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NUH Women's Centre  
Is My Answer

## Recurrent Pregnancy Loss

## RECURRENT PREGNANCY LOSS

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Miscarriages are an emotionally difficult time for couples trying to establish a family. The Reproductive Immunology Clinic at NUH Women's Clinic adopts a multidisciplinary team approach to help couples with Recurrent Pregnancy Loss (RPL). Our team comprises specialists from various fields including: obstetrics, rheumatology, genetics as well as psychological medicine. In addition to caring for you medically, we have experienced counselors to support you through this emotionally difficult time.

### What is a miscarriage?

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A miscarriage refers to a pregnancy loss before 5 months gestation. It is estimated that about 15% of all recognised pregnancies result in miscarriage.

### What is RPL?

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RPL refers to the loss of two or more consecutive pregnancies and it affects about 5% of couples trying to conceive. About 1% of couples have three or more pregnancy losses.

### What are the causes of RPL?

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There are numerous causes described in the literature:

#### Genetic / Chromosomal



A chromosome analysis performed on parental blood identifies an inherited genetic cause in only 5% of couples. Translocation, or alteration in chromosome is the most common inherited chromosomal cause. Although a parent that carries a translocation is frequently normal, their embryo (developing baby) may receive too much or too little genetic material. When this happens, a miscarriage occurs. More often, many early miscarriages are due to random (by chance) occurrence of a chromosomal abnormality in the embryo.

#### Age



The chances of miscarriage increases as a woman ages. After the age of 40, more than one-third of pregnancies end up miscarried.

#### Hormonal/ Endocrine abnormalities



Progesterone is a hormone produced in pregnancy which is vital for a healthy pregnancy. There is some evidence although inconclusive, that suggests that low progesterone levels may contribute to recurrent miscarriages. Presently, some studies have shown that certain treatments such as progesterone supplements, injections of human chorionic gonadotrophin (hCG) may be beneficial, although the data is still inconclusive. Women with RPL should also be screened for diabetes, thyroid disorders and polycystic ovaries.

#### Uterine abnormalities



Abnormalities of the womb are also known to cause RPL.

#### Sticky Blood



Women with sticky blood have been shown to have a higher risk of blood clots and RPL. There are two main categories:

(i) Women with antiphospholipid antibodies account for up to 20% of RPL especially those who have losses in the second half of pregnancy; and treatment with aspirin and heparin has dramatically improved pregnancy outcomes in this group of women from 50% to over 90% success rates. A diagnosis is confirmed by two sets of blood tests performed three months apart.

(ii) Women with inherited disorders (thrombophilias) may also have increased risk of fetal death in the second half of pregnancy.

#### Unexplained



Up till today, no explanation is found in up to 50% of couples with RPL. Immune dysfunction has been increasingly implicated as a cause in this group as research in this arena has uncovered in the past two decades. Many of the tests to evaluate immune dysfunction are still only available in the research setting. There is mounting evidence that immunotherapy may be of benefit in a subset of women.

Our Reproductive Immunology group at NUH Women's Clinic is actively involved in research in the field to help improve understanding in hope of finding new therapies for these women.

For more information on immunotherapy, please refer to brochure "Intravenous Immunoglobulin Therapy in Recurrent Pregnancy Loss".

#### Conclusion

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You may be comforted to know that in your next pregnancy, with close monitoring alone, the chances of a successful outcome may be as high as 60-70%. A healthy lifestyle and folate supplementation is recommended before attempting another pregnancy. Smoking cessation, reduced alcohol and caffeine consumption, moderate exercise and weight control may increase your chances of a successful pregnancy. We have experienced counselors to help you cope through this emotionally difficult time.

@The information provided is not exhaustive. Further discussion with your physician is strongly recommended.