Methotrexate for the Medical Management of Ectopic Pregnancy

Welcome to the National Women’s Gynaecology Service
Tena Koe Noho Ora Mai

Introduction
This leaflet provides information about the medical (non-surgical) treatment of Ectopic pregnancy. Please ask staff if you have any questions about the information in this leaflet.

When can Methotrexate be used?
Women with an unruptured Ectopic pregnancy who meet particular criteria may be considered for medical management with the drug Methotrexate.

Methotrexate is a chemotherapy drug, which works on rapidly dividing cells such as pregnancy tissue to ‘dissolve away’ the ectopic pregnancy.

The criteria for using Methotrexate include women with:
- a low pregnancy hormone level (blood tests show < 5000 IU/L) and
- An Ectopic pregnancy that is small in size.

Methotrexate can prevent further growth of the Ectopic pregnancy tissue and can be used without surgery and also for persistent ectopic pregnancy tissue following surgery.

For most women, one dose of Methotrexate is sufficient to dissolve the pregnancy tissue and prevent further growth. Some women may need a second dose depending on the decline of the pregnancy hormone levels during follow up.

Although Methotrexate can be successfully used as a first-line treatment for most women who meet the criteria stated above, it will not work for approximately 10-12% of women who are given the drug. These women will need to have their Ectopic pregnancy removed by surgery.

Tests and procedures
You will be provided with a full explanation of why tests are recommended. No tests or procedures will be carried out without your consent.
Tests and procedures required prior to administration of Methotrexate:
- Blood tests.
- An ultrasound scan to confirm there is an Ectopic pregnancy.

Blood tests
Methotrexate is broken down in the liver and excreted by the kidneys in the urine. Women who receive this medication need to have blood tests to check their kidney and liver function is normal. Blood tests will be done on the day of administration, then on the 4th and 7th days following administration. If all is well, blood tests will only be required weekly until the pregnancy hormone level returns to normal.

Ultrasound scans
An ultrasound scan is carried out to assess the site and size of the Ectopic pregnancy. The decision about whether surgical or medical treatment is most appropriate will depend on the findings of the scan and blood tests. In some situations the scan result may be inconclusive and a second or even third scan may be needed to confirm an Ectopic pregnancy before treatment can begin. Tests and scans can occasionally need to be repeated a number of times to get the most accurate diagnosis.

Administration of Methotrexate:
Staff will provide you, your partner/support person or family members with all the information you need to make an informed choice about Methotrexate.

You will be asked to sign a written consent form. Please ask any questions you have about the treatment.

You are required to see the Pregnancy Loss Counsellor for pre-decision counselling prior to administration of Methotrexate.

The drug is administered as a deep intramuscular (IM) injection by a doctor or nurse with a certificate to administer the drug. The dose is very carefully calculated depending on your height and weight and therefore, the dose will differ between women.

Because Methotrexate is a cytotoxic drug used in chemotherapy treatment, protective attire (gloves, mask, gown, and goggles) will be worn by the person who administers the drug. This is to protect the doctor or the nurse administering the drug from accidental exposure.

Effects of Methotrexate:
Discomfort or pain
It is normal to experience discomfort in your abdomen. It is extremely important to seek medical advice if there is pain that is unrelieved by Panadol as this could be a sign that your condition is deteriorating.
Vaginal bleeding
Vaginal bleeding should be expected as a result of the breaking down of the lining of the womb and the pregnancy tissue. Please let the doctor or nurse know if your bleeding is heavier than a normal period.

Side effects of Methotrexate

Let the doctor or nurse caring for you know if you have any side effects. The most common effects include:

Mouth ulcers:
These can develop because Methotrexate acts on soft tissue. Side effects can be prevented by regular thorough oral hygiene i.e. brushing the teeth and using mouthwashes. Mouth ulcers are most likely to develop in the first 1-2 days after the injection.

Sensitivity of the skin to sunlight:
Exposure to sunlight should be minimised, as the skin will become sensitive to sunlight due to Methotrexate. Avoid excessive exposure and use sun block.

Hair loss:
This is extremely rare and caused because Methotrexate works on fast dividing cells. Hair is a form of fast dividing cells. If this occurs it will be mild and will only be noticeable by you.

Things to avoid whilst having Methotrexate treatment:

Alcohol
Alcohol must be avoided until the pregnancy hormone has returned to a negative level.

Steroids and anti-inflammatory drugs
Methotrexate affects the lining of the stomach and may cause bleeding; therefore it is important to avoid taking drugs that have similar effect. Steroids and anti-inflammatory drugs should be avoided for this reason. Examples of these drugs include aspirin, voltaren, ibuprofen, ponstan and tenoxicam.

Sexual intercourse and pregnancy
Pregnancy should be avoided for 3 months following an Ectopic pregnancy treated with Methotrexate. We recommend you use condoms or other contraception to avoid becoming pregnant during this time. When/if you become pregnant again, you should see a doctor early in pregnancy, so an early ultrasound scan can be organised.

Folic acid
It is important to avoid using any form of folic acid/folate including vitamins containing folic acid because these prevent Methotrexate from working to achieve the desired effect.

Breast feeding
It is usually not possible to breastfeed during treatment or for 3 months following treatment because Methotrexate can be passed in the breast milk to your baby. If you are breastfeeding you will need to express what breast milk you can prior to taking
Methotrexate so this can be given to your baby. To maintain your milk supply so you can resume breastfeeding you will need to express and discard the milk until you are advised it is safe to give to your baby.

**Nausea and vomiting:**
This is a relatively rare side effect and may last for 1-2 days. Drink plenty of water to prevent becoming dehydrated and if necessary, seek the advice of your doctor or chemist.

**Changes to liver and kidney function:**
Liver and kidney function can be affected, because Methotrexate breaks down in the liver and is excreted via the kidneys. Regular blood tests are carried out to check your liver and kidney function along with checks of your pregnancy hormone levels.

**Additional information**
We recommend you use sanitary pads instead of tampons if you are bleeding as this will help reduce the risk of infection. It is important to double flush the toilet after use to clear the toilet of any Methotrexate excreted in the urine so it will not affect others using the toilet. Well wrap sanitary pads before disposing in the rubbish.

**Follow up**
Initial follow-up blood tests are required on the 4th and 7th day following Methotrexate administration to check your liver and kidney function and to ensure there has been a drop in the pregnancy hormone levels. Your blood will also be tested to see if there is any sign of infection. Some women may also require a repeat ultrasound scan on the 7th day. Following this, weekly blood tests will continue until your pregnancy hormone levels return to non-pregnancy levels. This can take several weeks.

You need to return to the hospital if you:
- get a temperature over 37.5° or experience fever or chills.
- have severe abdominal pain or heavy bleeding.

Any questions or problems phone 307 4949 Extn: 25900

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