

# Ectopic Pregnancy

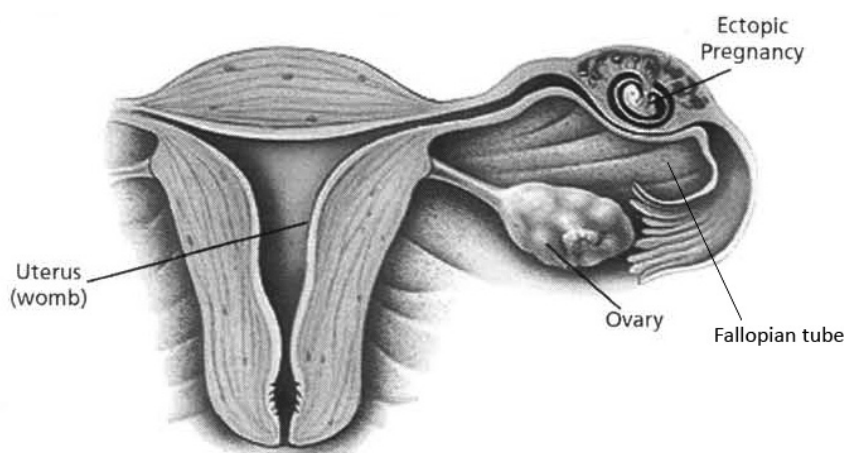
Department of Gynaecology

## Introduction

This leaflet provides information about ectopic pregnancy, how it is diagnosed and how it is treated. If you have any questions, please do not hesitate to speak to the doctors or nurses caring for you.

## What is an Ectopic Pregnancy?

An ectopic pregnancy is a pregnancy that grows outside the uterus (womb). In the UK, 1 in 90 pregnancies (just over 1%) is an ectopic pregnancy. An ectopic pregnancy can be life-threatening because as the pregnancy gets bigger it can burst (rupture), causing severe pain and internal bleeding. Most ectopic pregnancies (95%) occur in a fallopian tube (a tube which connects the ovaries to the womb). But they can also occur in the ovary, cervix, and the abdomen and even in the scar of a caesarean section



## How and why does an Ectopic Pregnancy happen?

Normally, the fertilised egg moves from the fallopian tube into the womb, where the pregnancy grows and develops. Sometimes, the passage of the fertilised egg is delayed and the fertilized egg may implant and start to develop outside the womb, leading to an ectopic pregnancy. The most common reason for an ectopic pregnancy is damage to the fallopian tube, causing a blockage or narrowing.

**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.

## Who is at risk of ectopic pregnancy?

Any woman who is sexually active and of childbearing age is at risk, however, ectopic pregnancies are more likely if:

- You have had a previous ectopic pregnancy
- You have a damaged fallopian tube; the main causes of damage are previous surgery to your fallopian tubes(including sterilisation) or previous infection in your fallopian tubes
- You become pregnant when you have an intrauterine device (IUD/coil) or if you are on the progesterone-only contraceptive pill (mini pill)
- Your pregnancy is a result of assisted conception, such as in vitro fertilisation (IVF) or intracytoplasmic sperm injection (ICSI)
- You smoke.

## What are the symptoms of ectopic pregnancy?

Each woman is affected differently by an ectopic pregnancy. Some women have no symptoms; some have a few symptoms, while others have many symptoms. Most women get physical symptoms in the 6th week of pregnancy (about 2 weeks after a missed period). You may or may not be aware that you are pregnant if your periods are irregular, or if the contraception you are using has failed.

Because symptoms vary so much, it is not always straightforward to reach a diagnosis of an ectopic pregnancy.

The symptoms of an ectopic pregnancy may include:

- **Pain in your lower abdomen.** This may develop suddenly for no apparent reason or may come on gradually over several days. It may be on one side only
- **Vaginal bleeding.** You may have some spotting or bleeding that is different from your normal period. The bleeding may be lighter or heavier or darker than normal
- **Pain in the tip of your shoulder.** This pain is caused by blood leaking into the abdomen and is a sign that the condition is getting worse. This pain is there all the time and may be worse when you are lying down. It is not helped by movement and may not be relieved by painkillers. You should seek urgent medical advice if you experience this
- **Upset tummy.** You may have diarrhoea, or feel pain on opening your bowels
- **Severe abdominal pain/collapse.** If the fallopian tube bursts (ruptures) and causes internal bleeding, you may develop intense abdominal pain or you may collapse. In rare instances, collapse may be the very first sign of an ectopic pregnancy. This is an emergency situation and you should seek urgent medical attention.

## How is an ectopic pregnancy diagnosed?

Most ectopic pregnancies are suspected between 6 and 10 weeks of pregnancy. Sometimes, the diagnosis is made quickly. However, if you are in the early stages of pregnancy, it can take longer (a week or more) to make a diagnosis of an ectopic pregnancy.

Your diagnosis will be made based on the following:

**Consultation and examination:** Your doctor will ask about your medical history and symptoms, and will examine your abdomen. With your consent, they may also do a vaginal (internal) examination in the presence of a female chaperone (someone to accompany you).

**Urine pregnancy test:** If you have not already had a positive pregnancy test, you will be asked for a urine sample so that this can be tested for pregnancy. If the pregnancy test is negative, it is very unlikely that your symptoms are due to an ectopic pregnancy.

**Ultrasound scan:** A transvaginal scan (where a probe is gently inserted in your vagina) is known to be more accurate in diagnosing an ectopic pregnancy than a scan through the tummy (transabdominal scan). Therefore, you will be offered a transvaginal scan to help identify the exact location of your pregnancy. However, if you are in the early stages of pregnancy, it may be difficult to locate the pregnancy on scanning and you may be offered another scan after a few days.

**Blood tests:** A test for the level of the pregnancy hormone  $\beta$ hCG (beta human chorionic gonadotrophin) or a test every few days to look for changes in the level of this hormone may help to give a diagnosis. This is usually checked every 48 hours because, with a pregnancy in the uterus, the hormone level rises by 63% every 48 hours (known as the 'doubling time') whereas, with ectopic pregnancies, the levels are usually lower and rise more slowly or stay the same.

**Laparoscopy:** If the diagnosis is still unclear, an operation under a general anaesthetic called a laparoscopy may be necessary. The doctor uses a small telescope to look at your pelvis by making a tiny cut, usually into the umbilicus (tummy button). This is also called keyhole surgery. If an ectopic pregnancy is confirmed, treatment may be undertaken as part of the same operation. This would be discussed with you before surgery, unless surgery is necessary due to an acute emergency situation (a leaflet about laparoscopy is available, please ask if you require one).

## How are ectopic pregnancies managed?

If you are diagnosed with an ectopic pregnancy, there are several factors that help us guide you towards the safest treatment.

These include your:

- Symptoms
- Scan findings
- Hormone levels and
- Personal views and preferences.

The options for treatment are:

### 1. Expectant management (wait and see)

Ectopic pregnancies sometimes end on their own – similar to a miscarriage. Depending on your situation, it may be possible to monitor the  $\beta$ hCG levels with blood tests every few days until these are back to normal. Although you do not have to stay in hospital, you should come back to hospital if you have any further symptoms.

Expectant management is not an option for all women. It is usually only possible when the pregnancy is still in the early stages and when you have only a few or no symptoms. Success rates with expectant management are highly variable and range from 30% to 100%. This mainly depends on your pregnancy hormone levels, with higher serum  $\beta$ hCG levels associated with a lower chance of success. If the pregnancy hormone levels continue to rise or if you develop pelvic pain, we will usually advise you to have surgery.

If your pain increases suddenly, it is very important that you either attend our emergency Gynaecology Assessment Unit immediately or, if out of hours, Emergency Department.

### 2. Medical Management

In certain circumstances, an ectopic pregnancy may be treated by medication. This involves injecting you with a drug called methotrexate, which stops placental tissue growing and, therefore, stops the development of an ectopic pregnancy. The aim of this type of treatment is to avoid surgery and to save the fallopian tube. Close follow-up is needed with blood tests to check that the pregnancy hormone levels are dropping (a leaflet is available).

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  $\beta$ hCG level is high, methotrexate is less likely to succeed. There is a 10% chance you may still need surgery after medical treatment.

The most common side effect of methotrexate is abdominal pain in the first few days after taking the methotrexate, but this usually settles with paracetamol or similar pain relief.

**After you have been given methotrexate:**

- Stop taking folic acid, and avoid alcohol and sexual intercourse until your blood tests return to normal
- Do not take aspirin or ibuprofen for a week afterwards. It is safe to take paracetamol
- It is very important that you attend your follow-up appointments until your pregnancy hormone levels are back to normal
- Use a reliable method of contraception for three months because there is a small risk that any child conceived during this time will develop abnormally.

A separate detailed leaflet is available for methotrexate, should you choose this method.

### **3. Surgical Management**

An operation to remove the ectopic pregnancy will involve a general anaesthetic.

The surgery will either be:

- Laparoscopy (known as keyhole surgery). Your stay in hospital is shorter (24 to 36 hours) and physical recovery is quicker than after open surgery. Laparoscopy might not be an option for some women and your doctor will discuss this with you (leaflet available)
- Open surgery (known as a laparotomy). This is done through a larger cut in your abdomen and may be needed if severe internal bleeding is suspected. You will need to stay in hospital for 2 to 4 days. It usually takes about 4 to 6 weeks to recover (leaflet available).

The aim of surgery is to remove the ectopic pregnancy. The type of operation you have will depend on your wishes or plans for a future pregnancy and what your surgeon finds during the operation (laparoscopy).

To have the best chance of a future pregnancy inside your uterus, and to reduce the risk of having another ectopic pregnancy, you will usually be advised to have your affected fallopian tube, where the ectopic pregnancy has implanted, removed (this is known as a salpingectomy).

If you already have only one fallopian tube or your other tube does not look healthy, your chances of getting pregnant are already affected. In this circumstance, you may be advised to have a different operation (known as a salpingostomy) that aims to remove the pregnancy without removing the tube. It carries a higher risk of a future ectopic pregnancy but it means that you may be able to conceive a pregnancy naturally or spontaneously in the future.

You will be advised to have blood tests for checking your pregnancy hormone levels after salpingostomy as part of follow-up. Some women may need further medical treatment or another operation to remove the fallopian tube later if the pregnancy has not been completely removed during the procedure. The decision to perform salpingectomy or salpingostomy may sometimes only be made during laparoscopy under anaesthetic whilst you are sedated or asleep.

## **What are the risks involved with surgery?**

There are risks associated with any operation: from the surgery itself and from the use of an anaesthetic. Your surgeon and anaesthetist will discuss these risks with you:

- Bleeding
- Pelvic or shoulder pain
- Infection
- Perforation of the uterus (womb)
- Unintentional damage to surrounding tissue, such as, bladder or bowel
- Adhesions (scar tissue).

If any of the above occurs, you may be required to have corrective treatment such as:

- Blood transfusion
- Antibiotics
- Further surgery to correct or examine any unintentional damage caused which would result in a longer stay in hospital.

You should also be aware that all operations carry a risk of death. Deaths caused by anaesthesia are very rare. An exact figure is not known, but it is around 1 death for every 100,000 anaesthetics given in the UK (Royal College of Anaesthetists, 2017). However, the risk does increase depending on your general health and medical conditions.

Each specific procedure carries an individual risk depending on many factors, such as your age, size and current health, etc. and can be discussed with your doctor.

## What are the options for treatment of non-tubal ectopic pregnancy?

The treatment of a non-tubal ectopic pregnancy depends on where the pregnancy is growing. Your doctor will discuss the available treatment options with you based on a number of factors, including the location of the ectopic pregnancy, the levels of the pregnancy hormone  $\beta$ hCG in your blood and the ultrasound scan report.

Treatment options may include expectant management, medical treatment with methotrexate or surgical operation.

## What happens to your pregnancy remains?

To confirm that you have had an ectopic pregnancy, tissue removed at the time of surgery is sent for testing in the laboratory. The healthcare team will discuss with you (and your partner) the options around what happens to your pregnancy remains afterwards.

## How will I feel afterwards?

The impact of an ectopic pregnancy can be very significant. It might mean coming to terms with the loss of your baby, with the potential impact on future fertility, or with the realisation that you could have lost your life.

Everyone reacts differently following an ectopic pregnancy. However, most women go through a grieving process not only for the loss of the baby but the future hope and plans for the baby. Some women find that they can get through it quite quickly with little emotional support. Others find that the feelings of grief and bereavement last much longer. If possible, talking with your partner, a family member or a close friend about what has happened and how you feel can be very helpful and supportive.

If you feel you are not coping or not getting back to normal, you should talk to your GP or another member of your healthcare team. See also the Further information section below for details of organisations that can provide advice and support.

It is important to remember that the pregnancy could not have continued without causing a serious risk to your health.

## What about future pregnancies?

The chances of having a successful pregnancy in the future are good. Even if you have only one fallopian tube, your chances of conceiving are only slightly reduced.

For most women, an ectopic pregnancy is a 'one-off' event. However, your overall chance of having another ectopic pregnancy is increased and is around 7 to 10 in 100 (7 to 10%) compared with 1 in 90 (just over 1%) in the general UK population.

You should seek early advice from a healthcare professional when you know you are pregnant so that an ultrasound scan can be arranged between 6 and 8 weeks to confirm that the pregnancy is developing in the womb.

If you do not want to become pregnant, seek further advice from your doctor or Family Planning Clinic, as some forms of contraception may be more suitable after an ectopic pregnancy.

## References:

- RCOG ectopic pregnancy patient information leaflet November 2017
- NICE patient information on ectopic pregnancy and miscarriage: 17 April 2019 [www.nice.org.uk/guidance/ng126](http://www.nice.org.uk/guidance/ng126)
- Royal College of Anaesthetists (2016) [www.rcoa.ac.uk/patientinfo](http://www.rcoa.ac.uk/patientinfo)

## Our contact details:

### **Gynaecology Assessment Unit**

01902 694606 (Monday to Friday 09:00 and 17:00)

### **Bereavement Nurse**

07917 398313 (Monday to Friday 09:00 and 17:00)

## Further information:

### **The Ectopic Pregnancy Trust**

Helpline: 020 7733 2653

[www.ectopic.org.uk](http://www.ectopic.org.uk)

### **The Miscarriage Association**

Helpline: 01924 200 799

[www.miscarriageassociation.org.uk](http://www.miscarriageassociation.org.uk)

### **Tommy's**

<https://www.tommys.org/baby-loss-support/ectopic-pregnancy-information-and-support>

## 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 ਆਸਾਨ 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。