MTHFR Hitting a Family Hard – There Are Solutions

by Dr Ben on September 8, 2011 in Q & A with Dr Ben Lynch

Question from a MTHFR Reader:

My mother had a severe stroke at age 58 which left her unable to speak or move her right side. Her only other health ailment prior was bipolar disease.... They never found the cause of the stroke... Then I had Eclampsia and seized several times before delivering my 29 week preemie... They never figured out why. Then my 40 year old brother who is extremely healthy had pulmonary emboli.... Finally after many tests, The hematologist found the mutation. I take Folplex and a baby aspirin. Is that enough? & at what point do I test my kids and start treating them?

Dr Ben's Response:

I am sorry to hear about your mother.

My hat is off to your hematologist for discovering the MTHFR mutation. Do ask him/her for the specific mutations and find out if you have additional genetic mutations – such as Factor V Leiden.

It is a must that you know exactly which MTHFR mutations you have as the severity varies and so does the treatment your doctors need to perform. Lifestyle changes also vary depending on which MTHFR mutation(s) one has.

In reading your statement, it appears that you 'understand' the potential cause of your mother's stroke: a MTHFR mutation.

A MTHFR mutation can cause sudden strokes and bipolar.

"MTHFR C677T was significantly associated with all of the combined psychiatric disorders (Schizophrenia, Bipolar Disorder and Unipolar Depressive Disorder)" (1)

"The association between inherited gene mutations and arterial ischemic events was modest: factor V Leiden mutation (OR, 1.21; 95% CI, 0.99-1.49), Prothrombin G20210A mutation (OR, 1.32; 95% CI, 1.03-1.69), and MTHFR TT mutation (OR, 1.20; 95% CI, 1.02-1.41). Subgroup analyses of younger patients (<55 years old) and of women revealed slightly stronger associations overall." (2)

A MTHFR mutation can cause pre-eclampsia:

"The data indicate that the T677 variant of the MTHFR gene is one of the genetic risk factors for pre-eclampsia." (3)

A MTHFR mutation can cause Pulmonary Emboli:

"MTHFR/ C677T in Chinese/Thai populations (OR 1.57; 95% CI 1.23-2.00, p = 0.0003), and ACE I/D in African American populations (OR 1.5; 95% CI 1.03-2.18, p = 0.03) were found to be significantly associated with venous thromboembolism (VTE) (pulmonary embolism and deep venous thrombosis)" (4)

A MTHFR mutation is strongly linked within a family network as MTHFR is an autosomal recessive pattern. This means that both copies of the gene in each cell contain mutations. Commonly, the parents of a person with an autosomal recessive condition each have a single copy of the MTHFR gene mutation. This means that the parents most likely do not show symptoms or signs of MTHFR yet they are very likely to have deficiencies of Vitamin B12 and folic acid.(5) This translates into MTHFR being a silent killer that must be identified within all family members.

You state you currently take Folplex and a baby aspirin and wonder if that is enough. Great question.

I've no idea as I do not know which MTHFR mutation you have.

However, I'm going to be bold here and say no – that is not enough.

Those with certain MTHFR mutations need to change their lifestyle as they are more susceptible to toxic overload as they cannot methylate well. Lack of methylation causes an increased body burden which means that toxins accumulate and wreak havoc within the body unless they are removed – or prevented from coming in the first place.

Thus, living a more pure lifestyle, performing detoxification protocols with your physician and understanding where toxins come from in our environment is crucial. I encourage all to read the websites of the Environmental Working Group and Environmental Health Perspectives

Understanding proper detoxification methods is also crucial. Foot Soaks, Detox Foot Pads, Colon 'Blows' and 'Diets' all are gimmicks or dangerous. As an expert in Clinical Ecology, also known as Environmental Medicine, I am well versed in educating others about proper detoxification methods and reducing exposures to environmental toxins. It is my plan to develop a comprehensive Detoxification Course which will be available at Dr Ben Lynch once it is available. It will be announced here at MTHFR.net and to my subscribers.

Now in terms of Folplex. I am not sure if Folplex is sufficient for you as it contains inferior forms of folic acid, B6 and B12. Those with certain MTHFR mutations cannot process inferior forms of any of these nutrients – especially those which require methylation. The nutrients requiring methylation are folic acid and B12. If B12 and folic acid are not methylated due to a MTHFR mutation, then the body does not utilize them and homocysteine builds up. Elevated homocysteine leads to pulmonary embolisms, ecclampsia, strokes and others.

Very few physicians understand MTHFR mutations and even fewer understand nutritional biochemistry. I am solid in nutritional biochemistry and becoming very solid in MTHFR mutations; however, I feel I will never reach the expert level I desire as both fields are massive and require constant research – which I do on a daily basis.

Back to Folplex. If I were your physician, I would prefer you to take the more active forms of B12, folic acid, B6, B2 along with TMG. I've developed a product called HomocysteX which currently contains the active forms of B12 (methylcobalamin), active folate (5-MTHF) and active B6 (pyridoxal-5-phosphate).

This is a comprehensive and potent formula to help reduce homocysteine as it contains methylated nutrients which bypass specific MTHFR mutations.

In my research, I have recently improved the formula of HomocysteX as there are other nutrients which I feel are needed in order to further reduce homocysteine levels effectively and skirt around the MTHFR mutation. I've added active vitamin B2 (riboflavin-5-phosphate) and TMG. This new formula is arriving in our warehouse any day. The current formula is still effective.

The other benefit to HomocysteX is that it is pure. As I mentioned earlier, I am an expert in environmental medicine which makes supplement manufacturers not like working with me. I demand purity and quality ingredients. Sadly, it is nearly impossible to find manufacturers which provide the level of quality I demand.

The 'inactive ingredients' in HomocysteX are simply: vegetarian capsule (hydroxypropyl methylcellulose, water), L-leucine, cellulose, and silicon dioxide. Leucine is an amino acid used by the body, cellulose is undigestable plant material and silicone dioxide is sand.

I'd also combine those nutrients along with fish oil or krill oil, n-acetyl-l-cysteine, sauna, multivitamin with active folate, probiotics, nattokinase and a thorough education in avoidance of chemicals in all forms.