



Ancillary Management for Migraineurs

The mechanisms behind Migraine headaches can be likened to filling a glass of water. Each little contributing factor is like adding some water to the glass until eventually it overflows resulting in a migraine. Often we assume the last contributing factor to the migraine is the trigger, but these triggers can change. Recent studies suggest that there are multiple factors leading to a migraine and that the trigger you associate with bringing on your migraine is just the last little bit of water to overflow the glass. To reduce the frequency of migraine you need to look at all the factors filling your glass.

Vitamin D

Up to 41.8% of migraineurs suffer vitamin D deficiency. Vitamin D3 is synthesized in the skin when exposed to ultraviolet-B rays from sunlight. It is also found in fish, eggs and fortified milk, however only 5% of our recommended daily dose is in food. The major biologic function of vitamin D is to maintain normal blood levels of calcium and phosphorus. Low vitamin D is implicated in osteoporosis, hypertension, cancer and autoimmune diseases.

A daily supplement of 1000 IU is typically recommended, although this level is currently under dispute as being too low.

CoEnzyme Q10

CoEnzyme Q10 is an essential element of the mitochondrial electron transport chain. In a recent study, 61.3% of patients achieved at least a 50% reduction in the frequency of migraine attacks by the end of the four-month trial by taking CoQ10. It takes five to 12 weeks to achieve more than a 50% reduction. A daily supplement of 150-300 mg/day was recommended.

It has been reported that migraine sufferers have a CoQ10 deficiency and, that supplementation with CoQ10 may provide relief. In a study of 1550 paediatric and adolescent patients aged 3 to 22 years who suffer from migraines, it was found that a large portion of the patients had low CoQ10 levels (up to 74.6%), with almost a third below the reference range (32.9%). Patients who began CoQ10 supplementation had an increase in serum CoQ10 levels and a significant reduction in headache frequency with improvement in their migraine related disability. Initial recommended

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doses were 1 to 3 mg/kg per day in a base with high bioavailability. The authors commented “that given the high frequency of CoQ10 deficiency and relatively low potential side effects of CoQ10 supplementation, all patients may benefit from CoQ10 supplementation.”

Water Intake

There are two uses of water in the prevention of Migraine. As a daily preventative measure, increase your water intake to 2 litres per day.

You may also be able to stop a migraine from progressing by having a high water intake during the prodrome. This can help to abort the episode.

Sleep

Sleep disturbances are a known migraine precipitator. Migraineurs should awaken at the same time every day, even on weekends. 9 hours sleep per night is best. Due to the nature of our sleep cycle sleep is best taken in blocks of 3 hours. Try not to awaken in the deepest part of your sleep (the 1.5hr, 4.5hr or 7.5hr mark). It is also a good idea to turn your phone off!

Magnesium

200 Mg/day of magnesium may be useful in women with menstrual migraine. Onset of a menstrual migraine is usually two days prior to menstruation.

No Diet Drinks

Aspartame consumption is strongly associated with migraines and seizures. Do you know what excitotoxins even are? Most people don't. They're chemical substances that cause neurons to fire spasmodically. Aspartame is one of these.

This eventually burns out, or damages, the neurons. Decades of research studies support the increasingly held belief that aspartame causes these painful, often debilitating headaches. Watch out for the sugarfree gums, lollies and yoghurts too!

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Exercise

Exercise may be a trigger for headaches; however some patients find they can stop a migraine from progressing from prodrome if they exercise.

Sunglasses

The use of sunglasses, especially whilst driving may stop the compounding effect some migraineurs feel from bright lights and changes in light.

Coeliac Disease

Coeliac Disease is an autoimmune gluten hypersensitivity that is 10 times as common in migraine sufferers. In Coeliac disease the lining of the small intestine becomes damaged, inflamed and flattened. However, it is possible to have Coeliac with migraine without any bowel pathology. Diet changes away from food containing gluten may decrease migraine attacks in those with Coeliac disease. There are antibody and genetic testing for Coeliac disease and further investigations are best guided by your general practitioner.

MTHFR Gene, Hyperhomocysteinemia and Folate

Migraineurs have an increased prevalence of a specific genetic change. (Point mutation from C to T in the 677th nucleoside in the MTHFR gene to be exact) .This genes role is to metabolise folate to different form of folate that the body can use and in doing so helps catalyse the change of Homocystine to Methoinine. This gene mutation decreases the function of this process to around 30% it therefore can lead to mild high homocysteinemia. Hyperhomocysteinemia has been suggested to damage blood vessels and may potentially influence migraine susceptibility. Supplementation of folic acid has been proposed to help and investigation into levels of folate, homocystine and the presence of the above mentioned gene are best directed by your General Practitioner.”

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