

## **How does the in vitro fertilization (FIVET) work?**

The treatment for the in vitro fertilization may vary slightly depending on the clinic. However, the basics remain the same and this is what you should expect if you want to undergo an in vitro fertilization treatment in our hospital.

### **Before treatment**

Before the treatment our staff will be at your disposal from the very first moment you contact us, to inform and assist you in anything that you may need from us. We understand the importance of deciding to follow a fertility treatment, and for this reason we will try to clarify all of your doubts and advise you in the best way possible about your particular case. For this reason, we ask you to send us all the relevant analysis you have previously done as well as your clinical history, in order for us to study it and give you the best possible assistance during the treatment. This information will help us to avoid further unnecessary examinations.

The specialized doctor will explain the procedure and tell you what expectation you can have.

In our assisted procreation center, we offer a personalized diagnosis with the aim of choosing the best treatment for any fertility problem.

Once you have all this information, the treatment can begin.

### **Blocking the natural menstruation**

The hormonal therapy should begin at the beginning of the menstrual cycle; If the patient decides to stay throughout the therapy in Albania, he/she must present himself to the clinic the day before the menstrual cycle. By adapting to your menstrual cycle and to facilitate the process, we can prescribe the contraceptive pill for a few weeks. Your doctor will explain to you when to start taking it and when to stop. A few days after you stop taking the medication, the menstrual cycle will come and from there you will start the treatment phases.

### **The ovarian stimulation (hormone therapy)**

The next step is to start taking FSH, or rather the follicle-stimulation hormone (in the form of daily injections) for a period ranging from 10 to 12 days.

During the treatment ultrasound scans are performed in series (about 4 or 5) and they determine the level of estradiol in the blood in order to control the growth and evolution of the follicles to normality.

### **Oocyte harvesting (The collection of ovules)**

When, during the ultrasound, it is found that the follicles have reached a suitable size and, in case of an availability of an adequate number of oocytes, the oocyte collection gets programmed, about 36 hours after the application of an injection of hCG hormones that induce the oocyte maturation in a natural way.

The harvesting will take place under sedation or total anesthesia. In order to collect the oocytes, a needle will be inserted into each ovary through the vagina. The procedure should take approximately 20 minutes.

### **Fertilization of Oocytes**

Once all oocytes and the spermatozooids from a sperm sample of the male component of the couple have been harvested, oocyte insemination is carried out.

This process can be achieved by using the IVF technique that involves placing a sperm-enclosed ovule or by using the Intracytoplasmic Sperm Injection (ICSI) technique, which consists in introducing a live sperm inside the ovule through a puncture made with a cannula.

The resulting embryos get grown in an incubator for 2 to 3 days. 5 days may be required if the embryos need to be developed until they reach the blastocyst stage. After being in the incubator, embryos are checked and the best samples are transferred to the uterus, which facilitates the highest success rate.

### **Embryo Transfer (Embryo Positioning)**

Embryos are placed in the uterus by a catheter. The number of embryos that are transferred depends on the age of the patient. The procedure is performed in the operating room; In this case it is not necessary to apply the anesthesia as it is a fast and painless process.

Embryos that are advancing can be frozen if further treatment for the in vitro fertilization is needed in the future, which may occur either because of a failed attempt or because you want to have another child.

Embryos that are blocked during the development are discarded as they are considered unsuitable.

### **Pregnancy test**

You may undergo a pregnancy test only after two weeks of embryo implantation. You can take the test at home using a casual pregnancy kit, or you may be asked to go to the clinic so that the test can be done directly there.

We are looking forward to receiving good news and sharing this moment with you. If the in vitro fertilization has not been successful, you can continue with another cycle.