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Information Leaflet (Version 2, Apr 2024)

Ovulation Induction

Why do I need ovulation induction?

Some women find it difficult to fall pregnant because their ovaries are not releasing eggs (ovulating) every month. Ovulation is controlled by two hormones which are released from the pituitary gland at the base of the brain. These hormones, known as gonadotrophins, are called follicle stimulating hormone (FSH) and luteinising hormone (LH).

In women who cannot ovulate, there is often an imbalance of these hormones which prevent eggs from developing or being released. In some cases, these eggs become trapped in small follicles which are fluid-filled sacs in your ovaries containing eggs. These follicles can be seen using ultrasound and are often referred to as polycystic ovaries.

What is letrozole?

Letrozole belongs to a class of drugs known as aromatase inhibitors. These drugs lower oestrogen production resulting in better regulation of FSH and LH. By doing this, letrozole helps to develop the eggs and induce ovulation. Letrozole is licenced for the treatment of breast cancer, however, it is being increasingly used as treatment by fertility specialists to aid ovulation.

How effective is Letrozole?

Several studies have suggested that using letrozole to induce ovulation results in better rates of successful ovulation compared to clomiphene. Higher birth rates and lower rates of multiple pregnancy have also been seen compared to clomiphene. Letrozole has less adverse effect on womb lining thickness, something seen with the use of clomiphene. Overall, approximately 35-50% of women who use letrozole will become pregnant over 6 cycles.

How do I take Letrozole?

Letrozole is taken as an oral tablet from day 2-6 of your menstrual cycle (day 1 is the first full day of bleeding). The starting dose is usually 2.5 milligrams (mg) daily. If you do not have a regular natural period don’t worry, we can give you tablets to induce a bleed with which you can start treatment.

How will I be monitored?

To reduce the risk of multiple pregnancy, and to ensure your dose of letrozole is sufficient, we ask that you inform us when you commence your letrozole tablets. We will then arrange for you to come to clinic around day 8-12 of your cycle for a pelvic ultrasound to assess the lining of the womb and ovaries. You will need to have emptied your bladder for the scan.

Providing follicle recruitment has occurred and there are no more than 3 follicles (to reduce the risk of multiple pregnancy), we will then ask that you have regular intercourse on alternate days from the day of your scan. We will also arrange for you to have a day 21 progesterone blood test to confirm ovulation in the first cycle.

If follicle recruitment has not occurred, or the day 21 progesterone does not confirm ovulation on 2.5mg, then the dose will be doubled in the next cycle to 5mg (days 2-6) and the scan and day 21 progesterone repeated. This is usually sufficient for most women, but the maximum dose is 7.5mg.

If ovulation is confirmed on a day 21 progesterone blood test, but your period comes and the pregnancy test is negative, you should take the same dose of letrozole in the next cycle (days 2-6 again) and arrange a repeat ultrasound scan around days 8-12 of your cycle. The 'follicle tracking' scan is to reduce the risk of multiple pregnancy and ensure continued follicular development on the same dose. It also allows us to plan for a trigger injection if necessary.

If your ovulation test is negative and you don't go on to have a period, so that you can restart your tablets on the higher dose (despite a negative pregnancy test), please get in touch as we may need to give you some tablets to induce a bleed to restart the letrozole on the higher dose.

What if my period is late and my pregnancy test is positive?

If your period following taking letrozole is late, please do a pregnancy test. If the pregnancy test is positive, please contact us and ask for an early pregnancy ultrasound scan. This scan should be booked for around 6 weeks after you started the letrozole in the month you have become pregnant. This is to ensure the pregnancy is developing in the womb and healthy.

What if I am not pregnant?

If pregnancy has not occurred after 3-6 cycles of letrozole on an ovulatory dose, then please arrange for a clinic follow up appointment to discuss the next steps, such as tubal patency checking (HyCoSy) if not previously performed. A maximum of 12 cycles of letrozole is possible.

What are the risks & side effects?

The most important side effect of taking ovulation induction medication is multiple pregnancy (twins or higher multiples). The estimated incidence is 1 in 20 (6-8%) pregnancies on letrozole. Other side effects include: hot flushes, as well as occasional fatigue and dizziness, nausea, headaches, bloating, muscle aches and blurred vision. They can occur in approximately 1-2 out of 10 women and is limited to that cycle. There is a very rare (<1 in 1000) risk of ovarian hyperstimulation syndrome (OHSS) with all ovulation induction medication, but this usually occurs with IVF medication. This results in the ovaries becoming enlarged with multiple follicles, causing abdominal discomfort and fluid accumulation in the

abdomen. Very rarely women may need to be hospitalized and monitored. Less than 1% of women who take clomid will develop the condition. The risk of developing OHSS is much less with letrozole use.

Is there an alternative?

Ovulation induction with oral agents is generally very successful and well tolerated, however some patients may request or require alternative treatments. These will be discussed and can include:

- Clomiphene citrate (Clomid) tablets
- Gonadotrophin injections
- hCG trigger
- Ovarian drilling (PCOS only)
- Metformin tablets along with letrozole/ clomid

What if I have any questions or problems?

If you have any problems or questions during your treatment, please ring or email Mandy Banbury, secretary to Mr Dobson. If Mandy is not available, please contact the hospital switch board and ask for nurse specialist Liz Ross or a member of the outpatient team.

Mandy Banbury:

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