

# MISCARRIAGE



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Sadly, miscarriages are a common occurrence with 1 in 6 pregnancies ending before week 20. This is little consolation when you have lost a baby through miscarriage, but you may want to find out why it occurred and what you can do to reduce the risk of it happening again.

Be reassured that the outlook is positive. The majority of patients who have experienced a miscarriage will go on to achieve a healthy family.

## What is a miscarriage?

A miscarriage is broadly defined as a pregnancy loss prior to week 20. Recurrent miscarriage is a term used when women experience three or more consecutive early pregnancy losses.

## What causes a miscarriage?

Some of the causes of miscarriage include:

### Random chromosome and genetic abnormalities

To achieve a successful pregnancy, a chromosomally normal egg needs to join with healthy sperm, and then the genes on the chromosomes need to mix in a way that allows the embryo to successfully implant into the uterus and grow. About 60-70% of embryos lost in the first 12 weeks show major chromosomal abnormalities.

### Parental chromosome abnormalities

In a small percentage of couples, one of the partners carries a chromosome rearrangement that if passed on will cause the embryo to be abnormal. This may not cause any obvious problem in the carrier, as the chromosome defect is 'balanced' by normal chromosomal activity.

### Uterine abnormalities

For the embryo to implant normally, the uterine shape is important. Abnormalities like fibroids or uterine septum can contribute to miscarriage if the fibroids are large or extend into the uterine cavity, however it is easily detectable and treated by specialists.

### Blood clotting disorders

Certain individuals have an increased

risk of clot formation (thrombosis) and this may result in the blockage of developing placental blood vessels. These women are also at a higher risk of venous thrombosis of other blood vessels. The most common of these is deep venous thrombosis, or DVT.

### Other medical conditions

Endocrine (hormonal) diseases such as thyroid disorders and uncontrolled Diabetes have been associated with an increased occurrence of miscarriages. Obviously many other severe medical conditions can interfere with the wellbeing of the early pregnancy.

### Hormone imbalances

Hormone imbalances in the early phase after conception remain a controversial cause of pregnancy loss and infertility. The link between polycystic ovarian syndrome and miscarriage is widely reported but still not conclusively proven.

### Age & lifestyle

With advancing age random chromosome abnormalities become more common and therefore the risk of miscarriage increases. This is particularly important with women over 35 years of age and of major importance in those over 40.

Other lifestyle factors such as obesity, cigarette smoking and excessive caffeine intake may be linked to an increased risk of miscarriage.

### Immune causes

- Antiphospholipid syndrome is where a woman has immune factors in her blood called antibodies, which can either attack the developing embryo or increase the risk of blood clotting.
- Immune cells in the uterus are important in the early detection



and elimination of foreign cells such as infections or cancer.

- Sperm DNA fragmentation is where abnormal levels of fragmentation of the genetic material within sperm have also been linked to a higher risk of miscarriage in the female partner.

## Support for your next pregnancy

Our specialists have expertise in supporting women and couples who have experienced miscarriage. This includes:

- Initial testing to investigate any cause for the miscarriage, particularly if it has happened more than once
- Specialised care during the next pregnancy, including blood tests, hormonal and ultrasound monitoring to provide reassurance throughout the first stages of pregnancy.

