

Department of In Vitro Fertilisation (IVF)

We welcome the opportunity to provide a variety of fertility service to you, and would be happy to assist you with any of your fertility concerns. IVF involves taking eggs from the woman, fertilizing them in the laboratory with her partner's sperm and transferring the resulting embryos back to her uterus 2-6 (usually 3 or 5) days later.

In all branches of medicine both patients and doctors recognize that same symptoms may have many different causes and that accurate diagnosis should always come before treatment. This is no less true when the symptom is the "inability of a couple to have a baby (infertility)". Therefore before you start infertility treatment we recommend you to have proper examination and investigations so that we can give you better advice regarding the treatment options and help you to decide the most appropriate treatment for you.

Assisted Reproductive Technology (ART)

Any medical technique that attempts to obtain a pregnancy by means other than by intercourse is defined as ART.

We at Apollo provide you the full range of ART services to aid your infertility treatment to help you bear a child. Successful outcome with minimum invasion is always our priority.

Intra Uterine Insemination (IUI)

This is the method by which processed semen is placed directly in the uterus with the help of a catheter. IUI can be done in a natural cycle, however, to get better results, it is usually preceded by ovulation induction / ovarian stimulation using appropriate fertility enhancing drugs.



In Vitro Fertilisation (IVF) and Embryo Transfer (ET)

Commonly known as "Test Tube Baby". IVF means fertilisation of an ovum outside the body and consequently transfer of the fertilized ovum (embryo) into the uterus of the woman. IVF is probably the most widely practiced assisted conception procedure in the world.



The procedure does not need admission at any step and is conducted on outpatient basis.

Steps involved in IVF procedure

- Ovarian stimulation by hormonal injections to produce multiple eggs.
- Monitoring of the response by ultrasound scans and blood tests.
- Egg retrieval with the help of a needle under local / general anaesthesia.
- Fertilisation of the eggs in the laboratory
- Transfer of the resulting embryo(s) into the uterus of the woman.

Blood test performed 15 days after embryo transfer to assess the establishment of pregnancy. If the treatment procedure is successful, one or more embryos will implant in the uterus and the pregnancy will result just as it happens in the natural process of conception.



Intra Cytoplasmic Sperm Injection (ICSI)

ICSI is the technological breakthrough in the field of IVF which is used to overcome the inability of sperm to fertilise an egg which may be either due to sub-optimal sperm parameters, Oocyte defects or other reasons (anti sperm antibodies). In this technique a single sperm is directly injected into the cytoplasm of an egg in order to achieve fertilisation.

The steps involved in ICSI procedure are exactly the same as for IVF, except that fertilisation is achieved with the help of a micromanipulator.

In some cases when there is a complete absence of sperm in the ejaculate, sperm can be retrieved from the testis / epididymis and used for ICSI. The testicular / epididymal sperm retrieval techniques are:

PESA (Percutaneous Epididymal Sperm Aspiration), **MESA** (Microsurgical Epididymal Sperm Aspiration), **TESA** (Testicular Sperm Aspiration) & **TESE** (Testicular Sperm Extraction).



Cryo Preservation of Embryos (embryo freezing)

Excess (Surplus) embryos can be Cryo-preserved at ultra low temperatures for many years. These frozen embryos can be used subsequently without the need for ovarian stimulation and egg retrieval. However the pregnancy rate following transfer of frozen embryos is lower than that with fresh embryos.



Semen / Sperm Freezing

Semen /Sperm or testicular biopsies can be stored frozen at ultra low temperatures for long duration which could be helpful in a variety of circumstances.

IVF Using Donor Oocyte (Eggs)

Women who are unable to produce their own eggs or their eggs failed to fertilise during an IVF cycle due to poor Oocyte quality can be helped by using other women's egg (Donor Oocyte). Replacement of donor embryos and surrogacy are other available options to the infertile couple.

Assisted Hatching (AH)

The procedure is based on the fact that an alteration in zona pellucida (outer covering of egg) either by drilling a hole through it or by thinning it, will promote hatching or implantation of embryos that are otherwise unable to escape intact from the zona pellucida.

Semen Bank

We are having a semen bank at Apollo. The bank contains frozen sperm from voluntary donors with various backgrounds and physical characteristics to match with the individual needs. Donors are screened thoroughly to rule out transmission of any infectious or genetic diseases.

Risks Involved

1. Multiple Pregnancy.
2. Ovarian Hyper stimulation Syndrome (OHSS).
3. Failure at different steps of IVF treatment.
4. Ectopic pregnancy.
5. The incidence of congenital malformation in IVF babies is no more than in the general population.

Success rate



Apart from the expertise of the individual infertility clinic there are other factors also, which affect the ART outcome such as patient's age and the variety of abnormalities respond well to IVF while others do not. This means that some patient will have a good change.

Success rate of a center represents the number of pregnancies achieved out of total number of cases performed over a period of time. At our center we are currently having 30-40 % pregnancy rate per attempt.

Treatment Options Available

1. Ovulation induction / controlled ovarian stimulation
2. Intrauterine Insemination (IUI)- husband / donor
3. In Vitro Fertilisation (IVF) and Embryo Transfer (ET)
4. Intra Cytoplasmic Sperm Injection (ICSI)



5. Gamete Intra Fallopian Transfer (GIFT)
6. Sperm retrieval techniques – TESA (Testicular Sperm Aspiration), TESE (Testicular Sperm Extraction), MESA (Microsurgical Epididymal Sperm Aspiration), PESA (Percutaneous Epididymal Sperm Aspiration)
7. Sperm Bank
8. Donor Oocyte Program
9. Donor Embryo Program (genetic surrogacy)
10. Blastocyst culture
11. Assisted hatching