

## Natural Cycle IVF

Natural Cycle IVF treatment is carried out without the use of fertility drugs.

The success rates may be lower compared to stimulated cycles but the treatment is safer, less expensive and can be repeated in subsequent cycles, meaning there is no need to have a break between treatments.

## Why choose Natural Cycle IVF?

1. Natural Cycle IVF is a less invasive approach where the use of less stimulating drugs leads to fewer potential risks and side effects.
2. In conventional Stimulated IVF treatments the patient takes drugs to stimulate her ovaries to produce multiple eggs, which can lead to risks associated with multiple pregnancies. The treatment cycle may also be prolonged by nearly two weeks due to suppression of the ovaries – leading to unpleasant menopausal symptoms.
3. The potential risks with Stimulated IVF also include Ovarian Hyperstimulation Syndrome (OHSS), adverse conditions in the lining of the womb for embryos transplantation and an increase in chromosome abnormalities in both eggs and embryo.
4. Natural Cycle IVF avoids side-effects such as headaches, hot flushes, bloating, mood changes or other concerns relating to ovarian stimulation.
5. Natural Cycle IVF is less expensive than Stimulated IVF treatments as it does not require a daily dose and cumulative dose of costly medications.
6. Natural Cycle IVF patients can repeat their treatment in consecutive cycles – whereas, due to the effect of ovarian stimulation drugs on the body, Stimulated IVF patients need to take 2-3 months break between cycles.

## What is the Natural Cycle IVF procedure?

The procedure involves the collection of a naturally produced egg, fertilisation in a laboratory, and replacement of an embryo into the uterus, which has not been stimulated by medication.

You will be asked to ring the ARU on the first day of your period to book a scan at Day 10 or Day 12 of your cycle. If the scan shows that a large follicle measuring 16mm or more is present you will have a blood test to make sure that your hormone level of LH, a hormone which stimulates the ovary to release an egg, has not already started to rise. If the hormone level is low, you will be asked to take an injection to mature the egg and will go to theatre approximately 35-36 hours after this injection.

If the follicle is large enough, but you are unable to go to theatre within the next 2 days (for example, over weekends or Bank Holidays, you may be given an injection to take to stop you from releasing LH so that we can time the egg collection around theatre lists. It may also be necessary to give a small dose of FSH (stimulation drug) to get the follicle to a suitable size for egg collection.

### What is the success rate for natural cycle IVF?

The success rate of natural cycle IVF in patients with adequate ovarian reserve is generally good and comparable to conventional IVF treatment.

The success rate in patients with reduced ovarian reserve is generally low (around 8 - 10% in different studies), meaning that 8 - 10 women out of one hundred will get pregnant in a natural cycle. The lower success rate is linked to the nature of the patients receiving treatment and the lower likelihood of obtaining an egg in each cycle.

### What happens when I go into hospital for egg collection?

Your stay in the hospital is usually for just a day. You will be asked to come to the Assisted Reproduction Unit at 8 am.

On the morning of the operation you should not have anything to eat or drink, unless you are advised otherwise. You should have a bath or shower. **DO NOT** use any deodorant, perfumes, make-up or nail varnish when you come into hospital.

### What do I need to bring into hospital with me?

You will need to bring the following items with you:

- Dressing Gown.
- Slippers.
- Towel.
- Flannel and Soap.
- Toothbrush and Toothpaste.
- Comb or Hairbrush.

Please do not bring any valuables into hospital with you.

### How is the egg collected?

For IVF/ICSI, the egg is collected using ultrasound. A vaginal scan is performed to locate the follicle, and a needle is inserted into the follicle. The fluid from inside the follicle is drained into a sterile tube via a needle attached to a suction pump. The embryologist then examines the fluid under the microscope to find the egg. The egg is placed into labelled dish and placed into an incubator.

### Is the procedure painful?

The egg collection is performed after giving you some sedation and pain relief. Sedation relieves anxiety and helps you to relax. Most women describe minimal discomfort during the egg collection, and many don't remember much about it afterwards. Cramping and a small amount of vaginal bleeding can occur after the procedure. You can take Paracetamol tablets for pain relief, but you must wait 4 hours between doses, and must not take more than 8 tablets in a 24 hour period. If your pain is not relieved by Paracetamol, contact the medical staff using the emergency contact number at the back of this booklet. During the egg collection procedure the consultant will pass a small catheter into the uterus. This is called a trial cannulation of the cervix. This is done whilst you are sedated to detect any difficulty in passing the catheter before your embryo transfer. Very rarely it may be necessary to dilate the opening to the cervix so that when the embryos are transferred the procedure will take place with as little discomfort for you as possible.

### **Do I take any drugs after egg collection?**

You will be given hormones in the form of an injection (Gestone) or vaginal pessary (Cyclogest) following the egg collection to support the early embryo after embryo transfer and increase the chance of a successful pregnancy. This is known as "luteal phase support." The injections or pessaries are taken every day up to the day of your pregnancy test. If your test is positive you must ring the unit and collect another prescription that day. **You must not stop taking them or miss a dose.** You need to continue with them until you are 12 weeks pregnant.

Side effects can include nausea, vomiting, and swollen breasts. If you experience any side effects, speak to the doctors or nurses. Use the emergency contact number after 5pm and weekends for advice before stopping any medication.

Occasionally you may be given injections to thin the blood after egg collection, and aspirin tablets. If your pregnancy test is positive you will also need to continue taking these medicines until you are 12 weeks pregnant.

If you have any symptoms of bleeding you must contact us for advice.

### **When is the sperm sample collected?**

Around the time your partner's egg is collected, you are asked to produce a fresh sample of sperm. This is usually provided at the hospital by the partner after the egg collection. A private room is provided for this. We recommend that you do not have intercourse for 3-4 days prior to the egg collection.

If you have any worries about producing your sample please speak to the nurses.

The sperm sample is stored for a short time before the sperm are washed and spun at a high speed. This is so the healthiest and most active sperm can be selected. The semen is prepared by the embryologist and the egg is fertilised by either IVF or ICSI. It is placed in an incubator overnight. The egg is examined the following day for signs of successful fertilisation.

### **When will I know if the eggs have fertilised?**

The Embryologist will contact you between 9:00am & 10:00am the day after egg collection. This is to find out whether the egg has fertilised and if it is suitable for replacement.

Failure of the egg to fertilise or not to develop sufficiently means that the procedure failed and your cycle will have to be discontinued. The Unit Counsellor will be available for you and your partner if you wish to see her. Please ask the nurses to arrange this for you. Another appointment will be made for you to see the Consultant.

### **When is the embryo replaced?**

The embryologist will check your embryos 2 days after your egg collection and will grade it for quality.

### How is the embryo replaced?

The procedure feels similar to a smear test and causes very little discomfort. No anaesthetic is needed. You will be asked to come in to hospital on the morning of the embryo replacement. You can have your breakfast before coming into hospital, and again we request that you wash with simple soap and avoid perfumes and deodorants.

The embryo is placed into the womb using a long, thin plastic tube which is passed through the cervix (neck of the womb). You may be given a scan during the procedure and you will need to have a full bladder for this. The procedure takes approximately 35 minutes.

You will be taken back to the ARU from theatre and you can get dressed and go home.