Recurrence Miscarriage Guideline
GL1072

Approval

<table>
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<tr>
<th>Approval Group</th>
<th>Job Title, Chair of Committee</th>
<th>Date</th>
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<tr>
<td>Gynaecology Clinical Governance</td>
<td>Chair, Gynaecology Clinical Governance</td>
<td>10th May 2019</td>
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Change History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
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<tbody>
<tr>
<td>1.0</td>
<td>Sept 2016</td>
<td>Alex Swanton, Consultant</td>
<td>New guidance document</td>
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<tr>
<td>2.0</td>
<td>Feb 2019</td>
<td>Alex Swanton, Consultant &amp; Baljinder Chohan, Obs &amp; Gynae Consultant</td>
<td>Reviewed, no changes to clinical content. New referral pathway added by Fertility Clinic pg 6/7 to ensure patients are given appt. for Fertility Clinic before they leave ward</td>
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1. Purpose
The aim of this guidance is to provide high quality, efficient service and care for the patients attending the RBH’s Emergency Clinic (EC) with recurrent miscarriage. The Trust is committed to the provision that is fair, accessible and meets the needs of all individuals.

This should be read in conjunction with Medical Management of Miscarriage protocol (CG621).

2. Scope
For all staff, medical, nursing and clerical, to provide uniformity of management options for patients attending the EC with recurrent miscarriage.

The provision of evidence based high quality management of patients from referral to discharge from the EC.

3. Roles and responsibilities

- Consultant Lead for Emergency Gynaecology/Early Pregnancy Clinic
  - To ensure that all junior doctors understand the content of the protocol and are able to follow the guidelines in ensuring that patients are managed sensitively and effectively through this process.
  - To work with lead nurse to ensure that the protocol is reviewed regularly and updated to reflect any changes to current guidance.

- Lead Sister for Emergency Gynaecology/Early Pregnancy Clinic
  - Co-ordinate training of all staff to ensure that protocol is utilised effectively
  - To ensure that all patients within the Emergency Gynaecology Clinic and/or ward who are diagnosed with a recurrent miscarriage are given appropriate support and guidance through diagnosis and treatment
  - To work alongside Consultant Lead to review protocol regularly and update as necessary to reflect changes in current national guidance.

- All Doctors and Nurses working within the Gynaecology Unit
  - All staff to provide competent, effective and compassionate care for women diagnosed with a recurrent miscarriage
4. Introduction

A miscarriage is the early loss of a pregnancy. Recurrent miscarriage is when this happens three or more times. 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. For women and their partners it is a very distressing problem. 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.

Key points

− Most couples who have had recurrent miscarriages still have a good chance of a successful birth in future.
− If patients have had recurrent miscarriages, they 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.

4.1 Diagnosis

4.1.1 History

Genetic factors

In around three to five in every 100 women who have recurrent miscarriages, they or their partner will have an abnormality on one of their chromosomes. Although such abnormalities may cause no problem for the patient or their partner, they may sometimes cause problems if passed on to your baby.

After a third or subsequent miscarriage fetal products may be sent off to Cytogenetics. This may be helpful when considering further pregnancies.

Abnormalities in the embryo

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

Autoimmune factors

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.
Antiphospholipid syndrome is the most important treatable cause of recurrent miscarriage. Antiphospholipid syndrome refers to the association between aPL antibodies – lupus anticoagulant, anti-cardiolipin antibodies and anti-B2 glycoprotein-I antibodies – and adverse pregnancy outcome or vascular thrombosis.

Adverse pregnancy outcomes include:

- three or more consecutive miscarriages before 10 weeks of gestation
- one or more morphologically normal fetal losses after the 10th week of gestation
- one or more preterm births before the 34th week of gestation owing to placental disease.

Uterine abnormalities

It is not clear how far major uterine irregularities can affect the risk of recurrent miscarriages. Estimates of the number of women with recurrent miscarriage who also have these irregularities range from two 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 uterine variations do not cause miscarriages.

Weak cervix

In some women 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

Polycystic 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. We are not sure what the link is but may be linked with insulin resistance and elevated androgen levels.

Infections

Sepsis or a serious infection may lead to a miscarriage. Bacterial vaginosis early in pregnancy may increase the risk of having a miscarriage around the fourth to sixth month or be linked to premature delivery. It is not clear, though, whether infections cause recurrent miscarriage. This rules out illnesses like measles, herpes, listeria, toxoplasmosis and cytomegalovirus. Patients do not need to be tested for them routinely.
Thrombophilia Defects
Although thrombophilia has been thought to play some part in miscarriage, we do not yet know enough about how or why that is. A full thrombophilia screen (10-12 weeks after a pregnancy event) can be arranged to analyse both inherited and acquired defects. Patients with positive results are treated with aspirin and low molecular weight heparin during pregnancy as this has been shown to improve live birth rates.

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.

4.2 Management of recurrent miscarriage
Initially, patients with recurrent miscarriage need to be managed like any other patient undergoing a pregnancy loss (see Management of Miscarriage Procedural Document) and be offered appropriate treatment options. For patients undergoing their 3rd or subsequent miscarriage and are undergoing surgical management (SMM), products of conception can be sent for cytogenetic analysis (via The Churchill Hospital, Oxford). The follow up of any cytogenetic analysis can be done via a letter from the emergency clinic or as part of a fertility outpatient appointment (this will require a new GP referral).

4.3 Follow-up
Patients who have recurrent miscarriage and require follow up can be referred to the fertility clinic from their GP or by internal referral from EPU/Sonning Ward to be reviewed for a consultation and undergo the following investigations:

- Baseline hormone profile
- Ovarian reserve testing – depending on history
- Thyroid function
- Thrombophilia testing
- Parenteral Karyotyping
- Ultrasound +/- MRI
Subsequent treatment will depend on the results of the tests but all patients will be offered supportive care during their subsequent pregnancies which has been shown to improve outcome.

Women with unexplained recurrent miscarriage have an excellent prognosis for future pregnancy outcome without pharmacological intervention if offered supportive care alone in the setting of a dedicated clinic.

4.4 Referral process

4.4.1 A referral letter must be raised on EPR

4.4.2 Sonning Ward/EPU to make the appointment for patient to be seen on Fertility Clinic on EPR to seen in either the Consultant, Clinicians or Nurse’s clinic as long as a referral letter is raised on EPR from the Ward.

4.4.3 Recommend that appointment is given to the patient before they leave the Ward. Appointments can be made for either the RBH or outreach clinics. Please do NOT send patients to the Fertility Clinic to make the appointment.

4.4.4 Appointments can be made for soon after, but patient must be informed by the Ward staff if they are RCM, Thrombophilia screen cannot be done till 12 weeks after miscarriage. Supportive care will also be discussed at the clinic appointment.

5. References

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

Helpful organisations

These organisations offer support.

The Miscarriage Association  Women's Health
Tel: 01924 200 799  Tel: 0845 125 5254
www.miscarriageassociation.org.uk  www.womenshealthlondon.org.uk