Buckinghamshire Healthcare
NHS Trust

Ectopic Pregnancy

This leaflet deals with the more common questions about ectopic pregnancy.

What is an ectopic pregnancy?

An ectopic pregnancy is a common condition, in the UK it can affect 1 in 90 pregnancies. In a normal pregnancy the egg is fertilised by sperm in the fallopian tube and then the fertilised egg implants in the cavity of the uterus (womb). If your fertilised egg does not implant in the uterus it is known as an ectopic pregnancy. It needs to be diagnosed and treated quickly as it can be life threatening.

The most common place for an ectopic pregnancy is the fallopian tube (97%) however, in rare cases, your egg may be implanted elsewhere. Some of these sites include:

- **Interstitial** (2% of ectopic pregnancies) – this is the area which is the connection between the uterine cavity (cavity of the womb) and the fallopian tube
- **Abdominal** (1.4%)
- **Cervical** (0.2%) – in the cervix (neck of the womb)
- **Ovarian** (0.2%) – in or on the ovary
- **Caesarean section scar** - the pregnancy is implanted on or within the caesarean section scar
- **Heterotopic** – a twin pregnancy where one is correctly placed in the womb, but one is ectopic.

Unfortunately, it is **not** possible to move your ectopic pregnancy to the correct location within the cavity of your womb.

As your ectopic pregnancy grows it will stretch the thin wall of your fallopian tubes causing you abdominal pain and vaginal bleeding. Your fallopian tube is not large enough to accommodate a growing pregnancy and if left untreated the tube may eventually burst (rupture) causing severe internal bleeding.

Why does it happen?

Often the reason for an ectopic pregnancy will never be determined. However, there are some known causes and risk factors:

- A **previous ectopic pregnancy**.
- **Damage to your fallopian tubes,** which can be a result of a previous pelvic infection, or previous surgery to your fallopian tubes including a sterilisation.
- **Fertility treatment**: particularly in vitro fertilisation (IVF) or intracytoplasmic sperm injection (ICSI).
- **Contraception,** if you became pregnant whilst using the mini pill or a copper contraceptive coil.
- **The Morning After Pill**: It is possible to become pregnant in the same cycle after trying to prevent pregnancy with emergency oral contraception.
- **Abdominal Surgery**: such as caesarean section or appendicectomy.

- **Endometriosis**: cells like the ones lining the womb grow elsewhere in the body; they react to the menstrual cycle and bleed despite there being no way for the blood to leave the body. This can cause damage to the fallopian tubes.
- **Cigarette Smoking**: it has been shown that smokers have increased levels of a protein in their fallopian tubes which can slow down movement of the fertilised egg as it makes its way towards the cavity of the womb to implant.
- **Maternal age**: the risk is higher amongst women over 35 years.

What symptoms should you look out for?
The symptoms of ectopic pregnancy can vary, some women may have no symptoms, others may have mild symptoms whilst others will have severe symptoms.

These are:

- Increasing abdominal pain (either one-sided or severe abdominal cramps) not responding to pain relief such as paracetamol or codeine. This can be a sudden onset of pain or come on gradually.
- Vaginal bleeding – this could be spotting or heavy bleeding which may seem different from a normal period. The blood can also seem darker.
- Shoulder-tip pain caused by internal bleeding irritating the diaphragm as you breathe in and out. It is normally worse on lying down.
- Bowel or bladder problems (diarrhoea +/- vomiting, pain on opening bowels or passing urine).
- Light-headedness/dizzy spells.
- Collapse – this may be the first sign and is an emergency which needs immediate attention.

If you have any of these symptoms, come to A&E as soon as possible.

How is an Ectopic pregnancy diagnosed?
Ectopic pregnancy can be difficult to diagnose since symptoms can be mistaken for irritable bowel syndrome, gastro-enteritis, miscarriage or appendicitis. Diagnosis is made using one or some/all of the following:

- **Clinical history and examination** – you will be asked your history to understand your symptoms and to look for risk factors for having an ectopic pregnancy.
- **Pregnancy test** – we will check to see if your urine pregnancy test is positive. If your test result is negative, then it is unlikely that your symptoms are related to an ectopic pregnancy
- **Ultrasound scan** – a vaginal scan, where the ultrasound probe is inserted into your vagina, is the most accurate way of diagnosing the appearance and location of a pregnancy at an early stage. If, however, you are in the very early stages of pregnancy then it may be difficult to locate the pregnancy and further management will be discussed with you. This may include a blood test to measure pregnancy hormones and could also include a repeat ultrasound scan a few days later.
- **A blood test** measuring the levels of the pregnancy hormone beta human chorionic gonadatrophin βhCG (the hormone produced by the placenta) and the Progesterone hormone (the hormone which gives an indication of the health of the pregnancy

regardless of location) can be used to help make the diagnosis and determine treatment options. The βhCG level may well be repeated 48 hours later. This helps the Early Pregnancy Unit (EPU) team to assess the trend of βhCG level.

It may take a few days before a decision can be made, as other possibilities are that your pregnancy may be too early to detect on ultrasound scan or may be a very early miscarriage. If so, it may be called a pregnancy of unknown location (PUL).

The pregnancy hormone βhCG in a normal early pregnancy doubles every two days. After a miscarriage the levels drop quite quickly. In a failing pregnancy or an ectopic pregnancy, the levels are often lower and may plateau or rise slowly. Blood tests alone cannot determine where a pregnancy is developing, however, they can help monitor patients who may have a growing ectopic pregnancy.

- **Surgery.** If the diagnosis is not clear or you are complaining of significant pain, a laparoscopy may be performed under general anaesthetic. A small cut is made in your abdomen and a tiny camera is used to look at your fallopian tubes and internal organs. A tubal pregnancy will be treated at the same time; on rare occasions no ectopic pregnancy may be seen. This might be because there is a very early pregnancy developing in the womb or that the ectopic is too small to see at laparoscopy.

What are the different methods of treatment?

Once an ectopic pregnancy is diagnosed it can be managed conservatively (wait and see), medically or surgically. The treatment best suited for you will depend on the scan findings, physical symptoms, levels of a hormone called βhCG and your preferred choice.

Conservative management (watchful waiting)

This involves close monitoring by medical professionals instead of immediate treatment. In some cases, the ectopic pregnancy dies early and is absorbed. These pregnancies resolve without treatment and the pregnancy often dies in a way like miscarriage. This can be confirmed by falling pregnancy hormone (βhCG) levels and no active treatment is required. This treatment will only be offered to you if your hormone levels are not too high, you are clinically stable, and your ultrasound scan does not show any evidence of internal bleeding or an ectopic pregnancy that is too large. Generally, this treatment is only offered to women with an ectopic pregnancy in the fallopian tubes.

You will need to have repeated blood tests to ensure that your βhCG levels are dropping, initially 48 hours apart and then at regular intervals, until the levels have dropped to below 10 units/L. How long it takes for your hormone levels to drop can vary considerably and can take between two weeks and three months; most women's βhCG levels reach a non-pregnant state, less than 10IU/l, within four weeks. If the βhCG levels are consistently dropping you can continue to be managed expectantly. You may, however, require alternative treatment if your symptoms worsen or the βhCG levels plateau or rise.

Medical treatment

In early ectopic pregnancies an injection of methotrexate can be used to stop the cells of the pregnancy growing in the fallopian tube. This form of medical treatment is an alternative to surgical treatment if certain criteria are fulfilled e.g when the βhCG levels are below 5000

units/L (the risk of rupture is higher in pregnancies with levels greater than this) and small size of ectopic pregnancies.

Your general health will be assessed for suitability for this treatment since there are some health conditions that may make this treatment unsuitable, particularly if you have an illness involving your liver or kidneys.

The treatment is given by means of a single injection into the muscle. The dose is calculated according to your height and weight. Before the being given the injection, blood tests are done to check liver and kidney function and to ensure you are not anaemic.

Close follow-up with further scans and blood tests will be necessary. As with expectant management you will have regular blood tests to monitor βhCG levels until they drop to a normal level (below 10 units/L).

You will be advised to avoid pregnancy for 3 months from the time of injection. There are some side effects with methotrexate. If you choose to have this treatment, they will be explained to you in detail.

Surgical treatment

Surgery may be your only option if your βhCG hormone level is high; if significant internal bleeding is seen on your scan; or you become unwell, and your health becomes at more immediate risk. Surgery may also be performed if expectant or medical management have failed.

In most cases this is done by laparoscopy under general anaesthetic and usually takes approximately 30 – 60 minutes.

- A small cut is made in your abdomen below the umbilicus (belly button) and a tiny camera is used to look at your fallopian tubes and internal organs.
- 2-3 further small incisions may be necessary if an ectopic pregnancy is seen to allow access for instruments to be used to remove it.
- The operation will usually involve removal of the fallopian tube containing the ectopic pregnancy, this is known in medical terms as a salpingectomy. This is the recommended procedure if the other fallopian tube appears normal as there is a concern that the affected tube is damaged,

  or
- Removal of the pregnancy only by making a small cut in the fallopian tube, taking away the pregnancy tissue and leaving the affected tube intact. This is known as a salpingotomy and is usually only performed if the other fallopian tube is absent, for example from previous surgery or does not appear normal at the time of surgery. The reason for doing this is to try and preserve fertility.
- Your ovaries are **not** removed.

What are the benefits of salpingectomy (removal of the tube)?

The tube containing an ectopic pregnancy is removed to prevent severe internal bleeding. In future pregnancies the risk of further ectopic is reduced – compared to when the tube is not removed. If the other tube looks healthy future pregnancy rates are the same whether the tube is removed or saved.

What are the risks/benefits of salpingotomy (removal of the pregnancy only)?

A small amount of pregnancy tissue may remain in the tube requiring further treatment (e.g. with methotrexate). The chance of this happening is between 5–10%. Generally, this procedure will only be performed if the other fallopian tube looks abnormal. You will then be followed up until your hormone levels drop to a non-pregnant level.

How long will you stay in hospital?

This will vary from 1–4 days depending on the type of surgery, but most patients can expect to be discharged home within 24 hours of their operation. Stitches are usually dissolvable and should dissolve completely after 7–10 days.

Following methotrexate injection, you will need to stay for 1–2 hours for observation.

When should you return to work or resume my normal activities?

Complete recovery will vary from 2–6 weeks depending on the type of surgery.

It is normal to experience pain for 1–2 weeks following surgery; it is advisable to take regular pain relief such as paracetamol, codeine, or ibuprofen to aid your recovery. If you had a laparoscopy, you are likely to feel bloated for the first week with pain similar to trapped wind. This is due to the gas used during surgery to assist the surgeon in visualising the abdomen. You would feel tired, particularly if you had significant bleeding during the procedure.

You should avoid heavy lifting or vigorous housework for around 2 weeks and only undertake gentle exercise such as walking. Once the wound sites have healed you can resume gentle swimming.

After keyhole surgery most women do not return to work for at least 2 weeks to enable their body and emotions to heal; after major abdominal surgery, this time frame increases to approximately 6 weeks.

If your blood group is Rhesus negative

An injection of Anti-D will be given after your surgery. This is given to all pregnant women who are rhesus negative to protect future pregnancies. If you would like a more detailed explanation of the benefits of anti-D we would be happy to provide it.

What happens to the tissue removed at surgery?

Pregnancy tissue removed at surgery is sent to the Histology laboratory for diagnosis (to be looked at under a microscope). The slides and blocks of wax in which the tissue is embedded are kept in the laboratory for 30 years as part of your hospital record (in line with national guidelines).

Please note that tissue kept in the laboratory consists, wherever possible, of only small amounts of tissue.

If any foetal tissue is seen it is the hospital policy to plan for this tissue (except for the small amounts processed by the laboratory for diagnosis) to be buried; this is done in a sensitive manner. You will be asked to give permission for the hospital to do this by signing a burial form.

You will be asked when you consent for your operation whether you agree that tissue in the laboratory can be used for teaching healthcare staff or for research. A separate information sheet is available to explain the importance of this. You do not have to agree to this

How will you feel afterwards?

Ectopic pregnancy can be a difficult experience. As well as recovering from your operation you must cope with the loss of your pregnancy and often the loss of part of your fertility. Your partner is likely to be suffering too and sharing your feelings often helps. There are support networks available listed at the end of this leaflet.

Follow Up Appointment

All patients who have experienced an ectopic pregnancy will be offered an appointment with a Gynaecology Consultant to discuss their case and the impact of this on potential future pregnancies. This appointment will take place once you have fully recovered from whichever treatment option you have chosen You will also have the opportunity to have all your questions answered.

Future pregnancies

The chance of a healthy pregnancy is very good, and 65% women become pregnant within 18 months after an ectopic pregnancy if they are actively trying to conceive. Some studies have suggested that this figure rises to around 85% within 2 years; your chance of conceiving is dependent upon the health of your tubes.

What do you do in your next pregnancy?

You should see your GP as soon as you know you are pregnant especially if you have any abdominal pain or bleeding. It is appropriate to have an ultrasound scan when you are around 6-7 weeks pregnant, even if you have no symptoms, to confirm that the pregnancy is in the womb; you may refer yourself to the Early Pregnancy Clinic for this scan.

Useful contact numbers:

Stoke Mandeville Hospital
EPU Clinic 08:00–13:00 Monday – Friday 01296 316469

Out of Hours (Stoke Mandeville Hospital)
Surgical Assessment Unit (Ward 15) 01296 316500

Further Support & Information

The Ectopic Pregnancy Trust
3rd Floor
28 Portland Place
London W1B 1LY
Tel: (Helpline) 020 7733 2653 (24hour answer machine service)
Leave message to request a call back
www.ectopic.org.uk

The Miscarriage Association
17 Wentworth Terrace
Wakefield
Yorkshire
WF1 3QW
Tel: 01924 200799 (Monday – Friday 09:00–16:00)
www.miscarriageassociation.org.uk

This leaflet explains some of the most common side-effects that some people may experience. However, it is not comprehensive. If you have any further concerns or questions experience other side-effects and want to ask anything else related to your treatment, please speak to the Surgical Assessment Unit on 01296 418110/811.

Please remember that this leaflet is intended as general information only. We aim to make the information as up to date and accurate as possible, but please note that it is subject to change. Please therefore always check specific advice on any concerns you may have with your doctor.

How can you help reduce healthcare associated infections?

Infection prevention and control is important to the well-being of our patients and for that reason we have infection prevention and control procedures in place. Keeping your hands clean and wearing a face mask is an effective way of preventing the spread of infections. Please follow our infection prevention and control guidelines when visiting our healthcare sites. Further information is available on our website.

Patient Advice Sheet

If you would like a copy of this information on audiotape, in large print or translated, please call the Patient Advice Liaison Service on
01296 831120 or email bht.pals@nhs.net

Approvals:
Maternity Guidelines Group: Feb 2011, V5 Apr 2022
Gynae Guidelines Group: V4 Feb 2016, V5 Mar 2022 Chair's action
Divisional Board: Mar 2011/V3 Apr 2012. O&G SDU V4 Jun 2016, V5 Apr 2022
Clinical Guidelines Group/Medicines Check: V3 7 Apr 2011/Apr 2012, V4 Sep 2016, V5 Apr 2022
MSLC: July2011, Lay Reps: V4 May 2016
Equality Impact Assessment: Jun 2011, V4 Feb 2016, V5 Mar 2022
PEG/CAP: Jun 2012, V4 Nov 2016, V5 May 2022