

Information: In-Vitro Fertilisation (IVF)

In vitro fertilisation is a method of assisted conception which increases the chance of pregnancy by placing fertilised eggs directly into the *uterus* (womb). The fertilised eggs are called embryos.

In preparation for the IVF procedure the woman is given hormone drugs.

Most patients have Long Protocol IVF. The first drug is a nasal spray or subcutaneous injection. Its action is to suppress normal hormone production by temporarily shutting down the ovaries. It enables us to control your cycle and prevents premature ovulation. This drug is usually started 21 days after the start of the period.

Follicle Stimulating Hormone injections (FSH) are then given to stimulate the ovaries to produce follicles that will contain the mature eggs. It also prepares the lining of the womb for receiving the embryos.

Some patients have Short Protocol IVF in which an Antagonist injection is added from day 5 of FSH injections. These patients do not take the first sniffer or injection to suppress the ovaries.

Ultrasound scans are carried out in the IVF clinic during this ovarian stimulation to check that the drugs are working and follicles are growing. At each scan we measure these follicles and take a blood test to check the oestrogen level. These scans, which only take a few minutes, are done using a vaginal probe and cause little discomfort.

Once the follicles on your ovaries have reached a certain size we will advise you to have a further injection. This hormone causes final maturation of the eggs and is carefully timed according to the time arranged for your egg collection.

The egg collection itself takes place under intravenous sedation which is given by an anaesthetist. This means that you will be relaxed and pain free during the procedure.

The eggs are removed from the ovaries under ultrasound guidance. A very fine needle is attached to the vaginal probe, which is gently inserted in to the ovary through the vaginal wall. The fluid in each follicle is then aspirated into a test tube which is then handed to the laboratory. The scientist will then examine the fluid under the microscope to detect the presence of eggs. The eggs will then be placed in an incubator.

The egg recovery takes approximately 15 - 20 minutes. During this time the male partner is asked to produce a semen sample (*if applicable*). This will then be specially prepared before finally being placed with the eggs in the incubator.

After the egg collection is completed the woman will need to rest for one to two hours and will then usually be ready to return home.

The following day the couple are telephoned and advised how many of the eggs have fertilised. The lab staff will discuss with you the most likely date for your embryo transfer. This day will be decided upon according to the number of embryos you have and their developmental progress. The embryo transfer will be on day 2, 3 or 5 after your egg collection. This may mean that your embryo transfer falls into the week **after** your egg collection.

The embryo transfer is usually a simple procedure and again is carried out under ultrasound guidance. This time the scan is done abdominally and **the bladder needs to be full**. A very fine soft tube called a catheter is gently inserted into the uterus and the embryos are placed inside. This takes a few minutes and does not usually require sedation.

Vaginal pessaries of progesterone are prescribed three times daily beginning the day after egg collection and continued for nearly two weeks after the embryo transfer in order to maintain the

lining of the womb. A pregnancy test should be done at home, two weeks after the embryo transfer using a urine pregnancy testing kit which will be supplied.

Many factors influence the successful outcome in IVF cycles, including the woman's age, her weight, her normal hormone levels and her health.

The costs of an IVF treatment for patient funded cycles are itemized on a separate charges document.