Introduction
The purpose of this leaflet is to:
• Describe what a miscarriage is and why it happens
• What it means for your health
• What treatment options are available
• Discuss future fertility and the risk of miscarriage occurring again

What is miscarriage?
A miscarriage is the spontaneous loss of a pregnancy between conception and 24 weeks into pregnancy. Most miscarriages occur very early in pregnancy (before 12 weeks). It is estimated that nearly half of all pregnancies end in miscarriage. The majority of these losses occur before a period is missed and therefore women often do not realise that a miscarriage has occurred. Once the menstrual period is missed and the urine pregnancy test becomes positive, only one in six pregnancies will miscarry. In general, the risk of miscarriage decreases as the pregnancy progresses further.

What are the symptoms of miscarriage?
Symptoms of miscarriage vary from one woman to another. The most common symptom is vaginal bleeding. This is usually accompanied by period-like pains. Some women will have no bleeding or pain and the only symptoms they experience are the loss of pregnancy symptoms such as nausea or breast tenderness. Some women may not experience any symptoms at all and may be diagnosed as having a miscarriage at a routine ultrasound scan.

Bleeding and pain are not always associated with a miscarriage as many women with normal pregnancies may also experience these symptoms.
Why do miscarriages happen?

Most miscarriages are caused by a fault on a chromosome (a package of genes) within the cells of the developing pregnancy. This means that the pregnancy is not healthy and is not developing normally. This cannot be prevented nor is it caused by anything you have done during the pregnancy.

The risk of faults occurring on chromosomes increases with the mother’s age, so miscarriage is more likely to occur in older women. The risk of miscarriage increases from about ten percent for a 20 year old women to approximately 40 percent at the age of 40.

Very rarely a miscarriage can happen because the uterus (the womb) is not the normal shape or because the mother’s immune system rejects the pregnancy. Because these problems are so rare, we would normally only search for them in women who have experienced three or more miscarriages in a row. There is no evidence that early miscarriages are caused by any infections.
Types of miscarriage
There are three different types of miscarriage:

1. **Early embryonic demise** is when the pregnancy has stopped developing but it remains intact within the uterus.

2. **Incomplete miscarriage** is when some of the pregnancy tissue has already been passed but some tissue is still left inside the uterus.

3. **Complete miscarriage** is when all of the pregnancy has been passed and the uterus is empty.

Diagnosing a miscarriage
The most accurate method to diagnose a miscarriage is an internal (transvaginal) ultrasound scan. This type of scan can detect subtle changes inside the uterus, and gives a more accurate way of telling between normal pregnancies and miscarriages. In some women it may not be possible to diagnose a miscarriage during the first scan and the examination needs to be repeated a week later.

Another way to identify a miscarriage is by measuring the level of pregnancy hormones. This may help to tell between normal early pregnancies and miscarriages. Generally, if the hormone levels are low the risk of miscarriage is increased.

Management of miscarriage
The way we treat and manage miscarriage largely depends on the severity of the symptoms. If you experience severe pain or very heavy bleeding you may need to be admitted to the hospital straight away. However, if the symptoms of miscarriage are mild you will be offered a choice of different management options.
1. Expectant management

This means waiting for the miscarriage to happen naturally. We normally recommend this option when an incomplete miscarriage has been diagnosed. This method is successful for about 80 percent of women with incomplete miscarriages.

If you take this option, you may bleed for up to two weeks. During this time you may experience some heavy bleeding with clots and period-like pains. You may need to take painkillers (such as Paracetamol or Ibuprofen).

If your bleeding does not settle you should return to the Early Pregnancy Unit for a repeat scan to check whether there is any pregnancy tissue left inside your uterus. If your uterus is empty, a complete miscarriage is diagnosed and no further treatment is needed.

If there is some pregnancy tissue left, then you may be offered a surgical procedure called an Evacuation of Retained Products of Conception (ERPC). Alternatively you may continue to wait for the remaining pregnancy tissue to pass naturally.

Risks associated with expectant management

- **Heavy bleeding** – Bleeding occurs in every miscarriage. The amount of bleeding may vary. It is unusual for women to experience very heavy bleeding. Generally if you need more than one sanitary towel per hour you may be losing too much blood.

- **Abdominal pain** – Minor lower abdominal cramping is common. Pain killers such as Paracetamol or ibuprofen may help. Severe lower abdominal pain or tenderness that is not relieved by painkillers is unusual.
• **Infection** – Symptoms that might indicate infection include fever or shivering, vaginal discharge which smells foul or looks infected, abdominal pain or tenderness which is persistent and not relieved by painkillers.

If you experience any of the heavy bleeding, severe lower abdominal pain or tenderness that is not relieved by painkillers, infection (all as described above) go to the Early Pregnancy Unit immediately. If this occurs out of clinic hours (09:00 till 17:00 Monday to Friday) then please go to the nearest Accident and Emergency Department.

• **Prolonged follow up** – Although most miscarriages are completed within a week from the diagnosis, sometimes it may take much longer for the pregnancy tissue to be expelled from the uterus.
2. Surgical Treatment – Evacuation of retained products of conception

This involves emptying the uterus using vacuum suction. We recommend this treatment when an early embryonic demise has been diagnosed. This is because it can take a long time for this type of miscarriage to be passed out of the uterus spontaneously. Also, if the pregnancy loss occurs later in pregnancy, bleeding and pain may be severe requiring emergency surgery.

Evacuation of retained products of conception is usually performed a few days after diagnosis in the Day Surgery Centre or in our Outpatient Clinic. However, if you are bleeding heavily or if you are in pain, you will be admitted to the gynaecology ward.

The procedure can be carried out under local anaesthetic in the clinic, or under general anaesthetic in an operating theatre.

The procedure under local anaesthetic is mainly suitable for women with early miscarriages who have previously had vaginal deliveries. If you are interested in having the procedure under local anaesthesia, please ask the nurses to provide you with additional information. In either case the pregnancy is removed through the vagina so there are no cuts made on the abdomen (stomach) and there are no stitches.

Following the operation you are likely to experience some light vaginal bleeding for up to ten days. The Evacuation of retained products of conception can be carried out up to seven days after the scan. There is a possibility that while you are waiting for an Evacuation of retained products of conception you may miscarry naturally. If you experience heavy bleeding you should come back to the Early Pregnancy Unit the next day for another scan to check whether the operation is still needed. It is advisable that you telephone the Unit first (number at the back of booklet).
If the pain or bleeding is causing distress you should return to the Early Pregnancy Unit immediately. If this occurs out of clinic hours (09:00 till 17:00 Monday to Friday) then please go to the Accident and Emergency Department at the University College London Hospital.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERPC carried out under general anaesthetic</td>
<td>• Painless</td>
<td>• Admission to hospital</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Risk of anaesthetic complications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Longer recovery</td>
</tr>
<tr>
<td>ERPC carried out under local anaesthetic</td>
<td>• Fast recovery</td>
<td>• Some women experience discomfort during surgery</td>
</tr>
<tr>
<td></td>
<td>• Avoidance of risks associated with general anaesthesia</td>
<td></td>
</tr>
</tbody>
</table>

**Risks of surgical management**

These problems are rare but they will be discussed in more detail when the operation is explained to you. Risks can include:

- **Bleeding** – If you bleed very heavily during the operation you may need a blood transfusion. This is rare and would only happen if the doctors felt it is absolutely necessary. If you object to receiving blood products please tell us before you sign a consent form.

- **Infection** – All surgical procedures carry a risk of infection. If you develop a fever, unusual vaginal discharge or persistent abdominal pain, please come back to the Unit or visit your GP as soon as possible. If this happens, we will take vaginal swabs and give you a course of antibiotics.
• **Uterine perforation** – This is a very rare complication. During the operation it is possible for the surgeon to accidentally make a small hole in the uterus. In this situation he or she may need to make a small cut on the abdomen and insert a telescope (laparoscopy) in order to check whether there is bleeding, and if necessary, repair the hole. In exceptional circumstances it might be necessary to proceed to an open operation (laparotomy). You would also be given antibiotics to prevent infection.

• **Incomplete removal of pregnancy** – Occasionally, small amounts of pregnancy tissue can be left inside the uterus after the procedure. If you experience prolonged or heavy bleeding following surgery and/or pain please go to the unit for a repeat scan. If tissue is left behind it may be necessary to repeat the procedure.

We must by law obtain your written consent to any operation and some other procedures beforehand. Staff will explain all the risks, benefits and alternatives before they ask you to sign a consent form. If you are unsure about any aspect of the treatment proposed, please do not hesitate to ask to speak with a senior member of staff again.

**Follow up after miscarriage**

During the first two weeks following a miscarriage you should avoid having sex or using tampons to reduce the risk of infection. If you continue to bleed or experience pain for more than a week, you should go back to the early pregnancy unit or your GP.

It can take up to four weeks following a miscarriage for your pregnancy hormones to clear, during which time a pregnancy test can still read positive. Your next menstrual period may also be delayed for two to three weeks.
**Blood group**

Some women will have a blood type called Rhesus negative. If your blood group is Rhesus negative and you have miscarried later than 12 weeks gestation, you will need an injection called Anti-D. This helps to prevent antibodies developing against foetal blood cells, which could reduce your chance of having a healthy pregnancy in the future. The injection is also offered to all Rhesus negative women who have surgery to remove pregnancy tissue from the uterus.

**Other appointments**

If you already have antenatal and/or midwife appointments booked for the pregnancy, please inform the nurse who is dealing with you. The relevant departments will then be notified.
Emotional support
Women and their partners can have different emotional reactions to miscarriage. Grieving and depression are common reactions to losing a pregnancy and it can take time for these to resolve. If these feelings are prolonged or if you feel that you need help in coming to terms with the loss of your pregnancy, it can help to talk to a professional.

Trying again
If you would like to try for another pregnancy we advise that you wait for your next normal period. This makes it easier to find out the due date of the pregnancy. If you get pregnant before the first period this should not increase the risk of miscarriage.

Some women may need a little more time to recover emotionally and physically from the miscarriage. The best time to start again is when you and your partner feel ready to do so. There are several things you can do to increase your chance of having a healthy pregnancy:

• Take folic acid supplements
• Reduce alcohol and caffeine intake
• Stop smoking
• Eat a healthy, balanced diet
Further help
The Ectopic Pregnancy Trust
Telephone: 01895 238025
Website: www.ectopic.org

The Miscarriage Association
(Leaflets available in the unit)
Telephone: 01924 200799
Website: www.miscarriageassociation.org.uk

SANDS
(Stillbirth, miscarriage and Neonatal death support)
Telephone: 020 7436 5881

Babyloss
(Website for miscarriage)
www.Babyloss.com

There are also books which can be helpful:
Miscarriage: Women’s Experiences and Needs By Christine Moulder
Published by Pandora Press

PALS
The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. The PALS office is located on Ground Floor Atrium,

Telephone: 020 3447 9975
Email: PALS@uclh.nhs.uk
Address: PALS, Ground Floor Atrium, University College Hospital, 235 Euston Road, London NW1 2BU
How to contact us

Should you have any questions please contact the staff in our Early Pregnancy Unit:

• General Early Pregnancy Unit enquiries 020 3447 9411

• Senior Nurse 08451555000 ext 76515 (voicemail) or 020 3447 6515 (voicemail)

Early Pregnancy Unit opening times:

Mondays to Friday 09:00 till 12:30 and 14:00 till 16:30

Saturday and Sunday 09:00 till 12:00 (Accident and Emergency referrals only)

For advice out of hours you may contact NHS Direct on 0845 4647.

For emergencies after hours please attend your nearest Accident and Emergency department.

Address: The Gynaecological Diagnostic and Outpatient Treatment Unit
Clinic 3, Lower Ground Floor
Elizabeth Garrett Anderson Wing
University College Hospital
235 Euston Road,
London, NW1 2BU
If you need a large print, audio or translated copy of the document, please contact us on 020 3447 9411. We will try our best to meet your needs.

Turkish
Bu belgenin Türkçe’sini edinmek ya da Türkçe bilen birisinin size yardımcı olmasını istiyorsanız, bize başvurabilirsiniz.

Bengali
যদি আপনি এই ডকুমেন্ট অন্য ভাষায় বা ফরমেটে চান অথবা যদি আপনার একক ইন্টারনেটের প্রয়োজন হয়, তাহলে দয়া করে আমাদের সাথে যোগাযোগ করুন।

Cantonese
本文件可以翻譯為另一語文版本，或製作成另一格式，如有此需要，或需要譯員的協助，請與我們聯絡。

Polish
Jeżeli chcieliby Państwo otrzymać ten dokument w innym języku lub w innym formacie albo jeżeli potrzebna jest pomoc tłumacza, to prosimy o kontakt z nami.

Russian
Если вы хотели бы получить этот документ на другом языке или в другом формате, или если вам необходимо воспользоваться услугами переводчика, просим обращаться в администрацию.

Mandarin
本文件可以翻译为另一语文版本，或制作成另一格式，如有此需要，或需要传译员的协助，请与我们联系。