Understanding Recurrent Miscarriage

What is recurrent miscarriage?

A miscarriage is a condition of pregnancy loss before 24 weeks of gestation. 10-15% of pregnancies result in a miscarriage.

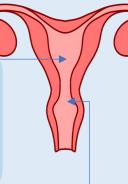
Recurrent miscarriage is the loss of three or more consecutive pregnancies, and affects approximately 1% of couples trying to conceive.

What are the possible causes of recurrent miscarriage?

Gynaecological Conditions

Uterine Abnormalities

Congenital uterine malformations (e.g. uterine septum) and acquired uterine conditions (e.g. adhesions and scarring in the uterus) can increase the risk of recurrent miscarriage. This may be detected by an ultrasound scan.



Cervical Abnormalities

Congenital and acquired cervical weakness and abnormalities might cause the cervix to dilate too early in the pregnancy, resulting in miscarriage.

Other Medical Conditions

Hormonal Conditions

Diabetes, thyroid problems (hypothyroidism, hyperthyroidism, antithyroid antibodies) and polycystic ovarian syndrome (PCOS) may increase the risk of recurrent miscarriage, particularly if the condition is not well-controlled.

Blood Clotting Disorders

Inherited and acquired deficiency of anticoagulant proteins can increase the risk of blood clot formation.

Autoimmune conditions such as antiphospholipid syndrome (APS) increase blood clotting which affects the flow of nutrients to the fetus, leading to recurrent miscarriage.

These can be detected through blood tests. Treatment may involve aspirin and anticoagulants to decrease blood clotting.

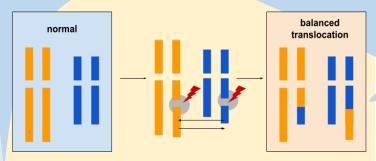
Chromosomal Abnormalities

The chromosomes in our cells carry information for them to function.

One copy of each pair of chromosomes is inherited from each parent, with a total of 23 pairs in humans.

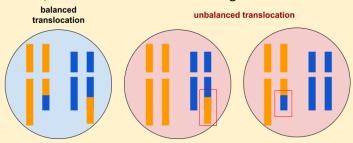


In some cases, one parent has a **chromosomal rearrangement** – when parts of two different chromosomes break off and rejoin to the other chromosome to produce a new arrangement, in the form of a **balanced translocation**.



While this may not manifest with physical symptoms in the parent, the baby might inherit the abnormal chromosome. In this case, the child may

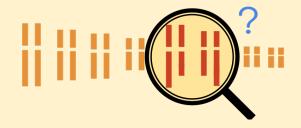
- 1) inherit the **normal** chromosomal arrangement;
- 2) be born with a **balanced translocation**, with no physical signs or symptoms; or
- 3) inherit too little or too much genetic material in the form of an **unbalanced translocation**. In this case, the risk of recurrent miscarriage increases.



What testing can be done for chromosomal abnormalities?

Chromosomal analysis involves examining your genetic material to identify chromosomal abnormalities that might contribute to recurrent miscarriage. This is done through a blood sample, and involves looking at the number, size, and structure of the chromosomes.

However, chromosomal analysis cannot identify genetic mutations in the chromosome or disorders that do not arise from chromosomal abnormalities.



What can I do if my results show that I have chromosomal abnormalities?

Genetic counselling for future pregnancy plans is recommended, where results of the genetic testing will be used to clarify risk and options available.

<u>Depending on the genetic testing results, you may consider:</u>

- Prenatal diagnosis for fetal chromosomal analysis through chorionic villus sampling or amniocentesis at the next conception.
- In vitro fertilization with preimplantation genetic testing to screen for unaffected embryos.



What if no cause can be found?

While 50% of recurrent miscarriage cases have no identified cause, testing can offer clues about potential risk factors that can be used to advise on future pregnancies. Even with no cause, about 70% of couples have a next successful pregnancy till full-term without any treatment or medication.

What support is available?

Couples experiencing recurrent miscarriage should seek medical advice promptly for guidance on testing to identify the potential causes. Consult your gynaecologist for management guidance.

We understand that recurrent miscarriage can put women and couples under tremendous stress. If you are struggling, consider talking to your family doctor for mental health support options.

For further enquires, you may contact us.

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