
Information IVF and ICSI

Medisch Centrum Kinderwens

Information IVF or ICSI

Together with your treating nurse or physician, you have decided on or are considering starting an IVF (In Vitro Fertilization) or ICSI (Intra Cytoplasmic Sperm Injection) treatment. In this information brochure you can read more regarding these treatments. More detailed information can be found in the 'Practical Information IVF and ICSI' information brochure.

IVF

In an IVF treatment, also known as a 'test tube fertilization', fertilization finds place behind glass: the ova (egg cells) and sperm cells are brought together in a petri dish. The sperm cells will still need to penetrate the ova themselves. If a sperm cell manages to do so, an embryo is developed (for more information, see the information brochure regarding embryos).

An IVF treatment is a viable option for couples struggling with issues related to fallopian tube blockage issues, childlessness for no obvious reason, endometriosis, cycle irregularity issues and lower sperm quality. In addition to this, couples may decide to use IVF if IUI (intra uterine insemination) treatments did not lead to a (successful) pregnancy.

ICSI

In an ICSI treatment, a sperm cell is injected directly into the egg cell using a microscope (for more information, see the information brochure regarding embryos).

An ICSI treatment is a viable option if the man has extremely low sperm quality or an IVF treatment has produced no or very few embryos.

This means that the difference between IVF and ICSI treatments is only laboratorial. The woman will undergo the same process for either treatment.

The treatment

IVF and ICSI treatments consist of 4 phases: stimulation; egg retrieval; the laboratorial phase; and the embryo transfer. During the stimulation phase, you'll have to use hormones so that several follicles will grow in either fallopian tube. Follicles are tiny, fluid-filled sacs, and ova grow in the walls of follicles. During the egg retrieval phase, a physician will 'harvest' the ova by sucking the follicles empty. During the laboratorial phase, the obtained ova will be fertilized using either the partner's or donor sperm. Five days after the retrieval, the best embryo is selected and placed into the uterus. If there are any viable leftover embryos following the transfer, these will be put into cryogenic storage if they are of high enough quality. Frozen embryos can be thawed and transferred to you if the first embryo transfer did not result in a successful pregnancy.

Chances of pregnancy

The chance of pregnancy is influenced by various factors such as the age of the woman (to a greater extent) and (to a lesser extent) the partner or donor's age, as well as weight, smoking habits and lifestyle of both partner/donor and prospective mother. It is not possible to determine your individual chances exactly.

Practical Information

Preparation

When you have your first consultation appointment, your treating nurse or physician will discuss several issues with you, such as when you'll start the treatment, which medications you're going to use and the dosages of each medication. One of our nurses will explain how to inject these medications, which can be done either by you or your partner. (See the link at the end of this document for a tutorial on how to inject FSH.) In addition to this, your blood (as well as that of your male partner, if you have one) will be checked for antibodies for HIV and Hepatitis B and C.

Leading up to the treatment

The woman: we advise starting folic acid (0.4 or 0.5 mg a day) and vitamin D (10 micrograms a day) at least four weeks before your treatment. We strongly suggest you do not smoke or drink. More information is available at www.zwangerwijzer.nl.

The man: the optimal period of abstinence for IVF or ICSI is 1-3 days before the egg retrieval.

The stimulation phase

During the stimulation phase, you'll use FSH, which stimulates follicle growth, as well as an ovulation suppressant. The MCK Fertility Center employs several treatment schedules. Your treating physician or nurse will discuss the options with you, and help you decide which one best fits your specific needs. A copy of your schedule will, of course, be provided for easy reference.

On the day your menstruation starts, we ask you to contact our administrative office in order to schedule a starting ultrasound (to take place on the first or second day of your cycle). After this ultrasound, you'll receive the necessary prescriptions for the medication, which you can pick up at the pharmacy in the Alrijne Hospital in Leiderdorp (across from our Fertility Center) that same day. You'll start FSH on the day indicated by your schedule. Roughly eight days after that, another ultrasound will take place, which will allow your treating nurse or physician to assess the number of growing follicles and their sizes.

Depending on the results of this ultrasound, the next assessment appointment is planned, which usually takes place 1-3 three days later. On average, three ultrasounds are performed during the stimulation phase before the follicles are of sufficient size for us to start planning the egg retrieval. Then, using a hCG (pregnancy hormone) injection, the final stage of ova maturing is stimulated. (See the link at the end of this document for instructions on how to administer Ovitrelle®.

A schedule with the exact dates and times of this injection and the egg retrieval will be provided by our administrative office when scheduling the retrieval.

You won't have to change your lifestyle during the stimulation phase. You are able (and allowed) to continue all your activities (including having sex, going to the spa/sauna and swimming). Your energy levels may be lower than usual, though, and we have had occasional reports of mood swings, headaches, abdominal pain or nausea. If this is the case for you, we advise against running and riding. If your physical complaints are severe, we ask you to contact one of our nurses.

Egg retrieval

The retrieval, the second phase of your treatment, will take place 35 hours after you have taken your hCG injection. You can have a light breakfast on the day of the egg retrieval. It is recommended that you don't consume a lot of fluids (max. 1 cup of tea, for example) and take two tablets of paracetamol two hours before the egg retrieval, and possibly 500mg Naproxen.

Then, you and your partner or another companion will go to the MCK Fertility Center, where you'll sign in at the front desk 15 minutes before your appointment, then take place in our waiting room until you are called by a nurse.

More detailed information regarding the egg retrieval can be found in the 'practical info IVF and ICSI' information brochure. Roughly thirty minutes after the retrieval, you'll hear how many ova were retrieved and whether the sperm's quality is high enough (if you're using your partner's sperm) to execute the intended treatment.

The painkiller we use during egg retrieval may lead to inhibited reflexes and concentration issues, which may impact daily activities such as driving for up to 24 hours after the retrieval.

After the retrieval

Most women decide to stay home on the day of the egg retrieval. We advise you to take this day to rest. You may experience some abdominal pain during the days following the retrieval, for which you can take paracetamol 1000mg (every 6 hours). It is advised that you take some more time to rest if this is the case. Drinking a lot of water (2-3 liters a day) may help.

De laboratorial phase

Several hours after the laboratory has received the ova and sperm, IVF/ICSI will be performed (for more information, see the link at the end of this document). The petri dishes will be placed into an incubator. Several checks, both physical and electronic, will be performed by several employees to ensure that your sperm, ova and/or embryos won't be confused with those of other people.

Two days later, between 14 and 16pm, you will be informed telephonically by one of our IVF analysts of how many ova were successfully fertilized and how many viable embryos have developed. Also, if there have been no irregularities, the embryo transfer will be scheduled, usually to take place five days after the retrieval.

The embryo transfer

We advise you to come to the clinic with a full bladder when you're having the embryo transfer, as this eases the transfer. Preceding the transfer, an IVF analyst will explain to you how the fertilization process went and how many embryos developed. One of our physicians will perform the transfer. Using a speculum, the cervix will be exposed. A thin tube will be inserted into the uterus through the cervix. The embryo will be passed through this. The entire transfer takes no more than a few minutes and is hardly ever experienced as painful.

Swimming and bathing on the day of the transfer is advised against. Showering is possible.

Supporting the luteal phase

The luteal phase is a period of time after your egg retrieval. During this phase, it's important to support the endometrium using progesterone, which helps the embryo settle. More information regarding this can be found in the 'Supporting the luteal phase' information brochure. Your treating nurse or physician will discuss the different options of medication with you.

Sixteen days after the retrieval

Today, you can perform a pregnancy test. We advise you to take a test even if you have started to menstruate. Please inform us of the result by phone or e-mail (on weekdays).

Five weeks after the retrieval

This is when a check-up appointment will take place, which has been scheduled on the day of your embryo transfer. If you are pregnant, this is when the first pregnancy ultrasound will take place. If you are not, you and your treating nurse or physician will reflect on the treatment and make plans for a possible new attempt or another course of action.

Of course, if you have any complaints or questions before this point you can always call us.

Side effects and risks of IVF/ICSI

The main side effects of using FSH are headaches (occurs in 1-2 out of 10 cases), abdominal pain, nausea and/or diarrhea (occurs in 1-10 out of 100 cases). Possible other complaints may include pain, redness, swelling or itching at the injection site (occurs in 1-2 out of 10 cases), and mood swings, although it is hard to determine whether those are caused by medication or the understandable anxiety induced by the entire treatment process.

The main risk of IVF/ICSI is hyper stimulation syndrome (OHSS). This occurs after egg retrieval and embryo transfers. It involves the presence of a large amount of fluids in the abdominal cavity, resulting in a notable increase in abdominal girth and weight. This heightens the risk of thrombosis and embolism. Please contact us if your girth or weight has increased significantly.

A second, rarer risk is ovarian torsion (a twisted ovary). Your ovaries will be enlarged by stimulation, and will stay enlarged after the egg retrieval. This may result in a twisted ovary, which causes acute severe abdominal ache, nausea and sweating. If these symptoms don't dissipate within 30 minutes, we implore you to either contact us or a nearby hospital's emergency room.

Finally, infection or bleeding following egg retrieval is a risk. If you experience abdominal pain and high fever (>38.5 °C), please contact us.

Intense period of time

An IVF or ICSI treatment is a very intensive, emotionally taxing process. In addition to the physical strain, which differs from person to person, it can be tough due to the necessary time management, constant preoccupation with it and of course the alternating hope, despair and uncertainty. The period following the embryo transfer is, to most, especially anxiety-inducing. This can cause a strain on the relationship between you and your partner. It's important that you talk about this. However, the process can also cause tension between you and your family, friends, coworkers or employer.

One of our fertility counselors may be able to help. You can contact our administrative office for a free appointment, for which you don't need a referral from your GP.

Finally

On some cases, treatment must be stopped due to your ovaries not responding well to the FSH injections. It is important that you know that if this is the case, the stimulation will not count toward your insured attempts. However, if there has been an egg retrieval, the treatment does count, even if no viable embryos developed.

Phone numbers for severe physical complaints

Telephone: 071 5812300 (MO-FRI 08:00 a.m.- 12:00 a.m. and 01:00 p.m.-3:30 p.m. SA: 10:00 a.m.- 01:00 p.m.)

After hours: 06 – 25 25 74 200

More information

<http://www.zwangerwijzer.nl>

(lifestyle tips)

https://www.youtube.com/watch?v=m8gOZ7l_Jq4

(Youtube: Instructie Gonal F)

<https://www.youtube.com/watch?v=vVA-4da9xic>

(Youtube: Instructie Fostimon)

<https://www.youtube.com/watch?v=Dj4v-CM2bcs>

(Youtube Instructie Ovitrelle)

<https://www.youtube.com/watch?v=vGbIL9QWSsM>

(Youtube ICSI)

<https://youtu.be/8AFvyf6sjMs>

(IVF en ICSI in Medisch Centrum Kinderwens (Dutch))

<https://youtu.be/PRG7tUxX9W8>

(Laboratorium Medisch Centrum Kinderwens (Dutch))

Folder 'Information about embryos'

Folder 'Supporting the luteal phase'

Folder 'Practical information IVF en ICSI'

This information is meant for women who have been offered an IVF or ICSI treatment at the MCK Fertility Center. This information, together with any other information provided by a physician or nurse, is meant to help you make an educated choice on whether you want to take the treatment. This information is subject to change.

For any feedback regarding this information brochure, please let us know at info@mckinderwens.nl.