

# Medical Management of Ectopic Pregnancy or Pregnancy of Unknown Location Using Methotrexate

Gynaecology

## Introduction

Your doctor is suspecting, or has diagnosed you with, an ectopic pregnancy. They have assessed you and decided that the best course of treatment is what is called 'medical management', using a drug called methotrexate. We understand this may be a very distressing time and we fully appreciate that it can be difficult to take in all the facts when you are anxious, especially in the hospital environment. This leaflet aims to help you understand more about medical management of ectopic pregnancy or pregnancy of unknown location (PUL) using the drug methotrexate.

## Why have I been offered this treatment?

Methotrexate has been proven to be very effective in treating the following conditions:

### **Ectopic pregnancy:**

If your ectopic pregnancy (pregnancy outside of the womb; a separate detailed leaflet is available explaining ectopic pregnancy) is small, your hormone levels are low, you are pain-free and feeling well, then methotrexate may be offered as an alternative to you undergoing surgery.

### **Pregnancy of unknown location (PUL):**

After investigations, including blood tests and most probably an ultrasound scan, it is suspected that your pregnancy is sadly unlikely to develop normally. Unfortunately, because of the inconclusive nature of some of the investigations and your clinical history, we are unable to tell you if the pregnancy is in your womb or an ectopic pregnancy. This leads us to conclude that the location of your pregnancy is 'unknown'.

On the basis of your tests, we think your pregnancy is unlikely to resolve (miscarry) spontaneously and that some form of treatment is required and we do think that you are likely to respond to methotrexate.

## How does methotrexate work?

Methotrexate is a medication that has been used for many years in the treatment of a variety of conditions, such as rheumatoid arthritis, inflammatory bowel disease and certain cancers. In the case of an ectopic pregnancy or PUL, it stops the embryonic cells from dividing and multiplying and is a non-surgical way of ending a pregnancy in its early stages. Within a few days or weeks of

**The prevention of infection is a major priority in all healthcare and everyone has a part to play.**

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

receiving an injection of methotrexate, the pregnancy ends through an experience similar to an early miscarriage.

This drug has been studied for its use in ectopic pregnancy with many patients and found to be safe and very effective. Therefore, although the manufacturer's license for this drug does not specifically cover its use in ectopic pregnancy, your doctor is happy to recommend its use.

## What happens about gaining my consent?

We must seek your consent for any procedure or treatment beforehand. Your doctor will explain the risks, benefits and alternatives where relevant before they ask for your consent. If you are unsure about any aspect of the procedure or treatment proposed please do not hesitate to ask for more information.

## What are the benefits of methotrexate?

- It has a good success rate (approximately 90%) for treating small ectopic pregnancies
- You avoid having an operation and the associated risks of having a general anaesthetic
- You do not have to stay in hospital.

## What are the risks of this treatment?

- It can take a few weeks to complete the treatment
- On average, women require only one treatment, but in approximately 15% of women a further injection may be necessary
- There is a chance, however, that the treatment may not work and the ectopic pregnancy will continue to develop. If this happens there is a risk that the tube could rupture and surgery will be needed
- Approximately 7% of women will need surgery after treatment with methotrexate
- You are advised to wait at least 3 months before trying for another pregnancy. This is because methotrexate can be harmful for a baby if you become pregnant during this time.

## Is the treatment suitable for everyone?

You will not be able to have this treatment if you have any of the following:

- Very high pregnancy hormone (hCG) levels
- Active infection
- Severe anaemia or shortage of any other blood cells
- Liver or kidney problems
- HIV/AIDS or immunodeficiency
- Peptic ulcer disease.

## What are the side-effects?

These are uncommon for the small single dose you will usually receive (sometimes, a second dose is necessary).

Side-effects include:

- Colicky abdominal pain. Up to 3 in 4 women experience this problem.
- Sore mouth.
- Sensitivity to sunlight.
- Difficulty with swallowing, sickness and diarrhoea from irritation of the bowel.
- Rarely, this drug can affect the body's ability to make blood cells leading to anaemia.
- Rarely, in 1-3% of patients, temporary hair loss may be experienced.

## What are the alternatives to this procedure?

Ectopic pregnancies and PUL's can also be managed by surgery. A laparoscopy (camera into your belly button) is used to detect and remove the pregnancy. A leaflet is available for this procedure.

Alternatively, in some cases, expectant management can be used whereby your blood pregnancy hormone levels are carefully monitored to see if the pregnancy ends naturally without the need for surgery or medication.

The choice about which treatment is best for you will be made together with your doctor. This will be based on the risks and benefits of the treatment and individual circumstances.

## What will happen during the procedure?

A blood sample will be taken to measure your blood count, pregnancy hormone levels and kidney and liver function. The results of these tests will be made available before you receive the medicine. Methotrexate is usually given by the chemotherapy nurses on the Deanesly Unit. It is given as a single injection into the buttock. It may sting for a while where the injection was given. You will need to wait approximately 30 minutes following your injection before you can leave. You will be given further appointments for follow-up blood tests.

## What follow-up is needed?

This varies for every woman, but you will need to attend the hospital on Day 4 and Day 7 in the first week and then weekly until the pregnancy hormone level (hCG) has returned to a normal non-pregnant level. This usually takes between 2-8 weeks. It is important that you keep these follow-up appointments.

## Will I experience any pain?

You might have some lower pelvic pain or backache at any time during the course of the treatment, although most patients usually find they have some pain around Day 3 or 4. If required, and you are able and not allergic, you can take paracetamol.

It is important to contact the Early Pregnancy Assessment Unit (EPAU) or attend Emergency Department (ED) if:

- You experience any increase in pain
- You experience any pain somewhere you have not previously, for example, shoulder tip pain or rectal pain (pain in your bottom)
- You feel faint or dizzy
- Paracetamol is not sufficient for any pain you are experiencing.

These could be a sign of a ruptured pregnancy.

## Will I experience any vaginal bleeding?

Vaginal bleeding can vary from dark brown spotting to heavier bright red bleeding. If you are concerned that the bleeding is excessive (changing soaked or heavily soiled pads every hour) please contact us. We realise it can be frightening being at home during a course of treatment. Please do not hesitate to contact EPAU if you are concerned about your pain or bleeding.

## Is there anything else I should know?

It is important you avoid the following for the duration of the treatment:

- Alcohol
- Smoking
- Vitamin preparations containing folic acid
- Non-steroidal anti-inflammatory drugs (NSAIDs) such as Aspirin, Ibuprofen or Diclofenac. (Regular Paracetamol is safe to use)
- Direct exposure to sun or sunlamps

- Heavy physical work or exercise
- Avoid sexual intercourse, as this may cause the ectopic pregnancy to rupture
- Avoid pregnancy for at least 3 months after the injection, as methotrexate could potentially harm a baby conceived during this period. We advise you to use condoms during this time. Further contraceptive advice can be sought from your doctor or family planning clinic
- Herbal remedies.

We would also advise an adequate fluid intake (1.5 litres per day) to avoid dehydration.

## When can I expect a period?

Every woman is different regarding how soon after treatment for an ectopic pregnancy or PUL they have their next period. However sometime in the next four to six weeks is considered common. Often this period may be different than usual (heavier or lighter). This is nothing to be concerned about unless the bleeding is very heavy; in which case consult your GP or EPAU directly.

## What about future pregnancies?

Studies have shown that there is a 7 in 10 (70%) chance of a normal pregnancy in the future irrespective of whether women are treated with methotrexate or by surgery. There is, however, a 1 in 10 (10%) chance that you may have a further ectopic pregnancy in the future.

If you become pregnant in the future and experience any symptoms; increased abdominal pain, shoulder tip pain, dizziness, then we advise you contact EPAU directly, or out of hours if necessary attend Emergency Department (ED).

If you are otherwise well, your GP may still arrange for you to have an early ultrasound scan at approximately six weeks to ensure the pregnancy is in the uterus.

## Useful contact details:

- **Early Pregnancy Assessment Unit / Gynae Assessment Unit**  
01902 694606  
(Monday to Friday 9am - 5pm)
- **Bereavement Nurse**  
07917 398313  
(Monday to Friday 9am - 5pm)
- **The Miscarriage Association**  
Helpline: 01924 200799  
[www.miscarriageassociation.org.uk](http://www.miscarriageassociation.org.uk)
- **The Ectopic Pregnancy Trust**  
Helpline: 020 7733 2653  
[www.ectopic.org.uk](http://www.ectopic.org.uk)

## References

RCOG - Green-top Guideline No. 21

RCOG/AEPU Joint Guideline | November 2016

NICE guideline [NG126] Ectopic pregnancy and miscarriage: diagnosis and initial management.  
Published date: 17 April 2019

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਅਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。