THE IVF PROCEDURE

The IVF procedure is a process of fertility treatment that is used to overcome a range of fertility issues, by the creation of embryos using egg and sperm outside of the body in a specialised laboratory.

The treatment starts with an initial specialised Consultation by the fertility specialist who will go through a detailed history taking with you and your partner to determine the cause of infertility.

The specialist will also review the preliminary tests that you will have had including the AMH (Anti Mullerian Hormone) to assess ovarian reserve, a pelvic ultrasound to assess the anatomy and integrity of the pelvic organs and a Semen Analysis of the male partner looking at count, motility and the percentage of normal looking sperm in a sample. After the initial consultation, the Specialist will create a treatment plan that is most appropriate for you. This will then be followed up by a Nurse consultation which will explain the time line, shows you how to self-administer the medications and when you should attend for the first monitoring blood test and scan.

Specialist use different protocols to stimulate the ovaries and you will receive specific instructions on when to start and stop medications relevant to your protocol.

During monitoring the specialist will check that the blood levels of the Oestrogen hormone is heading in the right direction to help determine that your response is optimal and to also help minimise the risk of Ovarian hyperstimulation where you overrespond to treatment. Once you have the optimum number and size of follicles you will have a trigger injection of hCG (Human Chorionic Gonadotrophin) and the Transvaginal Egg collection will be times 36 hours later.

The egg collection procedure is done as a day surgical procedure under sedation anaesthetic and takes about 20-30 mins. The doctor will use a thin needle that passes through the vaginal wall to enter the ovaries guided through a vaginal ultrasound probe and the eggs are collected. You will recover very soon after the procedure but will not be able to drive yourself home.

A fresh sperm sample is collected from your partner on the morning of your egg collection, and the eggs are placed together with the sperm in a dish in the lab where fertilisation occurs.

If there are concerns about the sperm quality, the scientists will sometimes use a procedure called ICSI (Intra Cytoplasmic Sperm Injection) to inject a mature sperm into every mature egg to enable fertilisation.

The fertilisation check is done the next day and the fertilised embryos are allowed to progress for 5 days to the Blastocyst stage before the best one is chosen to be put back into the uterus

On the day of embryo transfer the best suitable embryo is chosen to be transferred, and is injected into the womb under ultrasound guidance to ensure correct placement within the uterus.

Following transfer the woman is instructed to carry on using hormone pessaries to support the pregnancy until she can get to the pregnancy blood test which is usually organised 2 weeks after transfer. If the blood tests indicate a pregnancy they are repeated weekly until an ultrasound scan can be arranged in a few weeks.

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