Depending on your specific needs, your doctor may suggest you to undergo other procedures before IVF.

## **Which tests will I need before an IVF?**

Prior to deciding the infertility treatment, your gynaecologist will suggest a detailed check-up for you and your partner. Such a check-up will involve tests like blood tests, ultrasound, semen analysis, ovarian reserve testing, or any other specific diagnostic tests that your infertility expert decides depending on your other test results. Apart from these your gynaecologist will also perform a detailed physical examination and take a detailed history from you and your partner for a thorough understanding.



## **What to expect during the IVF procedure?**

IVF is an extensive, invasive, and long procedure which requires several sensitive steps. The following stages of treatment can be expected-

**Ovarian stimulation:** IVF requires fertilisation of eggs outside the human body, for this process healthy eggs/ova are required from the female. Your doctor will prescribe you specific medications to stimulate your ova, this will result in the maturation of multiple (more than one) ova. The medication or hormones required depend on the individual need and medical condition. The process of maturation of ova is monitored by your gynaecologist using ultrasound and blood tests, to check for growing follicles. Unlike a physiological cycle, many eggs are stimulated to mature in IVF, this is the need of the procedure.

**Retrieval of eggs:** Once the maturation of eggs is confirmed, your infertility expert schedules for retrieval of eggs. For retrieval, a thin needle is guided into the ovaries through the route of the vagina. This is an ultrasound-guided procedure that uses suction to carefully remove eggs. The eggs are then stored in a warm environment to keep them healthy and safe.

**Fertilisation (In vitro):** During this step, the eggs/ova are fertilized in a laboratory environment that is highly controlled. Intracytoplasmic sperm injection (ICSI) is used to fertilise all the mature ova which are retrieved- this is the injection of sperm in each egg. If this procedure is successful then the eggs develop into embryos. In case the eggs are more, then some can even be frozen to preserve for future use.

**Development of Embryo:** After successful fertilization, the embryo is developed outside the human body for a few (5-6) days, it is only then that it becomes suitable to be implanted in the uterus. On average, 50% of developing embryos mature whereas the rest fail to reach that state.

**Transfer of Embryo in the uterus:** In this last and final step, the embryo is transferred into the womb using a catheter. This is a painless & short procedure. However, before your fertility expert schedules you for this step, you may be required to take some medications / hormones, which will help in the preparation of the uterus for pregnancy. Following this an implantation of the embryo is expected in the uterus, to result in a successful pregnancy.

### **How long does IVF take from start to finish?**

IVF is an elaborative procedure and can take 4-6 weeks.

### **After how long of an IVF can I expect to get pregnant?**

Pregnancy test including a blood test, & ultrasound, is done within two weeks of a successful embryo transfer the last step of IVF, to confirm pregnancy.

### **Can I experience any side effects during IVF?**

Some common side effects during an IVF procedure can be experienced due to the medications used. These include nausea and vomiting, headaches, hot flashes, and abdominal pain. After the transfer of embryo in the womb one may experience abdominal cramps or spotting similar to natural conception. Apart from such effects, one should contact the doctor if fever, blood in the urine, or severe pelvic pain is experienced.

## **What are the chances of getting pregnant after an IVF?**

The chances of getting pregnant with IVF will depend on individual factors. Women below 35 years have the highest success rate with IVF, which decreases after 40 years of age.

## **What is done with the multiple eggs or embryos during IVF?**

IVF involves the retrieval of multiple eggs and may also result in the fertilisation of more than one egg during the procedure. Thus, one may choose to preserve the eggs and even embryos in a frozen state for future use.

## **Are there any other conditions apart from infertility where IVF may benefit?**

Since IVF involves fertilisation of egg outside the human body, the newly formed embryo can be screened for genetic disorders before it is transferred into the womb. Couples with a history of genetic disorders can be benefitted from such a procedure. There may be some risks associated with IVF which can include multiple pregnancies, chances of low-birth-weight babies and complications during egg retrieval, etc. One is advised to discuss the procedure in detail with their gynaecologist to know their chances of success and the risks associated.

Ankura hospital for women and children, has a team of expert obstetricians and gynaecologists who guide you through each step of infertility treatment.



**For Any Query: 9053 108 108**

This is general information issued in the public interest. Please contact your doctor for more details.