Medical management of ectopic pregnancy
Gynaecology Department
Introduction

We are extremely sorry that you are having an ectopic pregnancy (pregnancy developing outside the womb). In this leaflet we will give you some information regarding ectopic pregnancy and the treatment we offer based on best available evidence. We know that this is a sad and distressing time for you. If you have any questions please don’t hesitate to speak to a member of the team.

What is an ectopic pregnancy?

A pregnancy that develops outside the womb is called ectopic pregnancy. One in 90 pregnancies (just over 1 %) is an ectopic pregnancy (NICE 2012). It can develop in the fallopian tube (tube that carries the egg from the ovaries to the uterus) and rarely in the cervix, ovary or the abdominal cavity. An ectopic pregnancy can be life-threatening. If not treated early enough it ruptures from the area where it is growing and causes severe bleeding and pain.

How can an ectopic pregnancy be treated?

Ectopic pregnancy can be treated in the following ways depending on your individual circumstances.

1. Expectant management (wait and see): Ectopic pregnancies sometimes end on their own – similar to a miscarriage.

2. Surgical treatment: An operation to remove the ectopic pregnancy. This will involve a general anaesthetic

3. Medical treatment: A drug (methotrexate) is given as an injection – this prevents the ectopic pregnancy from growing and the ectopic pregnancy gradually disappears.
Medical treatment will be offered to you:

- If you are in good health and your condition is stable with no severe pain or bleeding into your tummy
- Your pregnancy hormone (ß HCG) is low
- The size of your ectopic is less than 3.5cm with no fetal heart beat inside it
- If you will be able to attend follow up appointments

Your Doctor has suggested that your ectopic pregnancy is suitable for treatment with methotrexate injection. This leaflet provides you with information about its use.

What is Methotrexate?

Methotrexate is a medication which stops cells from dividing. It has been used to treat some forms of cancer, psoriasis and rheumatoid arthritis for many years. The use of methotrexate for early ectopic pregnancies has been studied in many women around the world and it is now the recommended treatment option for ectopic pregnancies. It is used to treat ectopic pregnancy because it works by destroying fast growing cells (in your case – prevents the ectopic pregnancy from growing) and the ectopic pregnancy gradually disappears.

How effective is Methotrexate?

Most women only need one injection of methotrexate for treatment. However, 15 in 100 women (15%) need to have a second injection of methotrexate. If your pregnancy is beyond the very early stages or the ßhCG level is high, methotrexate is less likely to succeed. Seven in 100 women (7%) will need surgery even after medical treatment.
Are there any specific conditions that one should not take methotrexate?

Treatment of ectopic pregnancy with methotrexate is not appropriate if you suffer from any of the following conditions:

- An on-going infection ((tuberculosis, HIV/AIDS or other immunodeficiency syndromes)
- Severe anaemia or shortage of other blood cells
- Kidney problems
- Liver problems
- Ongoing lung disease
- Peptic ulcer or ulcerative colitis
- Breastfeeding
- Allergic reaction to methotrexate or to any of its excipients

Therefore, before commencing treatment, you will have some blood tests done to check for anaemia, kidney and liver problems.

What are the advantages of methotrexate treatment over surgery?

Traditionally, all women with ectopic pregnancies had to undergo surgery which is in the form of a “keyhole” operation called a laparoscopy.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td>Definite confirmation of diagnosis</td>
<td>Risks of general anaesthetic</td>
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<tr>
<td>Immediate removal of problem</td>
<td>Risks of surgical procedure</td>
</tr>
<tr>
<td>Ability to assess pelvis, including the other fallopian tube</td>
<td>Removal of tube containing ectopic pregnancy</td>
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<tr>
<td>No prolonged follow up</td>
<td>Hospital stay</td>
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<tr>
<td>No delay to next pregnancy</td>
<td>Time off work to recover</td>
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### Methotrexate

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoids risks of general anaesthetic</td>
<td>Side effects of drug (see below)</td>
</tr>
<tr>
<td>Avoids risks of surgery</td>
<td>Need for follow up</td>
</tr>
<tr>
<td>Tube with ectopic pregnancy remains in place</td>
<td>Tube with ectopic pregnancy may still rupture</td>
</tr>
<tr>
<td>Outpatient treatment</td>
<td>May need surgery at later date if treatment does not work</td>
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<tr>
<td></td>
<td>Cannot get pregnant for 3 months after treatment complete</td>
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<tr>
<td></td>
<td>No immediate information on pelvis and other tube</td>
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### What is the process?

You will be weighed and your height measured because the dose is calculated with reference to your height and weight. Blood tests will be taken to check your liver and kidney function and to ensure that you are not anaemic prior to commencing the treatment.

### How is Methotrexate given?

The methotrexate is given by injection into the muscle on the hip or arm.

### What care will I need after the injection?

You will be able to go home after you have had the injection. The EPAU staff nurses will arrange follow up appointments in EPAU to monitor that your pregnancy hormone levels are falling appropriately through a series of blood tests on day 4, day 7 and thereafter weekly until your levels are back to normal. Most women only need one injection but in 15% of the cases a further injection may be required if your hormone levels are not decreasing from day 7 after treatment.
Are there any side effects?

It is common to experience some lower abdominal pain over the first few days after the injection but this should resolve with paracetamol or similar pain relief. You may feel tired and need to take time off work. It is possible that you may also feel nauseous, develop indigestion, a sore mouth or have some diarrhoea and vomiting. You may also develop a headache or experience tiredness or drowsiness. This may influence your ability to drive and operate machinery. Very rarely, the treatment leads to changes in your kidney or liver function which resolves once medication is stopped. Other very rare side effects include changes in blood count, visual disturbances, muscle weakness, pins and needles in the hands and feet, metallic taste, convulsions, paralysis, problems with the heart or lungs, low blood pressure, blood clots or changes in your kidney or liver function.

Occasionally, women may experience some hair thinning which improves when the methotrexate treatment is completed. Please read the patient information leaflet supplied with the methotrexate for a complete list of potential side effects.

Treatment of ectopic pregnancy with methotrexate is not known to affect the capacity of your ovaries to produce eggs.

What happens after treatment?

This method has been developed to avoid surgery. However, it does require careful monitoring and follow-up. This means that you will have to attend the hospital regularly for blood tests until the tests are negative. This can take several weeks. A nurse or doctor in the Early Pregnancy Team will test your hCG hormone levels prior to commencement of your treatment. You will need to return to the Early Pregnancy Unit, four and seven days after you have had the injection to have more blood tests. The hCG level often rises on day 4 but your doctors are looking to see a drop in your hCG value of at least 15% between days 4 and 7. It is usual to begin to experience vaginal bleeding a few days after the injection. This bleeding can last between a few days and up to 6 weeks. It is also usual to have some discomfort and pain initially. If the pain persists for more than 10 days, is severe and is not relieved by paracetemol or you feel faint, you will need to go to the hospital immediately, as this may be a sign that the tube has ruptured.
It is important that you use adequate contraception for three months after treatment is completed. If you fall pregnant within this time, it is likely that you will have a miscarriage.

Avoid sexual intercourse until the treatment is complete.

Avoid vitamin preparations containing folic acid until your treatment is complete.

Avoid direct sunlight until your treatment is complete.

Do not use aspirin or ibuprofen for a week after treatment. Paracetamol is safe. Ask your pharmacist if you have any doubts.

Keep well hydrated.

Avoid alcohol until you have had your last injection and feel back to your normal physical self.

Who can I contact for further information?

If they have any questions or concerns, please contact the Early Pregnancy Assessment Unit on 01483 571122 ext. 2321. EPAU is open working Monday to Friday 9am to 5pm.

For general advice during out of hours or over the weekend please contact the gynaecological ward sister on Compton ward on 01483 571122 ext 4941 or 6372.

In an emergency or if you are experiencing the following severe abdominal pain, feeling faint, collapse or have heavy vaginal bleeding please contact NHS 111 or dial 999 or go to your nearest Accident and Emergency department.
You may find further useful information from the following charities:

**Ectopic Pregnancy Trust**
Weekdays
10am–4pm
**Helpline:** 0207 7332653
**Email:** www.ectopic.org.uk

**The Miscarriage Association**
17 Wentworth Terrace
Wakefield WF1 3QW
**Helpline:** 01924 200799
**Email:** info@miscarriageassociation.org.uk

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**References**

1. **National Institute for Clinical Excellence (NICE) (2012)**
   Ectopic pregnancy and miscarriage: Diagnosis and initial management in early pregnancy of ectopic pregnancy and miscarriage (CG145). NHS England

   Diagnosis and management of Ectopic pregnancy. Elson CJ et al., on behalf of the Royal College of Obstetricians and Gynaecologists. Diagnosis and management of ectopic pregnancy. BJOG 2016;123:e15–e55.
Contact details

Early Pregnancy Assessment Unit

Obstetrics & Gynaecology Department
Egerton Road, Guildford, Surrey, GU2 7XX

Telephone: 01483 571122 ext 2321
Fax: 01483 402754

PALS and Advocacy contact details

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757
Email: rsc-tr.pals@nhs.net
Opening hours: 9.00am–3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.