MTHFR Fertility

FERTILITY CASE STUDY

SECONDARY INFERTILITY

Hello and welcome!

I'm Carolyn Ledowsky, founder of **MTHFR Fertility and MTHFR Support Australia.**

As an MTHFR researcher, trainer and presenter, I am committed to teaching everyone I can about how and why the MTHFR genetic polymorphisms may affect your ability to fall and stay pregnant. I find it so sad that women are needlessly having multiple miscarriages and suffer the heartache that goes along with that, yet if they had known they had the MTHFR gene mutation before they started out they would have done things differently.

In honour of **National Infertility Awareness Week,** my team and I have compiled some amazing case studies and resources to share with you.

Our goal is to **support, inspire and empowe**r everyone going through this sometimes heartbreaking journey, to find the answers (and hope!) they need to turn things around.

Enjoy!

Carolyn Ledowsky

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Case Study:

Secondary Infertility

The following is a real-life case study of a couple who had previously had a child but were now experiencing infertility and multiple miscarriages.

**All personal details have been changed.

Ages

- Female 32
- Male 34

Presenting signs and symptoms (female)

- Secondary infertility 2.5 years
- 3 miscarriages
- High insulin (female)

Medical Diagnosis + Advice

- High androgens and insulin
- Prescribed metformin
- Prescribed high dose *folic* acid
- Start IVF in the next 6 months

Further Testing Revealed...

- High Mould + yeast markers (both partners)
- High homocysteine (both partners)
- Low folate (both partners)

Our diagnosis:

Methylation Disturbance

MTHFR Fertility

What genes affect methylation?

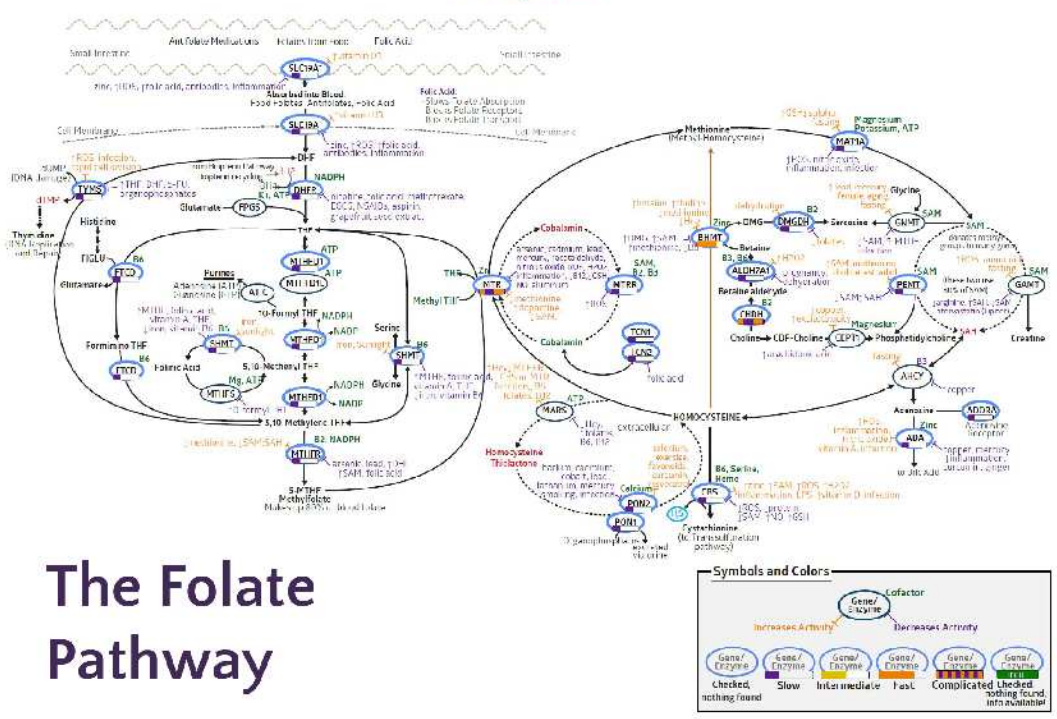
Genes We Assess for Methylation Disturbance

- Folate Genes e.g. MTHFR, MTHFD1, MTHFD1L, DHFR, SHMT, TYMS, SLC19A1
- B12 Genes e.g MTR, MTRR,TCN1, TCN2, FUT2
- Choline e.g. PEMT, BHMT, DMGDH

Case Study Genetics Discussion

- Folate, B12 + Methylation Pathway: C667T++ (female) C677T+-/ A1289C +-(male)

Both partners showed a significant reduction in MTHFR activity (70%- 50% respectively). Both also presented with DHFR ++ (at the top of the folate pathway) which can become inactive at around 200-300mcg of folic acid intake. The prescribed high-dose folic acid was not the ideal supplement for these genetics. Methylfolate at high doses, was a better choice. Remember folate is essential fo the health of DNA within the egg AND sperm. Both partners needed high dose methyl folate. This was an important discovery. The male partner also had polymorphisms in the genes needed to make and repair DNA and recycle folate.



Key Genetics Continued...

- Choline

The choline genes/ enzymes can act as a "back-up" to methylation and get up-regulated when the folate pathway is slowed. Choline is also essential for healthy cell membranes that protect the DNA within the sperm and eggs. Hence, insufficient choline will impact the health of the sperm and eggs.

- Mould + yeasts

Mould and yeasts within can produce mycotoxins that inhibit the uptake of folate and hence impact the methylation cycle. Mould in-utero has also been associated with autism and behavioural problems in children.

Certain genetics can make people more susceptible to mould overgrowth. These include genes coding for detoxification pathways; glutathione and glucuronidation. Both partners had genetics that reduced the antioxidant, glutathione in the body.

MTHFR Fertility

Treatment Overview

Both partners

Step 1: Support Methylation

- Switch to MTHFR-suited prenatal (no folic acid)
- STOP high dose folic acid.
- Add additional high-dose methylfolate.
- Methyl B12
- Phosphatidylcholine
- Food - no folic acid

Step 2: Support Mould Detox pathways

- Glutathione
- Liver + bile support
- Binder
- Targeted mould + yeast elimination

RESULTS - PREGNANT within 4 months of starting treatment

A *beautiful, healthy baby boy*

This is a perfect example of how important BOTH partner's genetics are and how focusing on the methylation cycle can turn things around very quickly.

Tell Us Your Story

Has your partner been tested for MTHFR?

Are you experiencing Secondary Infertility?

Tell us about your story in our private Facebook group or our Instagram page and use the hashtag ***#thisismystory***