Miscarriages (Recurrent)

Although miscarriage is quite common (15-20% of pregnancies), recurrent miscarriage is rare. About 2% of couples have two consecutive miscarriages and 0.5-1% have more than two.

Known Causes

Abnormalities of the womb including cervical incompetence are known causes of recurrent miscarriage as are rare syndromes such as the antiphospholipid syndrome. This can cause clots to form in the placenta triggering miscarriages. Treatment is usually with aspirin or heparin.

Unfortunately, in the most cases, the cause of recurrent miscarriage remains unknown and modern medicine has little to offer. However, we do have many clues to why recurrent miscarriage occurs and the solution.

Nutrition and the work of Robert McCarrison

In the 1930s, Sir Robert McCarrison (the Director of Research in Nutrition in India) was struck by the great differences in health between races in Northern India and those in the South (this is not true today). He devised a unique experiment in which he fed rats the food of the healthy Singhs, the food of the unhealthy Bengalis and Madrassis and the equally unhealthy British diet of the 1930s.

The rats fed on the diet of the Singhs grew well and had excellent health. They appeared cheerful, alert, lived in harmony with their fellow rats and were easily handled by their keepers.

In contrast rats fed on the food of the Madrassis and Bengalis or that of the British had stunted growth, poor coats and easily succumbed to pneumonia and intestinal infections. They had **high rates of stillbirths and miscarriages**. They were irritable, bit their keepers and sometimes resorted to cannibalism.

The changes were so striking that McCarrison stated "I know nothing so potent in producing ill health as an improperly constituted diet".

For this reason, there is a strong case, in recurrent miscarriage, for having as good as possible nutrition such as plenty of fruit and vegetables, seeds and nuts, green juices, herbs and spices and removing harmful foods (sugar, refined carbohydrates, processed foods, chemicals, preservatives and artificial sweeteners).

The cause of miscarriages remains poorly understood but here was a huge clue.

The Work of Foresight

A second clue came from the work of Foresight, an organisation committed to preconceptual care which sadly closed in 2017. The aim of the organisation was to help all babies to be born healthy. It proved to be of particular benefit to infertile couples, but also to those with recurrent miscarriages. The program involved dietary advice, testing for nutritional deficiencies and toxic metals, using supplements and treating infections where present. Hair analysis for trace elements and toxic metals (originally done in conjunction with Dr Neil Ward at the University of Surrey) was at the heart of the program.

As you can see from the results below, Foresight helped thousands of couples have the children they had all but lost hope of having.

Foresight noted that having more than one toxic metal dramatically augments the dangers in pregnancy and how trace elements, most notably zinc and selenium were protective against toxic metals. Patients were advised not to get pregnant until the essential elements had been corrected and the toxic levels brought to normal.

Results from 1997 to 1999

779 babies were born to 1076 couples (1061 had fertility or miscarriage problems) This was a 72% success rate which compared with expected rates of 22.6%.

393 had previously suffered a miscarriage and 28 went on to have a further miscarriage (7.1%). The expected miscarriage rate was 20-25%. There were no miscarriages in mothers without a history of miscarriage.

The rate of stillbirths went down from 1.37 to 0.35%.

In total there were 4 terminations and malformations (0.47%) whereas the expected rate was 6%.

Some couples went on to use IVF and similar methods and had a success rate of 43.5% (national average 22.6%).

Results from 2002-2009

A further survey was done on 1578 couples who completed this program. Prior to taking part, these couples had been 2383 failed IUI, 3004 had failed IVF and 1081 had failed ICSI. They had also been 8939 miscarriages. The results on the Foresight program were 1417 live births, (89.8% success rate). **There were 42 miscarriages (2.96%) expected rate 20-25%.**

For those who did only part of the program, there were 358 babies (69.1% success rate) and 39 miscarriages (7.53%).

Results by Category

History of Infertility: 81% successfully pregnant

History of Miscarriage: 83% successfully present

History of Stillbirths: 80% successfully pregnant

History of Malformations 100% successfully pregnant

I don't believe any program has ever been as successful as this for recurrent miscarriages. The book "How to conceive Healthy Babies the Natural Way" is packed with useful information and remarkable case histories. It emphasises how good nutrition and removing toxicity is often the answer. There is more information on nutrition and pregnancy in my pregnancy leaflet.

Toxicity

Patients with the highest levels of bisphenol A were 83% more likely to miscarry in a study by Stanford University. (Bisphenol A is found in plastics). A particular problem is cans as BPA is used as a liner and it migrates over time into the food. Whenever food is kept in plastics, and especially when it is heated, BPA is released. It is nearly always present in canned foods but can be found in plastic bottles, dental sealants and plastic-lined kettles. doi: 10.1016/j.fertnstert.2014.03.024

However, this study is likely the tip of a large iceberg as many pollutants are known to cause miscarriages in animals. Some form of detoxification (see toxicity leaflet) would seem a sensible measure in those with miscarriages. Remember anything put onto your skin is absorbed into the body as is anything you can smell (such as aerosols).

Recurrent miscarriages have been linked with higher levels of mercury and nickel.

The work of Foresight has shown that as nutritional levels increase, toxicity is reduced.

Other Nutrients

High homocysteine is also linked to higher rates of miscarriage. Common reasons for this are deficiencies in folate and Vitamin B12. Hyperhomocysteinemia and recurrent early pregnancy loss: a meta-analysis. Fertil Steril, 2000; 74(6): 1196-99

Lower levels of both Vitamin C and E have been noted in those with recurrent miscarriages. Clin Chim Acta, 2000 May;295(1-2):169-77. doi:10.1016/s0009-8981(99)00255-7.

Low selenium has been linked with first trimester and recurrent miscarriages.

The Vitamin E Studies

In 1931 wheat germ oil was found to stop recurrent miscarriages. By 1937 the Shutes in Canada and Young in England were preventing miscarriages with Vitamin E. Barcharach in 1940 did statistical analyses which found Vitamin E was of value in recurrent miscarriage and by World War II many studies confirmed this. Take 200 or 400 IU of either D alpha tocopherol or mixed tocopherols (not the synthetic DL alpha tocopherol).

<u>Vitamin D</u>

A search of the medical literature by Tamblyn in 2022 looked at Vitamin D status and miscarriage. They found women with Vitamin D deficiency (<50 nmol/l) had an **88% greater chance of miscarriage** compared to those with adequate levels (>75nmol/l). Those with levels below 75nmol/l had a 60% higher chance of miscarriage compared to those with levels >75nmol/l. It is interesting that night-shift workers (who get less Vitamin D as it comes from sunshine) have an 85% higher risk of miscarriage.

<u>Drugs</u>

A Canadian study looked at the use of antidepressants during pregnancy and found those using these drugs had a 68% greater chance of miscarriage. This was highest with SSRI anti-depressants (61%) and venlafaxine (271%).

Progesterone

Progesterone is produced by the corpus luteum in the ovary. During pregnancy levels of progesterone rise and after ten weeks the placenta takes over the production of progesterone. However, if progesterone is low the lining of the uterus will be thin (luteal phase defect). This makes miscarriage more likely. A clue to this would be a history of premenstrual tension (PMT).

https://pubmed.ncbi.nlm.nih.gov/28277122/#:~:text=Gynecol%20Endoc rinol,2017%20Feb%2028).

Good nutrition is critical to producing enough progesterone. For instance Vitamin B6 helps increase progesterone and also reduces the risk of miscarriage:

https://pubmed.ncbi.nlm.nih.gov/17478435/#:~:text=Am%20J%20Epid

emiol,Epub%202007%20May%202.Vitamin C has also been shown to increase progesterone and reduce miscarriages:

https://pubmed.ncbi.nlm.nih.gov/12909517/#:~:text=Fertil%20Steril,02 82(03)00657%2D5. Other nutrients such as zinc, magnesium, Vitamin E and L arginine can help increase progesterone.

Progesterone is sometimes used as a treatment for miscarriage. I would have concerns about using hormones in unnaturally high doses, given some of serious adverse effects of previous hormone treatments in pregnancy such as stilboestrol, a synthetic oestrogen. This increased the rate of breast cancer, stillbirths and foetal death in female offspring and genital abnormalities in male offspring. This took decades to come to light. Another unexpected effect of hormones is when the pill is taken in early pregnancy. This has been linked with a higher rate of homosexuality. So high doses of hormone need to be used with extreme care.

<u>Toxoplasmosis</u>

This infection can cause miscarriages. The main source is cats, or to be specific, cat faeces.

Low Thyroid

In the book Thyroid Power the authors note that low or borderline thyroid can be a case of recurrent miscarriage. They claim that they have seen this several times. They give a case report of a lady with two previous miscarriages. Her thyroid test showed borderline TSH of 3.0 (this would be regarded as normal in the UK) and borderline low T3 but positive thyroid antibodies. She had classic hypothyroid symptoms of low energy, dry skin and being chilly much of the time. After starting thyroid hormones, she went on to have a normal birth.

A 2012 review of the literature by Sarkar notes that even minimal hypothyroidism can increase the rates of miscarriages and that there is a significant relationship between thyroid antibodies and a higher miscarriage rate. <u>Sarkar</u> D. Recurrent pregnancy loss in patients with thyroid dysfunction. <u>Indian J Endocrinol Metab</u>. 2012 Dec; 16(Suppl 2): S350–S351. doi: <u>10.4103/2230-8210.104088</u>

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3603072/#

<u>Gluten</u>

A study in 2010 found undiagnosed gluten sensitivity can be a cause of recurrent miscarriages: https://dx.doi.org/10.3748%2Fwjg.v16.i46.5810

ElectroMagnetic Fields (EMFs)

There is a known link between miscarriages and electromagnetic radiation and it makes sense for anyone in pregnancy to keep their exposure to mobile phones, wifi, DECT phones and smart meters to a minimum. Electric blankets have been linked with miscarriages. Exposure to electromagnetic fields from mobile phones has been found to increase the possibility of miscarriage three-fold.

Sufficient Interval between Pregnancies

Having enough time between pregnancies is also vital. We know that in healthy long-lived societies they would leave a gap of at least two years between pregnancies (presumably to build up nutrients) and eat more of the high nutrient foods during this time.

Why is the MTHFR Gene Important?

This gene controls one of the body's key functions and when it mutates this leads to problems. There are two common mutations of the MTHFR gene called C667T and A1298C. In one study more than half the US population had one copy of the C667T mutation and 10% had two copies (homozygous). When there are two mutations then gene activity can be reduced by half.

When this happens one of the basic processes of the body, methylation, is slowed down. This leads to a reduced ability to produce glutathione (the key substance in detoxification) and problems processing folic acid and repairing genes. In particular it makes converting folic acid to its active form, methylfolate, difficult.

Where does this make a difference?

It plays a part in a range of diseases but probably the most important is recurrent miscarriages. One issue here is that folic acid is given in pregnancy and this can make the situation worse as people with this gene mutation find it difficult to process synthetic folic acid. They need to use methylfolate instead of folic acid and sometimes methylcobalamin (the methylated form of vitamin B12). These mutations are commoner in many auto-immune diseases and can also be a factor in anxiety. It can predispose to pre-eclampsia and birth defects.

What's to be done?

Genetic testing isn't normally available on the NHS. It would be sensible for anyone with a history of miscarriage to change the form of folic acid that they use in pregnancy.