

## InfoSheet : RECURRENT PREGNANCY LOSS

### INTRODUCTION

Miscarriage can be a devastating experience – and when it happens with a subsequent pregnancy as well, the disappointment and grief are profound. It is important that a systematic approach is taken to ensure that if there is any potentially correctable cause it is identified and, if possible, addressed and treated.

### HOW COMMON ARE MISCARRIAGES?

Across-the-board, the incidence of a clinical pregnancy resulting in miscarriage is between 10% and 15%. However, the true incidence is obviously variable and depends mostly on maternal age, although paternal age does play a small role.

The approximate chance of miscarriage in a woman with no obvious health or risk factors can be:

under 30	:	about 10%
between 30 and 35	:	15 %
between 35 and 40	:	15 -20%
between 40 and 45	:	perhaps as high as 25–75%

Other factors which may result in an increased risk of miscarriage include the following:

- Lifestyle factors: e.g. smoking, alcohol, caffeine, diet, weight.
- Uterine factors: e.g. polyps, fibroids, congenital anomalies such as a septum.
- Tubal factors: e.g. hydrosalpinx (a damaged fallopian tube filled with fluid).
- Ovarian factors: e.g. poor quality eggs, inappropriate hormone production.
- Adrenal gland problems: Perhaps caused by enzyme disorders which can result in overproduction of certain hormones that interfere with fertilization and implantation of the embryo.
- Thyroid hormone disorders.
- Pituitary gland disorders.
- Infections: Certain bacterial and other infections in the genital tract might affect implantation and increase the chance of

miscarriage.

- Insulin hormone disorders: Insulin controls blood sugar levels and subtle disorders of insulin activity might predispose a woman to miscarriage.
- Immune related disorders: The immune system is the body's defence system, and the female immune system is highly sophisticated and finely tuned to protect the body but also to allow a foreign “graft” – the baby – to grow undisturbed. Imbalances in the immune system can result in pregnancy losses, as well as a variety of other problems in an ongoing pregnancy.
- Coagulation disorders: To allow blood to do its job the body has a finely balanced system of pro-coagulant and anti-coagulant factors. Imbalances in these factors can cause the blood to clot too easily and damage the early developing placenta.
- Chronic illness: Any chronic condition might impair early pregnancy development.
- Drugs: Certain medications may interfere with implantation.

### INVESTIGATION AND MANAGEMENT OF MISCARRIAGE

Many early miscarriages (under 5–10 weeks) will sort themselves out and require no medical intervention. However, it is always important to notify your Doctor if you think you may have had a miscarriage. If you have a blood type which is Rhesus (Rh) negative there is a chance that the miscarriage can alert your immune system to make antibodies against a protein your partner and baby might have. If this happens you could make antibodies against this protein that would compromise a future pregnancy. To prevent this happening your doctor will give you an injection of an antibody which will “mop up” any of these Rhesus blood group proteins that might have leaked into your bloodstream. This injection will prevent your immune system from responding.

Miscarriages are so common that we do not usually investigate women if they have an isolated

miscarriage unless there is something in their medical, reproductive or family history which might be important.

However if a woman has 2 or more miscarriages in a row we should do some baseline investigations. These might include the following (depending on the individual circumstances):

- History and clinical examination
- Genital tract cultures
- Pelvic ultrasound
- Hysterosalpingogram
- Hysteroscopy/laparoscopy
- Hormone testing eg thyroid, adrenal gland etc.
- Fasting blood sugar or insulin levels
- Chromosome testing – male and female
- Coagulation testing
- Immune testing
- Endometrial biopsy

In some cases an obvious cause can be found, and corrective treatment offered. However, in some cases no cause is found, although some forms of “empiric” treatment might be offered – as long as the potential benefits outweigh the potential risks. Empiric treatment may include:

1. A course of antibiotics to treat any possible low grade endometrial infection.
2. Low dose aspirin to improve blood flow to the uterus and prevent early clotting in the developing placenta.
3. Antioxidant vitamins; Vitamin C 250 mg twice a day, Vitamin E 400 u a day and Selenium 200 mcg daily.

It is also possible that stress can affect miscarriage rates, so it is important that you are comfortable with your physician in his/her helping you to address and understand the tests which are being done, as well as the potential treatments to improve the outcome.

Revised: 20040129