

IN VITRO FERTILIZATION

WHAT IS IN VITRO FERTILIZATION (IVF)?

IVF is one of the most widely used treatments for infertility. It is often known as the test tube baby procedure. Since the first IVF baby, Louise Brown, was born in 1978, over 2,000,000 babies have been born as a result of IVF.

In order for you to get pregnant your ovary must release an egg that is then fertilized by a sperm in your fallopian tube. With IVF, fertilization happens outside your body. The egg and sperm are collected and united in a laboratory. Once the egg is fertilized, it is transferred to the uterus to continue to develop.

WHO IS IVF FOR?

You may be a candidate for IVF if you have:

- Tubal disease
- Endometriosis
- Cervical problems
- Unexplained infertility
- Failure of IUI
- Male factor infertility

WHAT DOES IVF INVOLVE?

An IVF treatment cycle has six different phases:

1. Pituitary Suppression Phase

During an IVF cycle, it is important that several eggs mature at once and that they are collected at the right time.

In the first phase of your IVF treatment cycle we will give you a medication called a GnRH agonist to temporarily suppress the hormones that send messages from your pituitary gland to your ovaries.

Suppressing these hormones prevents eggs from being released too soon. You will take the medication daily by nasal spray or injection.

2. Ovarian Stimulation Phase

In this phase your ovaries are stimulated to produce more eggs than usual. You will take daily injections of luteinizing hormone (LH) and follicle stimulating hormone (FSH) for about 10 to 14 days. These hormone injections will stimulate your ovaries to produce several follicles, each of which may contain an egg. One of our nurses will teach you how to give the injections to yourself.

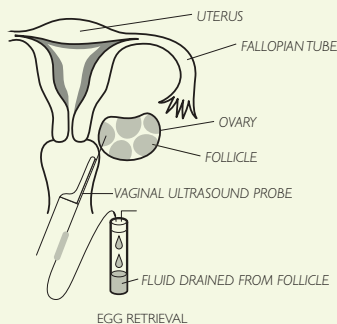
During this phase we use ultrasound to monitor your ovaries, and blood tests to measure your estrogen levels. You may have your ultrasounds and blood tests done at Genesis between 7:30 am and 9:00 am daily. Each woman and each cycle is different; however, this is an example of an IVF cycle schedule:

ULTRASOUND										✓	✓	✓
BLOOD TEST			✓			✓				✓	✓	✓
INJECTION	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TREATMENT DAYS	1	2	3	4	5	6	7	8	9	10	11	12

3. Egg Retrieval Phase

Once the ultrasounds and blood tests show that you have a reasonable size and number of follicles, we will give you an injection of hCG (human Chorionic Gonadotropin) to trigger the final maturation of the eggs. We will retrieve the eggs in the clinic 34 to 36 hours after your hCG injection.

Before the retrieval, you will get a short-acting medication to control any pain. One of our physicians will insert an ultrasound-guided needle through the top of the vagina into your ovaries. The fluid is drained from each follicle and looked at under a microscope for eggs. The procedure takes about 10 to 15 minutes and you can go home a few hours later.



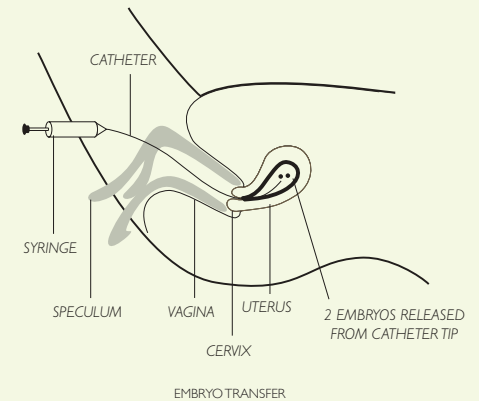
We encourage you to have your partner with you during the procedure.

4. Fertilization Phase

If you are using your partner's sperm he will give a sample of sperm on the day of the retrieval (some couples will be using donor sperm for this process). The sperm sample is washed and concentrated, and then added to the eggs a few hours after retrieval. One of our embryologists examines the eggs the next day for fertilization. If the sperm sample looks normal, we expect about 70% to 80% of the eggs to be fertilized. *It is important to know that not every follicle will contain an egg, not every egg will be fertilized, and not every egg that is fertilized will go on to form a good-quality embryo.*

5. Embryo Transfer Phase

Three to five days after your egg retrieval, we will transfer your fertilized eggs (embryos) to your uterus using a fine plastic tube (transfer catheter). This takes only a few minutes, and most women don't find it uncomfortable.



The exact number of embryos transferred depends on your age and the quality of your embryos. We choose the healthiest embryos that are the most likely to result in pregnancy. If you have any extra healthy embryos, you may choose to have them frozen for a future embryo transfer.

The transfer process lasts only a few minutes and you can return soon afterwards.

6. Luteal Phase and Pregnancy Test

We suggest that you take it easy for 24 hours after your embryo transfer. You can resume light, nonaerobic activity over the next few days. Many women return to work after a few days if their jobs aren't too strenuous.

Sixteen days after retrieval you will have a blood test to find out if you are pregnant. If your test is positive we will schedule an ultrasound for you. Once the ultrasound confirms that you have a healthy pregnancy, your doctor will discuss plans for pregnancy care with you.

OPTIMIZING YOUR CHANCES

Weight: It is important to be at a healthy weight for your height. Women with a body mass index under 19 or over 32 have a lower chance of getting pregnant and an increased risk of miscarriage.

Smoking: Women who smoke have a lower chance of becoming pregnant and a higher rate of miscarriage.

Supplements: We recommend that you take a multivitamin containing folic acid (0.4 to 1.0 mg daily). This B vitamin reduces the risk of some serious defects of the brain and spinal cord in the fetus. You should start taking it a few weeks before your treatment begins.

IVF SUCCESS RATES

Many factors influence success rates. One of the most important factors is your age. Your doctor will discuss your individual circumstances with you before you start your treatment cycle. You can see our current pregnancy rates on our website: www.genesis-fertility.com

EMOTIONAL SUPPORT

Many women describe the experience of coping with infertility and IVF treatment as an "emotional rollercoaster." You may feel periods of intense sadness, anger or isolation during this time. Because we understand how emotionally

difficult this journey can be, we include 1.5 hours of counseling support in the cost of each IVF cycle.

It is normal to feel overwhelmed, but you can do many things to take care of your emotional well-being. Our counselors are all experienced in helping couples cope with fertility issues. They can help you learn strategies for dealing with stress, managing your IVF cycle, and nurturing your relationship with your partner.

We also strongly encourage partners to participate in the treatment process. One of the most important sources of support for couples struggling with fertility challenges is each other.

WHAT ARE THE RISKS?

Ovarian Hyperstimulation Syndrome (1%). The ovaries become enlarged and extra fluid accumulates in the abdomen. Treatment includes rest, close monitoring, intravenous fluids, and, in cases, draining the abdominal fluid.

Multiple Pregnancies. Twins occur occur in 10% to 35% of our pregnancies, while triplets occur in 1% to 5%. Multiple pregnancies carry a higher risk of preterm delivery and other associated problems. Your doctor will review your age and the optimal number of embryos to transfer with you before you start your IVF cycle.

WHAT DOES IVF TREATMENT COST?

There is an initial fee of \$200 for the IVF orientation, injection teaching and injection supplies. Each IVF cycle costs \$5,000, plus an additional \$2000 to \$4000 for medications. The basic cycle fee is not covered by an insurance program although it is a tax deductible medical expense. Please check with your extended benefits carrier to see if any of the drugs are covered, to what extent, and for how many treatment cycles.

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For a referral to either office:

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fertility centre
embrace a new beginning