Ovulation Induction (OI) is a potential treatment option for couples who have had trouble conceiving for around 12 months due to problems associated with irregular periods or unpredictable ovulation.

Sometimes an imbalance in a woman’s reproductive hormones leads to irregular or absent menstrual cycles. This can make getting pregnant difficult.

Women who meet the criteria for the Ovulation Induction Program are often prescribed medications to help address this imbalance. These medications stimulate the growth of an ovarian follicle (egg) and assists ovulation.

While you are on the Program

Any medications you may need are available from the pharmacy on ground floor of the Women’s (in the shopping precinct) and from other pharmacies in the community. If you wish to purchase the medications from your local pharmacy, you will need to check if they stock them.

You will be monitored to assess your response to the medications. Monitoring may involve:

- a series of vaginal ultrasounds to assess ovarian follicle growth and thickness of the lining of the uterus (endometrium)
- using urinary Luteinizing Hormone (LH) detection kits to predict when ovulation occurs
- blood tests to check hormone levels.

When you become fertile, i.e., when you are ovulating, it is essential to have regular intercourse with your partner. If you have issues with having regular intercourse, please advise the OI nurse or fertility specialist as soon as possible. They will help you assess if ovulation induction is the best way for you to achieve a pregnancy.

Starting your OI cycle

Once you have been approved for an OI cycle and completed all relevant investigations and appointments, please telephone the OI Nurse on the first day of your period (full flow of bleed). This is called Day One. The OI nurse will help you plan your cycle, i.e., when to start taking your medication and the dose required. The OI nurse will also book you in for your first ultrasound appointment. Please do not start any medications until you have spoken to a nurse.

About the medications and tests

Clomiphene tablets

Clomiphene tablets are usually started early in your cycle (between day three and five) and are taken for five days. This medication stimulates the release of a naturally occurring hormone called FSH, which will cause ovarian follicles to grow.

Letrozole

Letrozole tablets are also started early in the cycle (between day three and five) and are taken for five days. Letrozole increases the production of FSH by suppressing the production of oestrogen. The production of FSH will cause ovarian follicles to grow.

FSH Injections – Gonal F® or Puregon®

FSH injections are a course of daily injections administered at the same time each day. Your first injection will be on day three of your cycle.

Clomiphene and FSH may cause your ovaries to grow more than one follicle. If this happens your doctor will have an in-depth discussion with you about the risk and complications of a multiple pregnancy. For some patients, it may not be medically safe to proceed and the cycle will be cancelled. Please see the information sheet Ovulation Induction - multiple pregnancies risk.
Vaginal ultrasound

Vaginal ultrasounds measure the thickness of the lining of the uterus (the endometrium) as well as the size and number of follicles on both ovaries. This scan can be done by one of the doctors or nurses at Reproductive Services Unit (RSU) depending on the type of cycle you are on.

You may need more than one vaginal scan before you are ready to be triggered for ovulation. The number of scans depends entirely on the time taken for your body to grow follicles. If you are on daily FSH injections, the dose of FSH may need to change depending on your scan results. Trigger injections (see below) are not always necessary, if you surge naturally, they are not required.

According to hospital policy you may be scanned by a male or female doctor/nurse. Reproductive Services Unit (RSU) will try and meet your request to have your scan with a female practitioner, but as per hospital policy this cannot always be guaranteed.

Urinary LH detection kits

After your first vaginal ultrasound you may be asked to start home urine LH tests. The test detects your body’s LH surge, which occurs 24-36 hours before ovulation. Home urine testing kits can be purchased through the clinic. Your urine needs to be tested daily.

Trigger injection – Human Chorionic Gonadotrophin – Pregnyl® 5000IU

Trigger injections cause ovulation to occur approximately 36 to 48 hours after administration. It is a one-off injection given in the same way as FSH injections. Some patients ‘surge’ spontaneously, (i.e., begin ovulating) so do not need this injection. Your OI nurse will advise you on what date it should be administered.

The trigger injection can be given in the clinic by a nurse or self-administered at home. The timing is not crucial so can be given at any time of the day. It is important to have regular intercourse once ovulation has been triggered.

Note: It is important that your partner and/or yourself are available during this part of the cycle. Please advise the nurses if you plan to be away or unavailable for any part of the cycle.

Luteal Phase Support (LPS)

The luteal phase is the part of a woman’s cycle that begins with ovulation and ends with a period. During the luteal phase the body produces more oestrogen and progesterone which work together to change the lining of the uterus and prepare it to accept the implantation of an embryo.

Your doctor may order additional medications to help keep the uterine lining thick and discourage an early period. This is referred to as Luteal Phase Support. The medication routinely used for LPS is Pregnyl® 1500IU. Two injections are required four and eight days after ovulation.

If you have used Clomiphene or letrozole tablets earlier in the cycle it is unlikely that LPS will be ordered. Your nurse will advise you if any medication is necessary and on what dates to administer the LPS injections.

Progesterone test

In your first OI cycle, you will need to have a blood test approximately 7-8 days after ovulation to measure your progesterone levels. Progesterone is an important hormone in the luteal phase, and the test gives your doctor information about whether your levels are sufficient and indicate whether ovulation has in fact occurred. If the test shows that your progesterone levels are lower than expected your doctor may need to adjust your medications in future cycles.

Pregnancy test

If you do not have a period within 19 days of ovulation, you need to have a pregnancy blood test. Please phone Reproductive Services Reception who will book an appointment for you. If you prefer to have your blood test done locally, we can arrange a request form for a local pathology provider.

What if I get my period?

If you unfortunately have a full flow normal period after an OI cycle, please phone the OI nurse to notify us of your Day One, a new cycle of OI will be planned for you.

If you do bleed but the period is not normal for you, please phone the OI nurses; we may organise a pregnancy test as your OI cycle may still have been successful.
Timing of intercourse

The ideal time for intercourse is before and up to the time of ovulation. You may start having intercourse any time after the first scan, unless multiple follicles are identified. Once a large follicle (>16mm) is identified you should have frequent intercourse (every day if possible).

Review

A review appointment should be made with a doctor in Reproductive Services if you have had no success after 3-4 ovulatory cycles.

Common medication side effects

Clomiphene tablets (Clomid and Serophene)
- Headache
- Depression
- Hot flushes
- Temporary visual disturbances like blurring and yellow discolouration

Letrozole
- Hot flushes
- Joint pain
- Fatigue
- Nausea

FSH (Gonal f® or Puregon®)
- Abdominal distension and discomfort
- Increased vaginal discharge
- Breast tenderness
- Enlarged, tender ovaries
- Bruising or irritation at injection site
- Irritability, tearfulness
- Headaches
- Nausea
- Fluid retention

HCG (Pregnyl® 5000IU and 1500IU)
- Nausea
- Vomiting
- Weight gain
- Shortness of breath
- Diarrhoea
- Painful breasts
- Bloating
- Mild stomach pain

Contact information at the Women’s Reproductive Services Unit
Level 2, Royal Women’s Hospital
Reception: (03) 8345 3200
OI Nurse: (03) 8345 3230 – Monday to Friday 7:30am to 3:30pm
Email: oinurse@thewomens.org.au