

Recurrent miscarriage

This information is for women and couples who have had three or more miscarriages. It is based on the Royal College of Obstetricians and Gynaecologists guideline 'The Management of Recurrent Miscarriage'.

About this information

It tells you:

- What we know about the reasons for recurrent miscarriages.
- About recommendations the guideline makes on the most effective ways of investigating and treating women who have recurrent miscarriages.
- It aims to help you and your healthcare team make the best decisions about your care.
- It is not intended to replace advice from a doctor or midwife about your own situation.
- It does not look at reasons or treatment for single miscarriages.

Some of the recommendations here may not apply to you; this could be because of some other illness you have, your general health, your wishes, or some or all of these things. If you think the treatment or care you get does not match what we describe here, talk about it with your doctor or with someone else in your healthcare team. .

Key points

- A miscarriage is the spontaneous loss of a pregnancy up to 24 weeks gestation.
- Recurrent miscarriage is when this happens three or more times.
- Around one woman in every 100 has recurrent miscarriages.
- Most couples who have had recurrent miscarriages still have a good chance of a successful birth in future.
- If you have had recurrent miscarriages, you may be offered blood tests and/or a pelvic ultrasound scan to try to identify the reason for them.
- In spite of careful investigations, it is often not possible to find the reason for recurrent miscarriages.
- Your doctors will not be able to tell you for sure what will happen if you become pregnant again.

What is a recurrent miscarriage?

A miscarriage is when you lose a pregnancy at some point in the first 23 complete weeks of pregnancy. When this happens three or more times doctors call this recurrent miscarriage. For women and their partners it is a very distressing problem. Around one woman in every 100 has recurrent miscarriages. This is about three times more than you would expect to happen just by chance, so it seems that for some women there must be a specific reason for their losses. For others, however, no underlying problem can be identified; their repeated miscarriages may be due to chance alone.

Why does it happen?

Often, in spite of careful investigations, the reasons for recurrent miscarriages cannot be found. However, if you and your partner feel able to keep trying, you still have a good chance of a successful birth in future.

There are a number of things which may play a part in recurrent miscarriage. It is a complicated problem and more research is still needed.

Your age and past pregnancies

The older you are, the greater your risk of having a miscarriage. The more miscarriages you have had already, the more likely you will be to have another one.

Genetic factors

In around three to five in every 100 women who have recurrent miscarriages, they or their partner have an abnormality on one of their chromosomes (the genetic structures within our cells that contain our DNA and the features we inherit from our parents). Although such abnormalities may cause no problem for you or your partner, they may sometimes cause problems if passed on to your baby.

After a third or subsequent miscarriage fetal products may be sent off by your doctor to assess the genetics of your baby. This may be helpful when considering further pregnancies.

Abnormalities in the embryo

An embryo is a fertilised egg. An abnormality in the embryo is the most common reason for single miscarriages. However, the more miscarriages you have, the less likely this is to be the cause of them.

Autoimmune factors

Antibodies are substances produced in our blood in order to fight off infections. Around 15 in every 100 women who have had recurrent miscarriages have particular antibodies, called antiphospholipid antibodies (aPL), in their blood; fewer than two in every 100 women with normal pregnancies have aPL antibodies. Some people produce antibodies that react against the body's own tissues; this is known as an autoimmune response and it is what happens to women who have aPL antibodies. If you have aPL antibodies and a history of recurrent miscarriage, your chances of a successful pregnancy may be only one in ten.

Womb structure

It is not clear how far major irregularities in the structure of your womb can affect the risk of recurrent miscarriages. Estimates of the number of women with recurrent miscarriage who also have these irregularities range from 2 out of 100 to as many as 37 out of 100. Women who have serious anatomical abnormalities and do not have treatment for them seem to be more likely to miscarry or give birth early. Minor variations in the structure of your womb do not cause miscarriages.

Weak cervix

In some women the entrance of the womb (the cervix) opens too early in the pregnancy and causes a miscarriage in the third to sixth month. This is known as having a weak (or 'incompetent') cervix. It is overestimated as a cause of miscarriage because there is no really reliable test for it outside of pregnancy.

Polycystic ovaries

If you have polycystic ovaries your ovaries are slightly larger than normal ovaries and produce more small follicles than normal. This may be linked to an imbalance of hormones. Just under half of women with recurrent early miscarriages have polycystic ovaries; this is about twice the number of women in the general population.

Having polycystic ovaries is not a direct cause of recurrent miscarriage and does not mean that you are at any greater risk of further miscarriages. We are not sure what the link is.

Hyperprolactinaemia

Prolactin is a hormone which prepares a pregnant woman's breasts to produce milk. When a woman produces too much prolactin, this is known as hyperprolactinaemia. It is not yet clear whether this condition plays a role in recurrent miscarriage because the evidence is conflicting.

Infections

If a serious infection gets into your bloodstream it may lead to a miscarriage. If you get a vaginal infection called bacterial vaginosis early in your pregnancy, it may increase the risk of having a miscarriage around the fourth to sixth month or of giving birth early. It is not clear, though, whether infections cause recurrent miscarriage. Illnesses such as measles, herpes, listeria, toxoplasmosis and cytomegalovirus are not thought to cause recurrent miscarriage so you do not need to be tested for them if you have recurrent miscarriages.

Blood conditions

Certain inherited conditions mean that your blood may clot more easily than usual. These conditions are known as thrombophilia. They do not though, mean that a serious blood clot will inevitably develop. Although thrombophilia has been thought to play some part in miscarriage, we do not yet know enough about how or why that is.

Alloimmune reaction

Some people have suggested that some women miscarry because their immune system does not respond to the baby in the usual way. This is known as an alloimmune reaction. There is no clear evidence to support this theory.

Diabetes and thyroid problems

Diabetes or thyroid disorders can be factors in single miscarriages. They do not cause recurrent miscarriage, as long as they are treated and kept under control..

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What can be done?

- **Supportive antenatal care:** Women who have supportive care from the beginning of a pregnancy have a better chance of a successful birth. There is some evidence having an early ultrasound scan can reduce the risk of further miscarriages. When you conceive, please telephone the Fertility Clinic on **0118 322 8785** where we will organise a six week scan (two weeks after your missed period).
- **Screening for abnormalities in the structure of your womb:** You may be offered a pelvic ultrasound scan to check for and assess any abnormalities in the structure of your womb, so that they can be treated if necessary.
- **Screening for genetic problems:** You and your partner may be offered a blood test to check for chromosome abnormalities; the test is known as karyotyping. If either or both of you are found have an unusual karyotype result, you should be offered the chance to see a specialist called a clinical geneticist. They will explain the result and discuss the implications for future pregnancies and what your choices may be. This is known as genetic counselling. It can help you decide what you want to do for the future. If it seems likely that other members of your family could be affected by the same problem, they too may be offered genetic counselling.
- **Screening for vaginal infection:** If you have had miscarriages in the fourth to sixth month of pregnancy or if you have a history of going into labour prematurely, you may be offered tests (and treatment if necessary) for an infection known as bacterial vaginosis (BV). If you have BV, treatment with antibiotics may help to reduce the risks of losing your baby or of premature birth.
- **Treatment for aPL antibodies:** There is some evidence that if you have aPL antibodies and a history of recurrent miscarriages, treatment with low-dose aspirin tablets and low-dose heparin injections in the early part of your pregnancy may improve your chances of a live birth up to about 7 in 10 (compared to around 4 in 10 if you take aspirin alone and just 1 in 10 if you have no treatment).
Even with treatment, you will have a risk of extra problems during pregnancy (including pre-eclampsia, restriction in the baby's growth and premature birth). You should be carefully monitored so that you can be offered appropriate treatment for any problems that arise. Steroids (certain sorts of natural or synthetic hormones) have been used to treat aPL antibodies in recurrent miscarriage, but they do not seem to improve the chances of a successful delivery and they carry significant risks for you and your baby, compared with aspirin and heparin.
- **Treatment for thrombophilia:** Although you may have a higher risk of miscarriage if you have an inherited tendency to blood clotting (thrombophilia), you may still have a healthy and successful pregnancy. At present, there is no test available to identify whether you will miscarry if you have thrombophilia. You may, be offered treatment to reduce the risk of a blood clot.
- **Tests and treatment for a weak cervix:** If you have a weak cervix, a vaginal ultrasound scan during your pregnancy may indicate whether you are likely to miscarry. If you have a weak cervix, you may be offered an operation to put a stitch in your cervix, to make sure it stays closed. It is usually done through the vagina, but occasionally it may be

done through a 'bikini line' cut in your abdomen, just above the line of the pubic hair. Although having a cervical stitch after the third month of pregnancy slightly lowers your risk of giving birth early, it has not been proved to improve the chances of your baby surviving. Because all operations involve some risk, your doctors should only suggest it if you and your baby are likely to benefit. They will discuss the risks and benefits with you.

- **Hormone treatment:** It has been suggested that taking progesterone or human chorionic gonadotropin hormones early in pregnancy could help prevent a miscarriage. Whilst it is safe to take progesterone in pregnancy there has been a recent randomised controlled trial showing that, it does not improve the chance of a successful pregnancy in patients with unexplained recurrent miscarriages. (<http://www.nejm.org/doi/full/10.1056/NEJMoa1504927>)
- **Immunotherapy:** Treatment to prevent or change the response of the immune system (known as immunotherapy) is not recommended for women with recurrent miscarriage. It has not been proven to work, does not improve the chances of a live birth and it may carry serious risks (including transfusion reaction, allergic shock and hepatitis).

What could it mean for me in future?

Your doctors will not be able to tell you for sure what will happen if you become pregnant again. However, even if they have not found a definite reason for your miscarriages, you still have a good chance (three out of four) of a healthy birth.

Is there anything else I should know?

- You have the right to be fully informed about your health care and to share in making decisions about it.
- No treatment can be guaranteed to work all the time for everyone.

Where can I find further information?

This information has been taken from the Royal College of Obstetricians & Gynaecologists webpage. For further information go to www.rcog.org.uk.

If you have any questions or concerns regarding your investigations please call the Fertility Clinic on **0118 322 7286**.

These organisations also offer support:

The Miscarriage Association Tel: 01924 200 799 www.miscarriageassociation.org.uk
Tommy's Tel: 0800 0147 800 www.tommys.org.uk

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

Fertility Clinic, December 2018

Reviewed: March 2021

Next review due: March 2023

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