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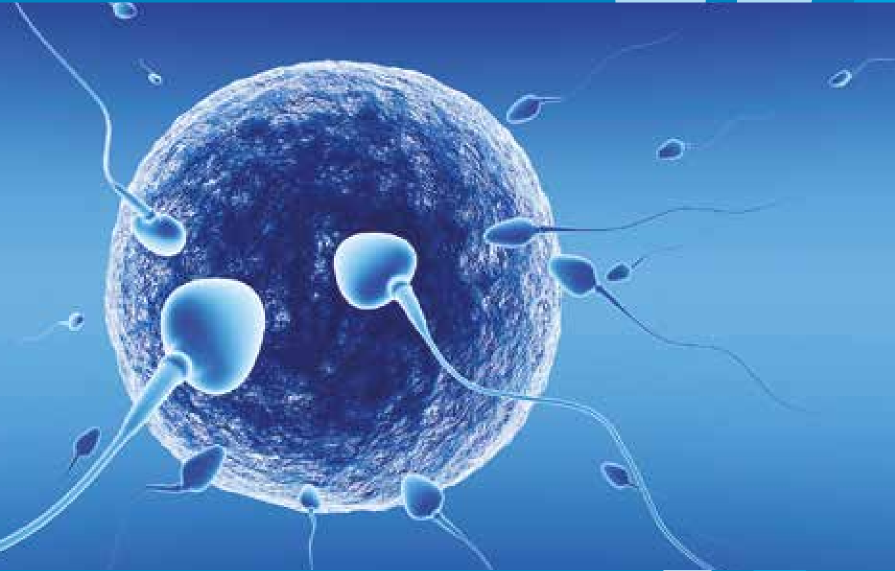

Intrauterine insemination

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Introduction

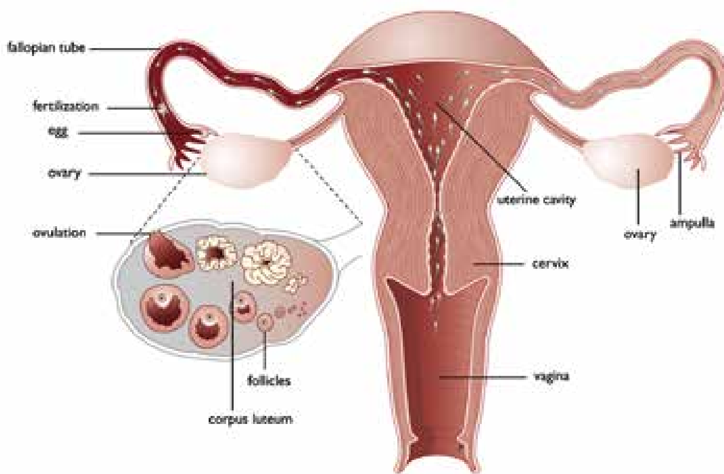
This brochure provides information on intrauterine (i.e. artificial) insemination (IUI).

Should you have any further questions after reading this brochure, please do not hesitate to contact us. The doctors and midwives at the Leuven University fertility centre will be happy to provide further information.

THE MENSTRUAL CYCLE

The start of the menstrual cycle coincides with the presence of several small follicles. One of these follicles will grow and mature within the ovary over the course of the first fourteen days. As the follicle grows it will produce more and more hormones (oestrogen). The high oestrogen concentration will affect the endometrial lining and cervix. Ovulation will follow under the influence of the luteinising hormone. The mature follicle will tear and release the egg (ovum), approximately 14 days before the end of the menstrual cycle.

When the egg is released it is captured in the oviductal ampulla. The egg proceeds through the oviduct as a result of the rhythmic contractions of the uterus and oviduct.



What remains of the follicle changes after ovulation into a corpus luteum under the influence of the luteinising hormone. The corpus luteum secretes progesterone, a hormone that maintains the endometrium. If the egg is not fertilised after ovulation the corpus luteum will not survive. Progesterone production will decrease and the endometrial lining will come away, resulting in menstruation.

An insemination treatment cycle may differ from a normal menstrual cycle in several ways:

- ✔ Hormonal medication can be used to stimulate a cycle.
- ✔ The sperm sample is capacitated and the concentration and motility checked in the laboratory.
- ✔ The processed sperm sample is injected directly into the uterine cavity around the time of ovulation.

WHAT IS INSEMINATION?

Intrauterine or artificial insemination (IUI) is a type of fertility treatment in which processed sperm cells are inserted into the uterus at the time of ovulation.

INITIATING INSEMINATION TREATMENT

You can contact the Leuven University fertility centre at your own initiative or with a referral from a doctor.

Your initial consultation with the fertility centre will provide ample scope for a detailed consultation. In preparation of this initial consultation you will have to first complete a questionnaire at home. The fertility consultant will ask specific questions in order to establish a clear insight into your situation. Sometimes this consultation will be preceded by a consultation with a specialist midwife. You will then be given information on any necessary additional examinations involving you and your partner. The examination phase may take up to two or three months.

Once all examinations have been completed a consultation will be arranged with the fertility consultant to discuss the results of the examinations. Insemination treatment can be initiated providing at least one fallopian tube is unobstructed and the sperm sample is of acceptable quality.

Before starting the fertility treatment an appointment will be arranged with the midwife for an intake consultation, during which each stage of the treatment will be explained. You and your partner will be expected to visit and read the information on the www.mynexuzhealth.be website beforehand and bring the signed contracts with you to the intake consultation.

INSEMINATION TREATMENT PROCEDURE

STEP 1: MONITORING THE CYCLE

Insemination treatment can be monitored during a natural cycle. The menstrual cycle is monitored by means of ultrasound follicle measurements and blood samples until the time of ovulation.

The ovaries can also be stimulated using hormone medication.

The following is a summary of the different medications:

1. Clomiphene citrate (Clomid®)

Clomiphene citrate is an anti-oestrogen that stimulates the release of the follicle stimulating hormone, which is vital for follicle growth. The treatment is based on tablets to be taken for 5 days at a specific stage of the cycle.

Follicle growth is monitored by means of several blood samples and ultrasound follicle measurements until the follicle has matured.

It is possible to initiate two consecutive treatment cycles, but this has to be followed by a rest cycle. Overall the duration of the treatment cannot exceed four to six cycles.

2. Gonadotropins (Menopur®, Puregon®, Gonal F®, Rekovelle®, Bemfola®, Ovaleap®)

If a natural cycle or treatment with hormone tablets does not result in pregnancy, hormone injections can be administered before insemination treatment.

Gonadotropins contain follicle stimulating hormone (FSH), with or without luteinising hormone (LH), which stimulates follicle growth. The hormones are administered daily via subcutaneous injections, which you, your GP or the home nurse can perform. Follicle growth will be monitored by means of several blood samples and ultrasound follicle measurements.

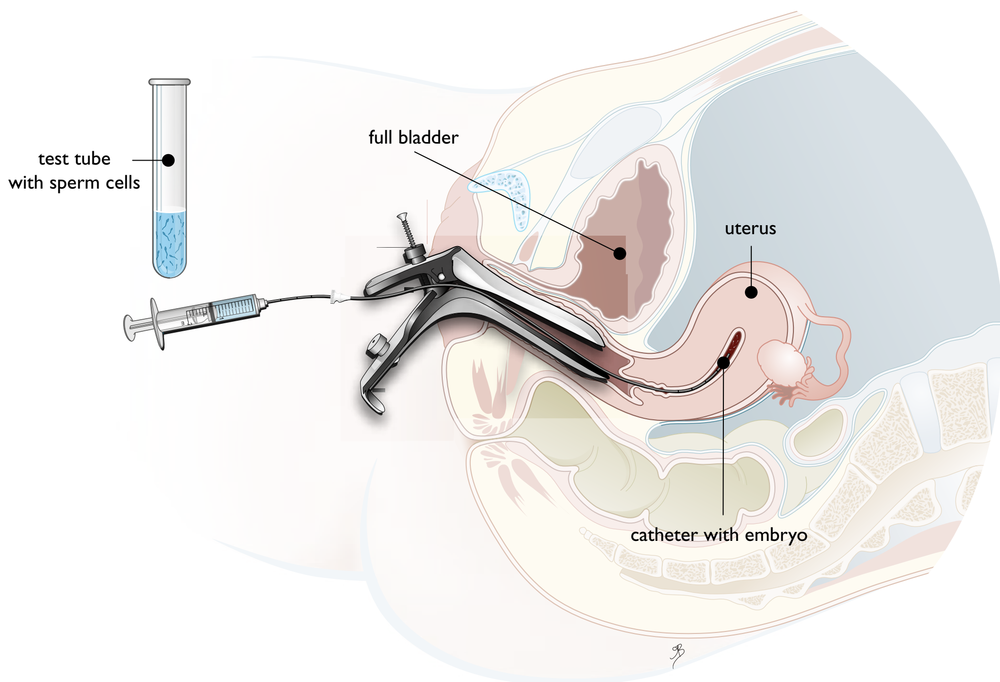
Gonadotropins are administered during maximum six treatments. As a rule a rest cycle without medication is introduced after one or two treatment cycles.

The Ministerial Decree (MD) dated 14 September 2006 regulates the repayment of gonadotropins within the framework of controlled ovarian stimulation with or without insemination.
The MD stipulates that gonadotropins will be refunded subject to specific indications. Your doctor will be able to provide further information and the necessary documentation.

STEP 2: INSEMINATION

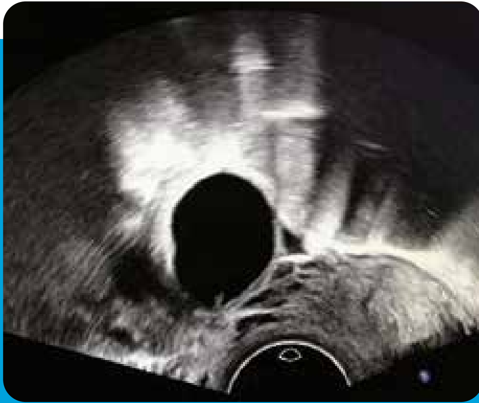
Human chorionic gonadotropin (Pregnyl®) promotes ovulation.
Pregnyl® is administered via a subcutaneous injection into the abdomen. The insemination will be planned to take place around the time of ovulation.

On the day of the insemination your partner will have to deliver a sperm sample to the laboratory, where it will be processed.
If a frozen or donor sample is used it will be thawed on the day of the insemination.
The processed sperm is then injected into the uterus via a thin catheter. The procedure is not painful. You will be able to return to your daily activities after the insemination. If the insemination takes place during the weekend, supplements may be charged.

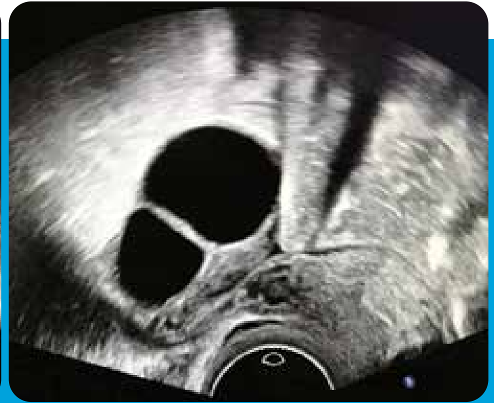


Risks

The use of hormone medication can promote the growth of several follicles. This is referred to as overstimulation, which is associated with an increased likelihood of multiple pregnancy if more than 2 follicles mature. In such cases there will be no insemination and you will have to wait until the next cycle. Careful monitoring and a timely reduction in the medication can limit the risk of overstimulation.



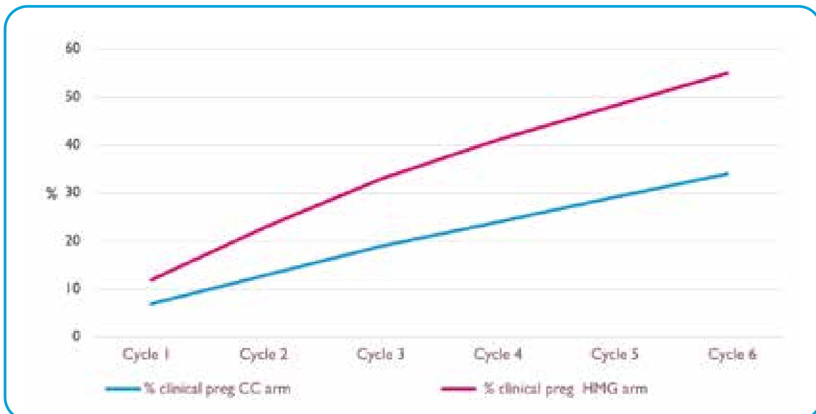
Ovary with 1 follicle



Ovary with several follicles

STEP 3: PREGNANCY FOLLOWING INSEMINATION TREATMENT

The likelihood of pregnancy following insemination treatment is approximately 7% to 12% per cycle. The cumulative likelihood of pregnancy across 6 insemination treatments is approximately 34% to 55%. The use of gonadotropins increases the likelihood of pregnancy.



There is a slightly increased risk of spontaneous miscarriage (up to 20%). Finally, there is a small risk of ectopic pregnancy (3%).

PSYCHOLOGICAL SUPPORT

Fertility problems or the start of fertility treatment are extremely emotional experiences. You may be subject to various emotions and thoughts, continually changing in intensity and direction, at different times. Often talking to your partner or someone close to you may help. If you feel that there are still a number of unanswered questions, you can request a consultation with a fertility psychologist.

Our psychologist will be happy to talk to you individually, or together with your partner, covering all the different aspects of fertility problems. Ample time will be taken to consider your specific concerns and the individual and relational decision making process in detail. How can you talk about your experiences with your partner or your nearest and dearest? How do you manage insecurities, the highs and lows of the treatment process? Sometimes it may be a relief to be told that your feelings and thoughts are a quite normal part of the journey. Talking to someone is always possible, during the investigation stage, the actual treatment or after its termination.

RELAXATION THERAPY

If you are under a lot of stress as a result of the treatment or a combination of different factors, our psychomotor therapist will be happy to provide support.

Psychomotor therapy is a type of physiotherapy, which focuses on the body and its expressivity. This may help when stress manifests itself in physical complaints such as muscle tension, anxiety, sleeping badly, no longer being able to relax, pain and hyperventilation. Your specific symptoms are investigated and the results used to jointly find a meaningful approach to deal with your particular situation. You will be provided with various tips and techniques, tailored to your specific requirements, to help you along the way.

CONTACT DATA

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NOTES

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Please send comments or suggestions relating to this brochure to communicatie@uzleuven.be.

Consult your medical record via nexuzhealth.com or

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