

* IVF (In Vitro Fertilisation)

Date: / /

Page No.:

→ In vitro This is the simple, safe and painless procedure needing no anaesthesia (injection).

→ In vitro fertilization, eggs are fertilised outside the body of the mother in glass vessels for subsequent reintroduction into the womb.

→ In this technique, egg production is stimulated in the mother through the use of hormones or fertility drugs, resulting recovery of more than one egg simultaneously that increases the chance of pregnancy.

→ After treatment with fertility drugs a laparoscopy is performed on the woman through a small opening in the abdomen and ripe follicles can then be visualized.

Here follicle ruptures and eggs are collected by suction through a tube into a glass vessel containing culture media.

→ A fresh sample of semen is obtained from the male (♂)

about an hour before the eggs are collected.

→ The sperms are washed twice and centrifuged in the culture medium before they are mixed with the eggs.

→ A concentration of 1 million to 80 million of motile sperms are needed for successful fertilization.

→ When the eggs complete their maturation process, they are kept in the culture medium for 5-6 hours before they are get mixed with sperms.

→ Later sperms and eggs are mixed together.

→ After 30 hours, the fertilized eggs may form 2-celled embryos at about 40 hours, 4-celled embryos and after 60 hours, 8-celled embryos form.

→ In embryo transfer, any embryos from the one celled to 16-celled stage may be used.

→ Through a narrow catheter which passes through the cervix into the uterus, the embryos are transferred.

* Application of IVF (In Vitro Fertilization)

(i) In vitro fertilisation and embryos and transfer are at present used for both diagnostics and therapeutic purposes.

(ii) They are mainly used in case of women reporting with infertility.

(iii) Sometimes embryo transfer fails and patient has advised to collect as many eggs as possible at the same same time and have them fertilised. Then use one or two for transfer into woman and store the rest in frozen state for future use.