

The Miscarriage Association



Acknowledging Pregnancy Loss

Why did it happen to us?

– a summary of causes, tests and treatment

If you would like information, support or simply to talk to someone who has had a miscarriage and can understand, please contact:

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Why did it happen to us?

This leaflet explains what is currently known about the possible causes of miscarriage, and what tests and treatments may be available.

Tests and investigations carried out and the treatment offered are likely to vary from one hospital to another, and will depend to some extent on the interest and expertise of the consultant responsible for your care.

What is a miscarriage?

Miscarriage – the spontaneous loss of a baby – can occur at any time from around the date of a missed period to 24 weeks of pregnancy. (After 24 weeks the loss of a baby is referred to as a stillbirth). The chance of having a miscarriage is more than one in five.

There is still a great deal not known about the many possible causes of miscarriage, and it is often difficult to pinpoint the exact cause in each individual case. Many women are left asking the question “Why?” and find it hard to accept that no-one can give a clear and definite answer. It is important to know that it is very unlikely to have been caused by anything you did or didn't do. Most women who have a miscarriage go on to have a successful pregnancy next time.

What follow-up and treatment is available?

If this is your first miscarriage, you will probably not be offered any follow-up. This is because it is unlikely that investigations would detect any clear cause and it is most likely that your next pregnancy will be straightforward without any specific intervention or treatment.

For many women and their partners, it can be painful and frustrating to find out that no follow-up is available after a first or even second miscarriage. But if you have any particular questions or concerns, it is worth discussing these with your GP who may be able to refer you for a hospital appointment.

After three or more miscarriages you should be offered investigations and, possibly, treatment. At this stage an underlying cause is more likely to be found, although a treatment for this may not be available.

The Miscarriage Association publishes a leaflet on investigations following recurrent miscarriage.

Even after several miscarriages, a successful pregnancy is possible even without medical intervention. When treatment is given, the aim is to improve the chance of a successful pregnancy. Since evidence suggests that the close support and concern of health professionals can also improve your chances,^{1,2} it is sometimes difficult to tell whether a subsequent successful pregnancy is due to a specific treatment or to the support given.

Medical terminology

The medical term for miscarriage is "spontaneous abortion". Most doctors and nurses avoid using this phrase, but a few may not realise how distressing this term can be, and you may hear it used in discussion between staff. The medical terms in this leaflet are often used by health professionals. We hope they will not cause distress.

Threatened miscarriage It is important to remember that the majority of women who experience spotting or bleeding do not go on to miscarry; the symptoms stop and they go on to have a normal pregnancy. In some cases even heavy bleeding may settle down and stop. The bleeding will not affect the healthy development of the baby.

If you do experience bleeding, spotting or pain in pregnancy, probably the most useful investigation you can have is an ultrasound scan. The best time to have a scan is from about 7 weeks' gestation when it is normally possible to see the baby's heartbeat. In those early weeks, a vaginal scan may be used since it can get a clearer picture of the baby. There is no evidence to show that this procedure will damage your pregnancy.

Seeing the baby's heartbeat is very reassuring as it greatly increases the chances that the pregnancy will continue normally. However, a heartbeat can be difficult to detect in early pregnancy, so you may be asked to return for another scan a week or so later to assess the situation. Because of the time needed to make a clear assessment, many women experience a period of stress and uncertainty, of being "in limbo", which can last for some time.

If you would like a scan, talk to your GP. Many hospitals now have special early pregnancy clinics and although most need a referral from your GP, some will offer an appointment without a referral.

An internal (vaginal) examination is not usually required, but in some circumstances your doctor may wish to examine the cervix (the neck of the womb) to see if it is open. This will not cause the pregnancy any harm.

Non-viable pregnancy

There are various terms used for a pregnancy which is no longer viable (has not survived):

Delayed miscarriage (also called missed or silent miscarriage)

Sometimes a pregnancy can come to an end with little or no sign that anything is wrong. The baby has died or failed to develop but your body has not miscarried him or her.

Blighted ovum (also called anembryonic pregnancy, which means a pregnancy without an embryo) This is the name given to a fertilised egg that does not divide and develop as it should. The normal pregnancy sac develops but the baby fails to develop within the sac.

The Miscarriage Association publishes a fact-sheet on blighted ovum.

Incomplete miscarriage Sometimes when a miscarriage occurs, not all the pregnancy tissue in the uterus (womb) is expelled. Although the pregnancy is over, the symptoms of pain and heavy bleeding continue.

Diagnosis and management

The diagnosis of all these kinds of non-viable pregnancy is made by means of an ultrasound scan. This will show whether there is an empty pregnancy sac (indicating a blighted ovum), a collapsed sac (suggesting a delayed miscarriage), or retained pregnancy tissue (characteristic of an incomplete miscarriage).

The diagnosis can come as a shock as you may still feel pregnant and a pregnancy test may still be positive. This is because the symptoms of pregnancy are produced not by the baby, but by the placental tissues. These often continue to be active even though the baby does not develop as it should.

In all of these situations, the pregnancy will fully miscarry with time, but there are several ways of managing the situation. You may be given the option of returning home to let nature take its course, waiting for bleeding to start (or continue) naturally. You may be offered an ERPC (Evacuation of Retained Products of Conception), which is a short operation, done under general anaesthetic, to remove any remaining pregnancy tissue. In some hospitals, medical treatment in the form of tablets may be offered; these will accelerate the process of miscarriage. You may want time to think about these options.

Complete miscarriage This means that the pregnancy is over and that all the pregnancy tissue in the uterus has come away. If the miscarriage happens at home, you may want to go to see your GP. S/he may refer you for a scan to confirm the diagnosis.

Late miscarriage Miscarriage after 14 weeks gestation may begin with symptoms such as vaginal bleeding or cramps, or rupture of the membranes (waters). Alternatively there may be no warning signs and a routine ante-natal scan may reveal that the baby has died.

As with earlier miscarriages, a late miscarriage may be spontaneous and complete. If this is not the case, admission to hospital for an ERPC or, in later miscarriages, induction of labour, will be necessary. Hospital policies and provision vary, and you may be admitted either to the gynaecology ward or to the labour ward. In every situation, all options and procedures should be explained.

The Miscarriage Association publishes a leaflet on late miscarriage.

Recurrent miscarriage This is the medical term used when a woman experiences several miscarriages (usually three or more) in a row. In some cases recurrent miscarriage is due to a single underlying cause or a combination of factors, but in others the cause of each miscarriage may be different. Your doctor may offer you a range of tests to investigate the possible causes or s/he may refer you to a specialist centre.

Other types of pregnancy loss

Ectopic pregnancy An ectopic pregnancy is a pregnancy which is growing outside the cavity of the uterus. Between one and two percent of pregnancies are ectopic. Around 95% of ectopic pregnancies occur in one of the Fallopian tubes. Most ectopic pregnancies can grow to around 8 weeks, but beyond this the tube is likely to burst.

Signs of an ectopic pregnancy may be acute pain, usually on one side of the abdomen, sometimes preceded by a dull ache. This may be accompanied by bleeding. Pain in the shoulder or rectum can also be a sign of ectopic pregnancy. If an ectopic pregnancy is suspected, a scan will be done to see whether the pregnancy is in the normal place.

The treatment of ectopic pregnancy varies from hospital to hospital, and also depends on the stage at which it is diagnosed. It may be possible to save the Fallopian tube, though not the pregnancy, but in some cases the tube will have to be removed.

The chances of conceiving and having a successful pregnancy after an ectopic may be lower than normal, but this will depend on why the pregnancy was ectopic and on your gynaecological history.

The Miscarriage Association publishes a leaflet on ectopic pregnancy.

Hydatidiform mole In rare cases (about 1 in 1200 pregnancies) an abnormal egg cell is fertilised and implants in the wall of the uterus. This is called a hydatidiform mole. The mole develops for a while as if it were a normal pregnancy, but there is no embryo. Only the placenta develops and, because of this, the hormones of pregnancy are produced. This will make a woman feel pregnant and pregnancy tests will be positive.

This condition may be picked up by a routine ultrasound scan or by examination of placental tissue which has been passed. Once diagnosed, specialist follow-up is essential and you will be referred to one of three specialist centres in the UK.

The Miscarriage Association publishes a leaflet on hydatidiform mole.

Causes, tests and treatment – an outline of some of the known causes of miscarriage

Genetic problems

About half of all early miscarriages are caused by chance chromosome abnormalities in the fertilised egg. This is more common as maternal age increases (see *Age* page 10), but other than that there are no known causes. These faults are not very likely to recur and there is a very good chance that things will go right next time.

Very rarely, a problem may be caused by a chromosome abnormality in either the mother or father. Routine tests to try to determine the cause of recurrent miscarriage usually include a test for this and if it is found, genetic counselling will be offered.

Hormonal problems

Women with hormonal irregularities in their menstrual cycle find it harder to conceive and, when they do conceive, they are more likely to miscarry. In many of these women, an ultrasound scan will detect polycystic ovaries and blood tests can then confirm or rule out the diagnosis of polycystic ovarian syndrome (PCOS). Various treatments for PCOS are currently being researched.

Human chorionic gonadotrophin (hCG) and progesterone

The hormones which are important in maintaining pregnancy are hCG and progesterone. Some doctors and researchers have treated women with hCG and progesterone, aiming to boost hormone levels and thus maintain pregnancy, but the scientific evidence is mixed and this treatment is no longer commonly recommended.³ However if you do have hCG or progesterone treatment, there is no evidence that either can cause problems to the unborn baby.

Problems of the immune system

Anti-phospholipid antibody syndrome (APS) This syndrome consists of antibodies called lupus anti-coagulant or anti-cardiolipin antibodies. These circulate in the blood and cause blood clots in the placenta. They may also directly affect the placenta and prevent it forming as it should. This can occur at any stage of pregnancy. Up to 15% of women who suffer **recurrent** miscarriage will have raised levels of these antibodies.⁴

Blood tests can show whether the antibodies are present and it is recommended that these tests are done twice, at least six weeks apart, in order to confirm the diagnosis of anti-phospholipid syndrome. Treatment is usually with low-dose aspirin, alone or together with heparin, to reduce blood clotting.

It is not advisable to start taking aspirin unless this is part of a treatment prescribed by your doctor.

Other problems Less commonly, some women may be found to have one of a number of problems resulting from a deficiency in certain blood clotting factors.

Immune reactions It has been believed that some women may miscarry because of a reaction between their and their partner's tissue types: this is sometimes referred to as an allergic reaction. Some couples who have received this diagnosis have been offered specialist treatment, such as immunoglobulin infusion or immunisation of the woman with her partner's cells.

More recent guidance⁵, however, suggests that there is no clear evidence to support this theory and that any potential benefits to treatment need to be balanced against the risk of adverse side-effects.

Infections

Minor infections such as coughs and colds are not harmful during pregnancy, but we do know that a very high temperature and certain specific illnesses can increase the risk of miscarriage. If an infection has caused miscarriage, it is unlikely to cause a recurrent problem because once a woman has been exposed to infection she is normally immune to re-infection.

Late miscarriages (after 14 weeks) may also be due to uterine or vaginal infection. These can either cause the baby to die in the uterus or cause the membranes to rupture, resulting in the very premature delivery of an otherwise healthy baby. If you have or suspect you have a vaginal infection, you should see your doctor for investigation and treatment if necessary. Your partner may also need treatment due to the risk of possible re-infection. Listeria infection (from unpasteurised dairy products) can also cause later pregnancy loss.

Chlamydia infection can also be harmful, resulting in infertility, ectopic pregnancy, miscarriage or premature labour. One type is sexually transmitted; another rarer form may be contracted through contact with cattle or sheep, particularly during lambing or calving.

Other infections are particularly harmful in pregnancy, but do not usually cause miscarriage. These include toxoplasmosis, parvovirus, cytomegalovirus and rubella (German Measles) which is especially harmful within the first twelve weeks of pregnancy. In addition, if you suffer from genital herpes, it is important to inform your doctor when you are pregnant, as problems may arise around the delivery of your baby.

Anatomical problems which may cause pregnancy loss

Weak (“incompetent”) cervix During pregnancy the cervix should remain closed until labour is ready to begin. However in some women the cervix is weakened and the pregnancy sac bulges through the neck of the uterus, which may lead to miscarriage. This may be the reason for a miscarriage which happens after the 14th week of pregnancy.

The diagnosis of a weak cervix is generally made by means of past history of pregnancy loss or prematurity. Examination of the cervix in early pregnancy may also give signs confirming this diagnosis. If the risk is thought to be high, regular ultrasound assessment of the cervix can be carried out in order to detect early signs of change.

A common treatment for a weak cervix is the cervical stitch. This is like a drawstring which circles the top of the cervix near the uterus and is pulled

tight to keep it closed. In certain cases the normal cervical stitch is not possible and an alternative approach may be used, inserting a stitch by means of an abdominal operation. These procedures are carried out under general or epidural anaesthetic.

Ros Kane's booklet "The cervical stitch: what it's like" presents different women's experiences of this procedure and there is also a leaflet on the subject, both available from The Miscarriage Association. The Association can also put you in touch with other women who have had a cervical stitch.

Fibroids A fibroid is muscular and fibrous tissue which can grow either inside or – less commonly – outside the uterus. Fibroids are commonly found in women at some time and usually are not related to problems in pregnancy. Large fibroids may cause fertility problems and if you are pregnant, they can cause miscarriage as the baby grows.

If a fibroid is very large and distorts the shape of your uterus, your doctor may suggest that you have it removed before pregnancy by an operation called a myomectomy, which is done under general anaesthetic. Because the uterus is scarred, any future pregnancy will be closely monitored and the baby may be delivered by Caesarean section.

Irregular-shaped uterus The uterus is formed from two separate tubes which fuse together before you are born. Sometimes, however, the fusion is not complete and the uterus develops with an irregular shape. In some cases, there may not be enough room for the baby to grow and this can result in later pregnancy loss, after about 14 weeks. In other cases, however, the pregnancy will progress normally.

If it is thought to have caused miscarriage, an irregular-shaped uterus may be able to be corrected surgically, but this is usually not necessary.

Other factors

Developmental abnormalities Some miscarriages will be due to an abnormality in the baby's development (e.g. spina bifida or a heart defect).

Maternal medical disorder Some chronic medical disorders in the mother (e.g. diabetes, renal disease) are also linked with miscarriage. If you suffer from a chronic illness and/or are taking long-term medication, it might be best to consult your GP or specialist before becoming pregnant.

Rhesus negativity If your blood group is Rhesus negative and you miscarry or experience bleeding in pregnancy, you may need an anti-D injection. This aims to prevent the development of antibodies which could cause problems in a later pregnancy.

The Miscarriage Association publishes a fact-sheet on Anti-D.

Age The risk of miscarriage increases as a woman gets older. Women are born with all the eggs they will ever produce and as each woman grows older, so do her eggs. Older eggs are more likely to have chromosomal abnormalities and hence there is a greater chance that these pregnancies will miscarry. Even so, it is important to note that even in her early forties, a woman who has had up to three miscarriages is still more likely to have a successful pregnancy than to have another miscarriage.⁶

Environmental influences

There is still a great deal we do not understand about the causes of miscarriage, but there is some evidence that certain things in our environment can affect the health of the developing pregnancy.

At work Most research has shown that work in itself is not harmful in pregnancy. However, work which is particularly stressful may be linked to increased problems in pregnancy. In addition, in some workplaces there are specific hazards that could increase the risk of miscarriage. If a woman or her partner is exposed to certain hazardous substances (for example toxic chemicals, solvents, lead or radiation) the chances of miscarriage may be increased.

If you are worried about the effects of your work on your pregnancy, you may want to refer to your trade union Health and Safety representative, your Occupational Health Department or the local Health and Safety Executive (You may want to visit the national Health and Safety Executive's website: www.hse.gov.uk).

Smoking, alcohol, diet and drugs The chances of having a miscarriage are higher for women who smoke heavily. It is best to avoid smoking during pregnancy if you can or, if you can't, to cut down as much as possible. You may be able to get help with this from your GP. A smoky atmosphere can affect your health and that of your baby, and you may wish to encourage your partner and others to cut down their smoking too.

Heavy drinking in pregnancy has been linked to miscarriage as well as causing problems to the developing baby. While an occasional drink is unlikely to be harmful, it is best to avoid drinking alcohol during pregnancy.

A well-balanced diet before and during pregnancy is good for the health of mother and baby, as is maintaining a reasonable body weight for your height. Cereals and grains, milk, cheese, eggs, meat, fish or vegetarian alternatives are all good choices and eating fresh fruit and vegetables every day is associated with a lower risk of miscarriage⁷. It is advisable to avoid unpasteurised dairy products and pâté because of the risk of listeria. (See leaflet *Preparing for another pregnancy*).

It is recommended to take a supplement of folic acid before and during early pregnancy, and this is available from your chemist. This will be prescribed free of charge once you are pregnant. Some women like to take vitamin supplements, especially if they suffer from sickness and find it hard to eat properly.

Drugs such as paracetamol are safe to take during pregnancy if used as recommended, but certain drugs are known to increase the risk of miscarriage. Drugs such as cocaine, crack and heroin increase the risk of pregnancy loss or cause problems for the developing baby. If you take regular or occasional medication, discuss with your doctor or pharmacist whether the drugs recommended are safe to take in pregnancy.

Rest If you bleed during pregnancy but otherwise the pregnancy seems to be progressing as normal, your doctor may suggest that you take it easy and rest. You may feel that bedrest is something you can do to help your pregnancy, especially if you have miscarried in the past. It may be simply that resting feels right.

In early pregnancy, however, resting is unlikely to determine whether or not you will miscarry. While bleeding may decrease or appear to stop altogether while you are lying down, you may notice it again when you get up or go to the toilet. This does not mean that standing up is actually causing the bleeding.

Stress Stress can seriously affect our health in many ways. There is some evidence that stress may play a role in miscarriage and other pregnancy problems, but it is not clear that stress alone actually causes miscarriage.

After a miscarriage, you may understandably feel very anxious about becoming pregnant again. Do remember that after one miscarriage, the vast majority of women will have a healthy pregnancy next time without any treatment whatsoever.

Emotional and practical support before and during pregnancy can reduce stress and increase your general well-being. Talk to your GP or hospital doctor about what support they can offer next time to help reduce anxiety and increase your confidence – for example, regular check-ups or a scan in early pregnancy may help to reassure you. The care and understanding of family and friends can be invaluable.

The Miscarriage Association offers written information and a network of telephone contacts and support groups which may also be helpful in supporting you both before and during your next pregnancy.

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