

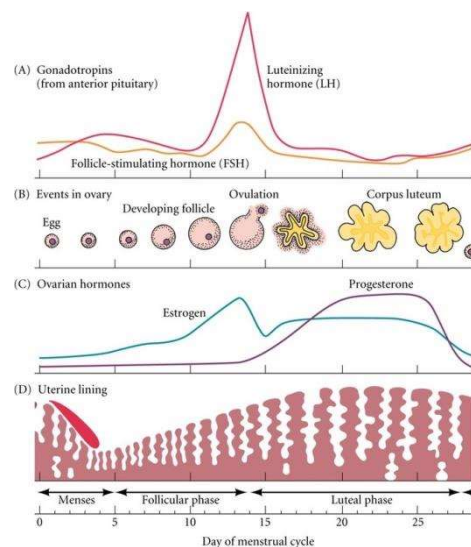
Supporting the luteal phase

Medisch Centrum Kinderwens

Introduction

The aim of this information brochure is to help you understand the luteal phase and the different ways of supporting it after an IUI or IVF/ICSI treatment or during a cryo-cycle. The luteal phase is the second half of the menstrual cycle; the time between ovulation (or ova retrieval) and the start of the next menstruation.

Progesterone is a hormone which is produced by the remains of the follicle, known as the corpus luteum, after ovulation has occurred. It maintains the endometrium. The fallopian tube will produce progesterone for ten to twelve days after ovulation, after which the progesterone levels in your blood will decline, causing your body to discard the endometrium. This is menstruation. If you have developed a pregnancy during the luteal phase, the fallopian tube will continue to produce progesterone, meaning you won't menstruate. The production of progesterone is stimulated by another hormone: LH (originating from the brain) or hCG (pregnancy hormone).



IVF or ICSI treatment

Research has shown that the hormonal stimulation involved in IVF/ICSI treatments causes the endometrium to be discarded too early. Menstruation will occur prematurely, which lowers your chances of a successful pregnancy. It is caused by the fast decline of progesterone levels. The fallopian tubes will produce progesterone as long as hCG (from the Ovitrelle® injection) is present in your blood, which is until roughly five days after the ova retrieval. This means that it will be necessary to take additional medication once these five days have passed. This will be done one of two ways:

1. Administer extra hCG, stimulating the fallopian tubes to continue to produce progesterone.
2. Administer progesterone directly.

IUI treatment

IUI treatments can take place in a natural or stimulated cycle. If you aren't receiving hormonal stimulation, there is no reason to support the luteal phase. This also holds for treatments in which you receive only Ovitrelle®.

If you're receiving an IUI treatment in a stimulated cycle, supporting the luteal phase is only necessary if the time between ovulation and the next menstruation is less than ten days.

Treatment with cryo preserved embryo's

Treatment with cryo preserved embryos can take place in a natural or stimulated cycle. If you aren't receiving any hormonal stimulation, there is no reason to support the luteal phase. This generally also holds for treatments in which you receive only Ovitrelle®, except if the time between ovulation and the next menstruation is less than ten days. If it is, it is advisable to support the luteal phase. If you're being treated using a substitution schedule, we refer you to the information brochure on embryo transfers.

Which medication to use?

hCG

hCG is pregnancy hormone. As explained above, it has the same function as LH. HCG causes the fallopian tubes to continue the production of progesterone. It is administered by injection: once a day on the 4th, 6th and 8th day after your IVF/ICSI-related ova retrieval (or on the 2nd, 4th, 6th and 8th day after ovulation if you're undergoing an IUI or cryo treatment). A drawback of this method is that it has a higher risk than others of developing overstimulation in IVF or ICSI treatments, which is why this is not our preferred method. You can discuss whether this method is an option for you with your treating nurse or physician. If you choose to go through with hCG, it's important to realize that you'll be able to take a pregnancy test fifteen days after the ova retrieval or ovulation. The hCG (which is only administered until the 8th day after the ova retrieval/ovulation) will not influence the result. Your physician can prescribe Ovitrelle® (4 clicks of the standard applicator).

Progesterone

Administering progesterone can be done in several ways.

1. Injecting it into a muscle. These injections aren't available in the Netherlands.
2. Administering it vaginally. This is the most common method, used across the globe. In the Netherlands, there are three available kinds. The differences between these are explained below.
3. Through oral medication (tablets). Several recent scientific studies have shown that progesterone tablets offer the same likelihood of success as the two methods mentioned above.
4. Through a subcutaneous injection. Since nov. 2021 available in the Netherlands

Crinone® gel

This is a 90 mg progesterone gel, which you'll have to administer vaginally **once a day** (every 24 hours). Its main side effects are headaches, sleepiness, vaginal irritations and vaginal discharge.

Lutinus®

These are 100 mg progesterone tablets. You'll have to administer them vaginally **three times a day** (every 8 hours). Its main side effects are headaches and sleepiness.

Utrogestan®

These are 300 mg progesterone capsules. You'll have to administer them vaginally **two times a day** (every 12 hours). Its main side effects are vaginal discharge, headaches and sleepiness.

Duphaston®

These are 10mg tablets, which you'll have to take (orally) **three times a day**. The main side effects are headaches and nausea.

Prolutex®

These are 25 mg subcutaneous injections that you administer **once a day**. Its main side effects are irritation like pain, itching or swelling at the site. Furthermore headache and nausea.

Other

Decapeptyl®

This is a pre-filled syringe with 0.2cc fluids for subcutaneous use. It must be administered once, on the 6th day after the ova retrieval. We do not expect side effects due to its one-time use. Decapeptyl® is only to be used in combination with the above mentioned medication.

Please discuss your preference with your treating nurse or physician. If you do not have a preference, we will prescribe the preferred schedule at that time. This preferred schedule is subject to regular revision and potential change. This may result in your medication schedule changing between consecutive treatment cycles.

Starting progesterone

If you're undergoing an IUI or a treatment with a cryo preserved embryo and you and your treating physician have decided to support the luteal phase, we advise you to start progesterone the day after your ovulation.

If you're undergoing an IVF or ICSI treatment, we advise you to start progesterone the day after the egg retrieval.

Stopping progesterone

If you're undergoing an IUI or cryo treatment and you and your treating nurse or physician have decided to support the luteal phase, we advise you to stop progesterone fifteen days after ovulation. You'll be able to take a pregnancy test then too. The use of progesterone will not influence the result of the test.

If you're undergoing an IVF or ICSI treatment, we advise you to stop on the 15th day after the ova retrieval (by this time, you'll have used progesterone for 14 days). This advice is based on research showing that at that time, more than enough progesterone will be produced naturally if a pregnancy has developed.

Comparative studies have shown no difference in your chances of having a miscarriage or a successful pregnancy between stopping progesterone 14 days after the ova retrieval or much later. Stopping later is possible in consultation with your treating nurse or physician. **Please discuss the moment you'd prefer to stop progesterone with your treating physician.** If you have no preference for a certain moment, we will prescribe medication in accordance with the current preferred schedule at that time.

Costs of progesterone medication

At the moment there's a surcharge for almost all types of supporting medicine. This may differ between insurance companies, depending on your insurance policy.

Duphaston® is the cheapest option; there is no surcharge for this medication. Of the vaginal medications, Utrogestan® is the cheapest (on average, there is a surcharge of 0.29 euros a day).

Lutinus® is more expensive (on average, 0.99 euros a day), and

Crinone® is most expensive (on average, 2,65 euros a day).

Prolutex® is the most expensive, however at this moment there is no surcharge

These prices are indicative and might be changed by either authorities or insurance companies.

Your choice of medication should be based on which you deem more user friendly and the costs you're willing to make for that. There are no clear medical indications to consider when making this decision.

<http://zwangerwijzer.nl>

This information is meant for women who are being treated at the MCK Fertility Center. This information, together with any other information provided to you by a physician or nurse, is meant to help you make an educated choice. This information is subject to change. For any feedback regarding this information brochure, please let us know at info_mckinderwens@tfp-fertility.com