

Plain language summary

Recurrent Miscarriage

Who is this summary for?

People who experience recurrent miscarriage, including women and men/partners.

What is this summary about?

The National Women and Infants Health Programme, Health Service Executive has developed a number of clinical guidelines to help health care professionals to deliver evidence-informed care. One of these guidelines is around the assessment and management of recurrent miscarriage. This plain language summary describes the key points and important take home messages from this Guideline.

What is recurrent miscarriage?

We define recurrent miscarriage (RM) as the loss of two or more pregnancies, in a row, before 12 weeks of pregnancy. These include pregnancies confirmed by pregnancy test or ultrasound, as well as molar pregnancies (a particular type of pregnancy loss caused by over-development of the placenta).

When should tests be done after recurrent miscarriage?

Some investigations should begin after two consecutive miscarriages; some tests will only be carried out after the third miscarriage, in line with the evidence. The decision on when to start investigations should be decided by the doctor and the woman/couple as the result of shared decision-making, taking into account individual history and risk factors, and available resources.

If a cause or risk factor is identified, this does not always mean there is an available treatment to reduce the risk of further miscarriages. There is an excellent prognosis for future pregnancy outcome without intervention (e.g., medications) if women are offered supportive care alone in a dedicated early pregnancy assessment unit.

Women/couples with any number of non-consecutive miscarriages should be able to access supportive care, that meet their needs, in the form of psychological supports or counselling, and early scans in any subsequent pregnancies.

<https://www.hse.ie/eng/about/who/acute-hospitals-division/woman-infants/clinical-guidelines/>

<https://www.rcpi.ie/faculties/obstetricians-and-gynaecologists/national-clinical-guidelines-in-obstetrics-and-gynaecology/>

It is important to note that in many cases of recurrent miscarriage (about half) no risk factors or cause may be found.

However, there are some factors that may increase the risk:

- Increasing age (over 35 years), for women and men
- Previous miscarriages
- Ethnicity, e.g. Black African, Black Caribbean
- Alcohol consumption
- Caffeine consumption (>200mg per day)
- Body mass index (BMI) ≥ 25 or < 18.5
- Underlying or pre-existing medical conditions: e.g. thyroid disorders, diabetes, or some conditions that affect the blood such as antiphospholipid syndrome
- Anatomical anomalies, i.e. issues with the physical structure of the organs such as the shape of the womb or a problem with the cervix
- Genetics
- Male factors, e.g. sperm health.

How will recurrent miscarriage care be organised?

Women/couples should be referred to a recurrent miscarriage clinic. This is an outpatient clinic that offers specialist tests, support and, if possible, treatment. Women/couples should preferably be seen and tested prior to a new pregnancy. The clinic should have appropriate staffing with expert doctors and midwives, with access to the required equipment and well-located facilities.

Written information should be given before appointments in the recurrent miscarriage clinic, and further written information should accompany explanation of test results, treatments, and future pregnancy plans. Women/couples should receive contact numbers for available supports, including the early pregnancy assessment unit and emergency room.

What tests will women/couples be offered?

Many are keen to undergo any test that might help find a reason for their recurrent miscarriages, but there are few tests that are routinely recommended. This is because there is still a lot of research ongoing in this area to try and find out the causes and treatments for recurrent miscarriage. Some tests might be suggested based on a person's particular circumstances and history.

- A full history will be taken to check for any medical conditions, previous surgeries or any family history that might be important
- Assessment of risk factors such as smoking, alcohol, diet, exercise, BMI and stress
- Pelvic ultrasound to look at the shape of the womb
- Blood tests to check thyroid function and for a clotting condition called antiphospholipid syndrome

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- In certain cases, hormonal testing – such as female hormone profiles and ovarian reserve (egg count) or testing for diabetes might be done
- Any tests done on previous pregnancy tissue will be checked to make sure that no findings might be relevant to the miscarriages
- Assessment of factors in the male partner which may contribute to sperm health, such as age, smoking, exercise and BMI

Only after three consecutive miscarriages:

- The genetic make-up of pregnancy tissue (referred to as 'cytogenetic analysis') is tested. This is done on the second miscarriage if a woman is less than 35 and has had no prior livebirth.

What tests are not recommended?

- Routine immunological screening – such as blood tests for human leucocyte antigen, cytokine and natural killer cell testing.
- Screening for hereditary thrombophilia (clotting disorders), unless there is a family or personal history of clotting.
- Screening for infections in women without symptoms.
- Routine genetic testing of parents for chromosomal rearrangements.
- Routine sperm DNA fragmentation (testing abnormal sperm genetics).

What treatments will be offered?

- If antiphospholipid syndrome is diagnosed, women should see a haematologist (bleeding/clotting specialist) and receive low dose aspirin and a blood thinning medication called low molecular weight heparin (LMWH) in a future pregnancy.
- Hypothyroidism ("underactive thyroid") should be treated with the medication, levothyroxine (Eltroxin).
- Options for couples with chromosomal rearrangements include attempting a further natural conception, IVF treatments such as preimplantation genetic testing (IVF with testing of the embryo before insertion in the womb) or egg/sperm donation.
- Treatments for unexplained RM may include medications like high-dose folic acid, aspirin and progesterone and very occasionally blood thinners such as low molecular weight heparin.

What treatments should not be offered?

- Surgeries for a uterine anomaly (different shaped womb) should only be done after assessment by teams experienced in these surgeries.
- For women with hereditary thrombophilia (blood clotting disorder), blood thinners such as low molecular weight heparin are only recommended if there is a history of previous clots and if recommended by a specialist.
- Treatments for male factors, e.g. such as antioxidants/vitamins for sperm health, or surgical treatments, have not been shown to reduce miscarriage.

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In unexplained RM, the following treatments are not recommended:

- Immunotherapies (treatments for the immune system) such as steroids and immunoglobulin (IVIG)
- Metformin treatment (medication that can affect blood sugar)
- Antibiotics
- Endometrial scratching or biopsy (treatments to the lining of the womb)
- Routine use of pre-implantation genetic testing (IVF with testing of the embryo before insertion in the womb).

What happens in another pregnancy?

Pregnancy after miscarriage can be an anxious time. Women/couples should receive appropriate supportive care, including a timely plan for the pregnancy, contact details in case of any worries about the pregnancy, and ultrasound examinations

Women should be booked into a consultant-led antenatal clinic at a minimum, ideally a “high-risk” or perinatal medicine clinic, with regular visits and checks on the pregnancy.

Information:

Miscarriage Association of Ireland: www.miscarriage.ie

Facebook: <https://www.facebook.com/miscarriage.ie/>

Instagram: <https://www.instagram.com/miscarriageassociationireland/>

Cork Miscarriage Website: corkmiscarriage.com.

Pregnancy and Infant Loss Ireland: pregnancyandinfantloss.ie

<https://www.hse.ie/eng/about/who/acute-hospitals-division/woman-infants/clinical-guidelines/>

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