



Pregnancy of Unknown Location

We are sorry that your healthcare professional has informed you that you have a Pregnancy of Unknown Location or PUL

It can be an emotionally difficult time and you will probably have some questions about your Pregnancy of Unknown Location. In this handout, we will try to cover some of those questions that are most frequently asked.

You can find further information and support at www.ectopic.org.uk.

What is a Pregnancy of Unknown Location?

You may be classified as having a Pregnancy of Unknown Location when you undergo a transvaginal ultrasound examination (where a probe is placed inside the vagina) and it is not possible to see the pregnancy on the scan.

If a pregnancy cannot be seen inside or outside the uterine cavity (womb), or if the sonographer is not certain, you may hear this situation being classified as a Pregnancy of Unknown Location, or PUL. It is important to understand that PUL is not a diagnosis; it is a label given until the final location of the pregnancy can be identified with certainty. It is also important to note that this classification does not necessarily mean there is an ectopic pregnancy, as PUL also include healthy pregnancies that are initially too small to see on ultrasound as well as failing pregnancies that are too small to visualise.

In the event of a PUL, blood will be taken to measure hCG (the same hormone measured in urinary pregnancy tests) and another pregnancy hormone called progesterone. The hCG test may be repeated 48 hours later depending on the first results, and this will help the doctors plan if a repeat ultrasound scan is needed in order to identify the location of the pregnancy.

The reason for this is that until the location of the pregnancy is known with certainty, or the hormone levels have decreased to below pregnancy levels, there is a risk of complications associated with an ectopic pregnancy which has not yet been identified.

For every 100 pregnancies initially classified as a PUL, approximately 12 will subsequently be ectopic. Importantly, of these 12, some will not need any treatment. Your doctors will discuss the possible treatment options with you.

All PUL will be followed up until a final early pregnancy location is confirmed as ectopic, or within the uterine cavity. Sometimes a location cannot be confirmed, which is why the hormone level tests may continue for a little longer.

What are the reasons for a Pregnancy of Unknown Location?

There are four main reasons why you may be classified as having a Pregnancy of Unknown Location:

1. It might be too early to see your pregnancy on a scan *Urinary pregnancy tests are now very sensitive and some even allow a pregnancy to be detected before a period has been missed. However, a pregnancy cannot reliably be seen on a scan until around six weeks after having a missed period so it may be too early to see anything.*
2. You may have already miscarried the pregnancy
If you have experienced heavy bleeding, similar to a period or heavier, you may have already had a miscarriage and there is no pregnancy in the womb.
3. You may have an ectopic pregnancy, which may be too early to be seen on a scan
An ectopic pregnancy occurs when an ovum (egg) that has been fertilised implants (gets stuck) outside the cavity of the uterus (womb). As with an early pregnancy in the womb, it may be too early for an ectopic pregnancy to be seen on a scan.
4. You may have an ectopic pregnancy that has not been seen on the scan due to fibroids and poor views.

How will my doctors reach a final diagnosis?

This will depend on the local policy of your Early Pregnancy Unit (EPU), ultrasound clinic or hospital.

In general, it will involve blood tests and a possible repeat ultrasound examination (scan).

The doctors will use the blood tests to measure either one or two hormones: the pregnancy hormone known as human chorionic gonadotrophin (hCG) and also sometimes progesterone. Some units will measure these two hormone levels on one occasion and others will take two levels of hCG 48 hours apart.

The hormone hCG is produced during pregnancy by the early developing placenta regardless of where the pregnancy is. HCG can first be detected by a blood test approximately 11 days after conception and, in a healthy pregnancy, will typically increase during the first 8 to 11 weeks of pregnancy, then fall or level off for the remainder of the pregnancy. It is hCG that leads to the 'morning sickness' some experience in early pregnancy.

Progesterone is the hormone made by the corpus luteum cyst, which forms on the ovary after every ovulation. If not pregnant, progesterone is only made for two weeks, after which the corpus luteum disappears, a period starts, and a new cycle begins. In pregnancy, this cyst is encouraged to remain and continue releasing progesterone for the first 13 weeks of pregnancy.

HCG and progesterone are used to guide the management of a PUL. The progesterone is measured at the time of a first visit by some doctors, whilst the hCG is measured at the first visit and then in most cases 48 hours later. Low progesterone and falling hCG levels may indicate the pregnancy is no longer growing, or that the pregnancy has unfortunately already/passed as a miscarriage.

High progesterone and a normally rising hCG results are associated with a pregnancy that is still present, even if it is not visible on a scan. In this situation, the pregnancy most likely to be in the correct place in the uterus. Occasionally, however, the hCG levels rise suboptimally, and this can indicate the development of an ectopic pregnancy. The doctor caring for you will interpret these results in order to plan the next steps of your care safely.

HCG is also used to help decide the best way to treat an ectopic pregnancy. These results will be assessed by your doctor alongside your symptoms and your ultrasound scan findings. Depending on the results, you will be advised on appropriate management.

- Your hormone levels may be increasing consistent with a normally growing pregnancy which is too early to be seen on the scan. If this happens, a scan should be repeated once your hormone level has exceeded 1000iu/l or 1500iu/l. The pregnancy may be located inside or outside the womb, which is why it is important to have a follow-up scan when the hormone level is at the appropriate level.

- Your hormone levels may have reduced by half, which suggests a failed pregnancy and likely miscarriage.

- Your hormone levels may be slowly decreasing, staying the same or increasing which may indicate an ectopic pregnancy.

If you are suspected as having a normally growing pregnancy or an ectopic pregnancy, you will usually be asked to return to hospital for a repeat ultrasound scan to try to locate the pregnancy. The timing of the ultrasound scan will depend on the level of hCG in your blood, as shown by your blood test results.

If, unfortunately, your hCG levels are decreasing, rather than repeating an ultrasound scan, you may be asked to attend for further blood tests or to repeat a urinary pregnancy test to check the pregnancy hormone levels have decreased to non-pregnant levels.

It is very important that if you develop pain, abdominal (stomach) bloating, faintness, pain with opening your bowels or shoulder tip pain, you must attend the hospital/accident and emergency unit as soon as possible. You should be seen by a specialist doctor (gynaecologist).

What are my chances of having an ectopic pregnancy?

Fortunately, the majority of people who are initially classified as having a Pregnancy of Unknown Location **do not** have an ectopic pregnancy. About 10% of people will subsequently be diagnosed with an ectopic pregnancy.

If my pregnancy has failed, does it mean I have not had an ectopic pregnancy?

In most cases of failed Pregnancies of Unknown Location, the true location of the pregnancy is never known. The majority will be failed intrauterine (in the womb) pregnancies - also called miscarriages. It would only be possible to diagnose a failed ectopic pregnancy if a repeat ultrasound examination is performed, but this is not usually needed from a medical care point of view.

Your emotions

Undergoing diagnosis can be a worrying time. As well as the physical strain of repeated hospital visits and tests, you may also find it challenging to come to terms emotionally with what is happening to you.

For most people, when experiencing a difficult event, it is a natural response to try to make sense of what is happening. Trying to understand the various tests and why there is not yet a definite answer can be confusing. It can be frustrating not to have answers as well as worries about what may be ahead.

Your partner's emotions

Partners can also be impacted by the worries around your Pregnancy of Unknown Location. As well as trying to process what is happening for themselves, they can at the same time be trying to provide you with support after seeing you go through such a physical and emotional ordeal.

Your partner may or may not have connected with the pregnancy. They may be trying to deal with their own emotional response to the confusion and witnessing your worries. For some, a partner's focus may be on you rather than the pregnancy and this could be a point of disagreement. Sometimes your partner may find it difficult to understand your feelings and you may think that your partner is not supporting you in the way that you would like.

Partners can try to "fix things" or they may want to avoid talking about what is happening or bringing up the difficult topic. This is not because they do not care but rather that they want to "make things better". With much of the focus being on you, they can also feel left out and ignored.

It is important that, when you feel able to, you talk to your partner both about your feelings and theirs. We are also here to support partners through the worries of a Pregnancy of Unknown Location.

How The Ectopic Pregnancy Trust can provide support

The Ectopic Pregnancy Trust provides information and support to those experiencing early pregnancy complications and loss, through Pregnancy of Unknown Location and ectopic pregnancy.

At the EPT, many of us have been through similar physical and emotional trauma so we understand and empathise with how you and your loved ones may be feeling right now. You may be feeling lonely, confused, and overwhelmed. You may have questions about the experience and what may be ahead, physically and emotionally. We are here to support you.

Our website has further information on physical and emotional aspects of PUL and ectopic pregnancy. The website has medically-overseen content and also includes information on our various support services where you can share your experiences and ask questions. If you think we can help you, please visit our website, email or call.

Please visit ectopic.org.uk for more information and support.