



## Need to talk to someone who understands?

Call our support line on: 01924 200799. Monday to Friday, 9am-4pm Chat with us online at www.miscarriageassociation.org.uk
Or email: info@miscarriageassociation.org.uk

A single miscarriage can be very distressing; and it can be devastating if the next pregnancy fails too ... and then the next.

This leaflet looks at the known and possible causes of recurrent miscarriage and the tests and treatments that might help you.

# What is recurrent miscarriage?

In the UK recurrent miscarriage means having three or more miscarriages<sup>2</sup>, even if you have a healthy pregnancy or pregnancies in between.

It affects about one in every hundred couples trying for a baby.

Sometimes a treatable cause can be found, and sometimes not. But in either case, most people are more likely to have a successful pregnancy next time than to miscarry again.



## Your feelings

It can be heartbreaking to miscarry one baby after another. Each new pregnancy brings both hope and anxiety. And each new loss may be harder to bear, especially if you feel that time is running out.

The experience can place great strain on even the strongest relationships. You and your partner might react differentl from each other and that can cause great tension.

Family and friends may find it harder to support you with each miscarriage; they may even think you're getting used to loss and able to cope.

And all the time there may be a sense that your life is on hold while you try – and try again – for a baby.

We talk more about the emotional impact of recurrent miscarriage on our website (see page 13)

<sup>&</sup>lt;sup>1</sup>In this leaflet we generally use 'you' to address the person who has had the physical losses. We hope it will also be helpful for partners and others affected

<sup>&</sup>lt;sup>2</sup> In some countries it means two or more miscarriages.

## Testing after recurrent miscarriage

If you have had three miscarriages, you should be offered tests to try to find the cause.

Testing is not usually offered after one or two early miscarriages. But you might be offered tests after two losses:

- if you are in your late 30s or 40s, or
- if it has taken you a long time to conceive, or
- if your doctor thinks your miscarriages might have an underlying cause.

If you had a second trimester (late) miscarriage, where your baby died after 14 weeks of pregnancy, you should be offered tests after this loss.

For more information on second trimester miscarriage, see our leaflet Second trimester loss: late miscarriage.

## Your hopes

It is natural to hope that having tests will give you some answers and perhaps treatment that might prevent another loss.

But there are three reasons why it may not be the answer you're looking for:

- A cause may not be found. When this happens your miscarriages are called 'unexplained' (see page 11);
- Even if a cause is found, it may not be treatable;
- Treatment may not lead to a successful pregnancy. This can happen if a pregnancy miscarries for a different reason than the one being treated.



# Why recurrent miscarriage happens

The causes of recurrent miscarriage are often the same as the causes of a single miscarriage. However, some things make miscarriage more likely to happen more than once.<sup>3</sup>

# Risk factors for recurrent miscarriage

Age Miscarriage risk increases with age. It is highest if you are over 35 and your partner (or the biological father) is over 40.

Previous miscarriages Risk increases with the number of miscarriages you have had in the past. But even after three miscarriages, most people will have a live baby next time.

Ethnicity If you are of Black African or Black Caribbean background, you have a higher risk of miscarriage. We do not yet know why this is.

Weight and lifestyle Being very overweight or very underweight increases miscarriage risk. Cigarette smoking, and drinking more than the recommended maximum amount of alcohol or caffeine may also increase your risk.

# Other known causes of miscarriage

## Chromosome problems

The chromosomes in every cell of your body carry information in the form of genes. A baby inherits half its chromosomes from each parent.

About half of all miscarriages are caused by random 'one-off' errors in the egg or sperm or in how the fertilised egg develops. We don't always know what causes these faults but they are more common in women in their late 30s or older, when egg quality reduces.

In a very few cases, one parent has an error in the way their chromosomes are arranged, called a 'balanced translocation'. This doesn't cause a problem for the parent, but it can be passed on to the baby as an 'unbalanced translocation' and cause a miscarriage. See page 13 for a link to a useful resource.



<sup>&</sup>lt;sup>3</sup> See information from the Royal College of Obstetricians and Gynaecologists (RCOG) on page 14.

## Antiphospholipid syndrome (APS)

A blood clotting disorder, also sometimes called 'sticky blood syndrome'.

It happens when your immune system makes abnormal antibodies that can cause early miscarriage.

APS can also cause problems in later pregnancy, including the baby not growing enough, pre-eclampsia or stillbirth. It also increases your risk of developing blood clots. For more detail see our leaflet Antiphospholipid syndrome and pregnancy loss.

## Other blood clotting problems

Some inherited blood clotting disorders can cause recurrent miscarriage. Some of these, such as factor V Leiden and protein S deficiency are linked to a slightly higher risk of miscarriage.

## Cervical weakness (also known as 'incompetent cervix')

Your cervix is a kind of 'gateway' between the uterus and vagina, which normally dilates (widens) during labour to allow the baby to be born.

If the cervix is weakened or damaged, it might dilate too early in pregnancy. This is a known cause of some second trimester (late) miscarriages, which might recur.

## Possible causes

The problems listed below may play a part in causing recurrent miscarriage, but the links are less clear.

## Abnormally shaped uterus or other uterine problems

A small number of women (5-6 in 100) are born with an unusually shaped uterus (womb). This is rather more common (13 in 100) in women with recurrent miscarriage.

A septate or bicornuate uterus, both divided down the centre to some extent, may increase your chance of miscarriage. (There is a helpful diagram in the RCOG patient information leaflet.)

Fibroids or scar tissue in your uterus may also affect your risk of miscarriage, but this depends on their size and position.



## Hormonal problems

There are several hormonal conditions that are sometimes linked to miscarriage.

## Polycystic ovarian syndrome (PCOS)

is associated with an increased risk of miscarriage. This may be due to increased levels of insulin and testosterone (male hormone) that many women with this condition have, but the relationship is not clear.

Diabetes that is well controlled does not increase miscarriage risk. Poorly controlled diabetes may mean a higher chance of miscarriage.

Thyroid problems that are well controlled do not increase miscarriage risk. Untreated thyroid disease or high levels of thyroid stimulating hormone (TSH) or thyroid antibodies may increase miscarriage risk.

### Prolactin

Abnormal levels of prolactin may increase the risk of miscarriage.

### Immune problems

There is no clear evidence to show that immune problems, including raised levels of NK cells, cause or increase the risk of miscarriage. There is a need for more research in this area.

### Infection

Some serious infections can cause or increase the risk of single miscarriages. But it is not clear if infection plays a role in recurrent miscarriage.

### Male factors

Abnormal DNA in sperm may increase the risk of recurrent miscarriage. Age or lifestyle factors may also play a part.



### **Tests and treatments**

The information that follows reflects the recommendations of the Royal College of Obstetricians and Gynaecologists (RCOG) in their Green-top Guideline No. 17.4

Your hospital team or GP should refer you for tests, either in your hospital or at a dedicated recurrent miscarriage clinic.

## **Genetic problems**

### **Testing**

If possible, your clinic should test tissue from the miscarriage for abnormalities in the baby's chromosomes.

If tests on the pregnancy tissue show a chromosome problem, that usually means that this is a 'one-off' problem and you have a good chance of a healthy pregnancy next time.

If it isn't possible to test the pregnancy, or if the results suggest a chromosome problem that could be inherited (e.g. an 'unbalanced translocation'), you and your partner will be offered blood tests to check for any inherited chromosome problems that might cause your recurrent miscarriages.

It can take several weeks to get results from these tests.

#### Treatment

If you or your partner are found to carry a balanced translocation, you should be offered genetic counselling to help you to decide about future pregnancies.

## **Blood clotting problems**

## **Testing**

You should be offered blood tests for Antiphospholipid Syndrome (APS). You need to have two blood tests taken at least 12 weeks apart and at least 6 weeks after your miscarriage. If both tests are positive, this will confirm APS.

You may also be offered blood tests for inherited blood clotting disorders (thrombophilias).

### **Treatment**

If you do have APS you will be treated with low dose aspirin tablets and heparin injections. Together, these make your blood less likely to clot and can increase your chance of having a live baby. Your doctors will advise when to start each treatment.

You will be also monitored carefully throughout your pregnancy, as APS can cause other problems for you and your baby. There is more information in our leaflet on APS and pregnancy loss.

If tests show you have an inherited blood clotting problem, you may be offered heparin injections in your next pregnancy, depending on your individual circumstances.

<sup>&</sup>lt;sup>4</sup> See information from the Royal College of Obstetricians and Gynaecologists (RCOG) on page 14.

# **Abnormally-shaped uterus** *Testing*

You should be offered a pelvic ultrasound scan to check the shape of your uterus. If your uterus looks an unusual shape, you may be offered further tests to investigate this further.

#### **Treatment**

If you have a septate uterus, you may be offered an operation to correct this.

It is unclear whether surgery for fibroids or other conditions that affect the internal shape of your uterus reduces your risk of miscarriage. Your doctor should talk with you about the potential benefits and risks of surgery.

## **Cervical weakness**

## **Testing**

Cervical weakness can be hard to diagnose and there is no reliable test when you are not pregnant.

### **Treatment**

If your doctor thinks that one or more of your miscarriages might be due to a problem with your cervix, you may be offered regular scans of your cervix in your next pregnancy.

Some women are treated with a 'cervical stitch', an operation that may reduce the risk of the cervix opening too early during pregnancy.

The RCOG has a very helpful leaflet about cervical stitch (see page 14).



## **Hormonal problems**

## **Testing**

You may be offered blood tests to check for Polycystic ovarian syndrome (PCOS) or prolactin imbalance.

You might be offered thyroid tests, including thyroid antibody tests.

You might also be offered tests for diabetes if your medical history suggests this may be an issue.

### **Treatment**

There is no clear recommended treatment for PCOS, but you might be offered medication as part of a clinical research trial.

There is no clear recommended treatment if you have a prolactin imbalance, but you might be offered medication as part of a clinical research trial.

If you are found to have diabetes or thyroid disease, you will be supported to control this as well as is possible before your next pregnancy. You will also be monitored carefully during the pregnancy. Many people ask about treatment with progesterone supplements as a way to prevent miscarriage.

Research published in 2015 showed that overall, progesterone supplements during pregnancy did not improve outcomes for women with previously unexplained recurrent miscarriage (see page 14, reference 2).

However, a later research trial showed that in women with early pregnancy bleeding, progesterone treatment reduced the risk of miscarriage in those with a history of recurrent miscarriage (see page 14, reference 3).

## Weight and lifestyle

If you already are what's considered a healthy weight (BMI between 19 and 25), there's no need to change. If not, your GP or practice nurse may be able to advise and support you. If you smoke, they will be able to support you in stopping.

Experts agree that it is best to limit the amount of caffeine you drink (tea, coffee or caffeinated soft drinks) to two cups or glasses a day. They also advise either not to drink alcohol at all or to avoid drinking regularly or to excess.

## Other possible causes

With some of the causes mentioned earlier, there is no good evidence to recommend a test or treatment. These include immune problems and sperm abnormalities.

Some conditions, such as infection, will be treated but will not necessarily prevent another miscarriage.

Using IVF to screen embryos for abnormalities may be useful if you have fertility problems or a known chromosome abnormality. If not, you are more likely to have a healthy pregnancy through natural conception than via IVF.

Some treatments, such as immunotherapy are advised against except as part of clinical research.

And some possible causes of miscarriage simply can't be changed, for example age, previous miscarriage or ethnicity. Some people might consider using donor eggs or sperm or surrogacy as a way forward.



## Unexplained recurrent miscarriage

More than half of the couples who have investigations for recurrent miscarriage don't come out with an answer as to why they have miscarried.

In this situation, there is currently no evidence that any form of medical treatment will reduce your chance of a further miscarriage.

If this happens to you, you might be very disappointed. You may have hoped that finding the cause of your miscarriages would mean that you could be treated and the problem solved.

You might find it very hard to cope with not knowing why you have had repeated miscarriages. And it might be very scary to think about trying again.

On the other hand, you may feel relieved that you don't have any major problems.

You can also be reassured that, depending on your individual circumstances, you have a good chance of a healthy pregnancy next time, even without changing anything.

## Looking ahead...

Some research<sup>5</sup> has shown that women with unexplained recurrent miscarriage are more likely to have a healthy pregnancy next time if they have supportive care at a specialist unit. This includes being able to have regular scans or to talk to the specialist staff.

No one knows how or why it might make a difference, but it may reduce stress.

You might also find it helpful to get non-medical support - from family, friends, colleagues or organisations like the Miscarriage Association (see page 12).

Even though there is no proof that it will make you less likely to miscarry, it can be a relief to be able to talk to people who understand what you are going through and are willing to listen.

## ...and sometimes a different future

It can be very painful to go through repeated miscarriages. You might be determined to keep on trying. But there may come a time when it gets too much and you begin to think about other options.

Deciding to stop trying can be difficult - and it's a decision you might make and 'un-make' several times.

You may find it helpful to read our leaflet When the trying stops.



Whenever I go on the M.A. forum I always manage to find a group of people who are going through exactly the same thing as me. This makes me feel so much less alone - it helps me understand what I'm feeling and to be kinder to myself.

<sup>&</sup>lt;sup>5</sup> See page 24, references 4 and 5.

## Finding help and support

Going through recurrent miscarriage can be extremely distressing. It can feel lonely too. The right help and support can make a real difference.

The Miscarriage Association offers support and information through a staffed helpline: phone, live chat, email and via direct messaging.

Our network of support volunteers run face to face and online support groups and offer phone support.

We have an online forum with a dedicated recurrent miscarriage board, private Facebook groups and a range of leaflets.

Our website has pages on recurrent miscarriage, on looking after your mental health and stories from others who have had repeated loss. www.miscarriageassociation.org.uk

The British Association for Counselling and Psychotherapy can help you find a counsellor or psychotherapist. www.bacp.co.uk

### Relate

can help with relationship problems. www.relate.org.uk

### The Samaritans

can help people in serious emotional distress, 24 hours a day. www.samaritans.org
Tel: 116 123 (freephone)

### **Useful reading**

Leaflets from the Miscarriage Association:

All available online at miscarriageassociation.org.uk/leaflets

- · Your feelings after miscarriage
- Looking after your mental health during and after pregnancy loss
- Antiphospholipid syndrome and pregnancy loss
- Second trimester loss: late miscarriage
- About the cervical stitch
- · When the trying stops

## Useful animation about balanced translocation

https://www.youtube.com/watch?v=MLDC-J2gUC84&app=desktop

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#### References

<sup>1</sup> Recurrent Miscarriage, Investigation and Treatment of Couples (Green-top 17) Royal College of Obstetricians and Gynaecologists, June 2023 (see https://www.rcog.org.uk/guidance/browse-all-guidance/green-top-guidelines recurrent-miscarriage-green-top-guideline-no-17/

<sup>2</sup>The PROMISE trial. Coomarasamy A et al.A Randomized Trial of Progesterone in Women with Recurrent Miscarriages. N Engl J Med 2015 (see https://www.nejm.org/doi/full/10.1056/NEJMoa1504927?query=featured home)

<sup>3</sup>The PRISM trial. Coomarasamy A et al.A Randomized Trial of Progesterone in Women with Bleeding in Early Pregnancy. N Engl J Med 2019 (see https://www.nejm.org/doi/full/10.1056/NEJMoa1813730)

<sup>4</sup> Stray-Pederson & Stray-Pederson. Aetiologic factors and subsequent reproductive performance in 195 couples with a prior history of habitual abortion.

American Journal of Obstetrics & Gynaecology, 1984 (see https://pubmed.ncbi.nlm.nih.gov/6691389/)

<sup>5</sup> Liddell, Pattinson & Zanderigo. Recurrent miscarriage – outcome after supportive care in early pregnancy.

Australian Journal of Obstetrics & Gynaecology, 1991

(see https://doi.org/10.1111/j.1479-828X.1991.tb02811.x)

#### **Further information**

You might also want to read the European guidelines on recurrent pregnancy loss (2023). The link below includes the full guideline and a leaflet for patients: https://www.eshre.eu/Guidelines-and-Legal/Guidelines/Recurrent-pregnancy-loss

# Leaflets from the Royal College of Obstetricians and Gynaecologists:

Recurrent miscarriage Clinical Green-top guideline no.17: https://bit.ly/3MXPAiR

Recurrent miscarriage Patient information leaflet: https://bit.ly/3Gjo6jH

Cervical stitch Patient information leaflet: https://bit.ly/49ONRpK





The knowledge to help

## The Miscarriage Association

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