Investigations for couples with recurrent miscarriage

Department of Gynaecology
We are sorry to hear that you have had a further pregnancy loss. As a result of your history we are now suggesting that we do some additional investigations to see if there is an underlying reason for the miscarriages you have suffered. It is important to realise that even in cases such as yours there is often no underlying cause found and the outlook is still very good.

This information is for couples who have had three or more miscarriages in a row. It is based on the Royal College of Obstetrics and Gynaecology guidelines (RCOG) ‘The management of recurrent miscarriage’.

Why me?

Unfortunately miscarriage is very common. Around one in four pregnancies end this way. Often, in spite of careful investigations, the reason for your miscarriages can not be found. However, if you and your partner keep trying, you still have a good chance of a successful birth in the future.

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

Your age and past pregnancies

The older you are the greater the risk of miscarriage. For example a woman aged 25 with a history of 3 previous miscarriages (and normal investigations) has over an 85% chance of a successful pregnancy next time. A 40 year old woman with the same history and results has a reduced chance of a successful pregnancy of around 65%. However the outlook in both cases is still very good.

Genetic factors

For around three to five in every 100 women who have recurrent miscarriage, they or their partner have an abnormality on one of
their chromosomes. If appropriate we can analyse your pregnancy tissue for chromosome abnormalities (further information later in this leaflet). Genetic abnormalities can lead to a higher rate of pregnancy loss, but even when these abnormalities are present you can still achieve a successful pregnancy.

**Autoimmune factors**
Around 15 in every 100 women who have recurrent miscarriage have particular antibodies called anticardiolipin antibodies. These antibodies relate to a condition called antiphospholipid or Hughes’ syndrome. Untreated this leads to miscarriage in eight to nine times of out of ten. With treatment the risk of miscarriage drops down to the same as the rest of the population.

**Blood clotting conditions**
Some women carry abnormalities in the way their blood clots. This leads to them forming blood clots more easily than unaffected women. These conditions called thrombophilias are more commonly found in women who have recurrent miscarriage. Although the evidence behind treatment is not strong, we are currently suggesting that women who are known to have one or more of these conditions take treatment throughout their pregnancy to try and improve the chances of a live birth.

There are a range of other conditions that have been associated with recurrent miscarriage, many of these have not been proven and in most cases more research is needed to understand this further. As a result we only investigate and treat conditions where we feel there is a real benefit to you.
What will happen now?

We would suggest performing a series of investigations, including blood tests over the coming weeks.

It can take up to eight weeks to get a result and about half of all tests don’t give clear answers.

Once we have the results of these blood tests we will write to you outlining the basic results and invite you to come and see one of the gynaecology consultants, who are specialists in looking after couples with recurrent miscarriage, to discuss what happens next. Your appointment with a consultant can take up to twelve weeks, this allows us to get your results.

If you experience any bleeding in your third pregnancy, we would advise you to contact the Early Pregnancy Unit (EPU) or the gynaecology ward. You are unlikely to have a third recurrent miscarriage (only 28% of couples do). Unfortunately we can not stop the bleeding but we can investigate if you do go onto miscarry and to do this we need to you to collect your pregnancy tissue. (Discussed further in this leaflet).

What investigations are needed?

1. Abnormal chromosomes. We will aim to perform genetic tests on the tissue from your miscarriage (karyotype). This is to check for underlying genetic problems. In general we find that pregnancy loss is due to an underlying genetic problem with the pregnancy, but most of the time this is not an abnormality that will recur. What we are looking for when we send this tissue off for analysis is the presence of a specific type of abnormality that may happen each time you are pregnant. If tests on the miscarriage tissue show chromosomal abnormalities, that usually means that this is a ‘one-off’ problem and you have a good chance that you will have a healthy pregnancy next time.
2. **Antiphospholipid syndrome (APS).** It makes abnormal antibodies that attack fats called phospholipids in your blood. This makes the blood more ‘sticky’ and likely to clot, which is why APS is sometimes called ‘sticky blood syndrome’. APS is a treatable cause of recurrent miscarriage. We screen women for antiphospholipid syndrome with a blood test. This however cannot be done until six weeks after the pregnancy loss and if the first test is positive, then it needs repeating again after a further six weeks. Both tests need to be positive to get a diagnosis.

3. **Other blood clotting problems.** Some inherited blood clotting disorders can cause recurrent miscarriage, particularly after 14 weeks. These include factor V Leiden, factor II (prothromobin), gene mutation and protein S deficiency. screen.

4. **Cervical weakness** (also known as ‘incompetent cervix’)
   Some women – probably less than one in a hundred – have a weakness in the cervix that allows it to dilate too early. This is a known cause of late (second trimester) miscarriage.

### How to collect your pregnancy tissue

If you are having surgical management of your miscarriage then we will organise for your pregnancy tissue to be sent to Guys hospital for chromosome analysis. If you choose to have medical or conservative management then please speak to the early pregnancy nurse who will discuss with you in further detail what to do next. This system can occasionally fail to produce useful results and in these situations we may suggest some alternative blood tests on you and your partner.

If you chose medical or conservative management then we need to ensure that the laboratory receives your pregnancy tissue as
soon as possible so you can bring your pregnancy tissue to the gynaecology ward within 24 hours of your miscarriage for us to send of to Guys Hospital. You will be asked to collect your tissue in a clean container which needs to be kept in the fridge, until you bring it up to the ward. Or you can send your pregnancy tissue off yourself through the post office by guaranteed next day delivery. (Further information will be given to you by the EPU nurse).

**Are there other tests I need?**

You may have read about a number of other tests that you feel may be relevant but we focus on the most important factors and any other tests that may become necessary will be discussed with you when you are seen in clinic.

We are keen to give you as much information as possible at this difficult time but the implications and actual results of your tests will be discussed with you in person at your appointment.

Women who have supportive care from the beginning of a pregnancy have a better chance of a successful birth, there is some evidence that attending an early pregnancy clinic for reassurance scans can reduce the risk of further miscarriage. Hence even if we do not find an underlying cause for your miscarriages we will offer you a series of reassurance scans from six weeks. These are normally offered every two weeks up to your routine scan at twelve weeks of pregnancy.
Contact numbers

Royal Sussex County Hospital
(Main) 01273 696955
(EPAC) Ext. 4402, Monday-Friday 8-4
(Day unit) Ext. 7242
(Level 11) Ext. 4013

Princess Royal Hospital
(Main) 01444 441881
(EPAC) Ext. 8370 / Ext. 5686
(Horsted Keynes) Ext. 5685

The Miscarriage association
C/O Clayton Hospital,
Northgate, Wakefield,
West Yorkshire WF1 3JS
01924 200799
www.miscarriageassociation.org.uk

If you have bleeding and/or pain you can get medical help and advice from:
• Your GP or midwife who may advise you to go to hospital
• Your nearest EPU which can be found at www.earlypregnancy.org.uk/FindUS1.asp.
• Referral into the Early pregnancy unit is based on assessment by a health professional.

NHS CHOICES 111 when you need medical help fast but it’s not a 999 emergency. The service is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.
Alternatives Pregnancy Counselling Centre
01273 687687
Email alternativesbtn@btconnect.com

- BSUH NHS TRUST(2011) GP001 Early Pregnancy Unit Clinical Guidelines.
- Patient UK Information leaflets www.patient.co.uk
  Women’s Health Category
- Royal College of Obstetricians and Gynaecologists www.rcog.co.uk