MIGRAINE UPDATE: New Risks, Research and Answers

RISKS ASSOCIATED WITH MIGRAINES

Painful migraine headaches disrupt lives. Research is also raising concerns that migraines with aura may be linked to cardiovascular risks and blood clots. Studies reported in the Journal of the American Medical Association (JAMA) also found that women who suffered migraines accompanied by aura had double the risk of brain damage later in life.

- Heart attacks
- Stroke
- Blood clots
- Brain damage

RISKS ASSOCIATED WITH DRUGS USED TO TREAT MIGRAINES

Prescription medications used to treat migraines include a class of drugs called triptans. For example: sumatriptan (Imitrex), rizatriptan (Maxalt), almotriptan (Axert), naratriptan (Amerge), zolmitriptan (Zomig), frovatriptan (Frova) and eletriptan (Relpax). Side effects of triptans include nausea, dizziness and muscle weakness. They aren’t recommended for people at risk for strokes and heart attacks. Other drugs used to treat migraines include antidepressants, antiseizure drugs such as Topomax, and even Botox. All of these drugs carry the possibility of adverse effects, including serious ones. Many people also find it hard to tolerate these medications.

RISKS ASSOCIATED WITH PAINKILLERS

In addition to migraine-specific medications, patients taking prescription painkillers for migraines may risk developing a dependency on these painkillers. The risk of addiction stems from the fact these medications treat pain but not the cause of migraines. This means migraines – and the regular use of these medications – can continue for years. Clearly, there are significant risks associated with migraine drugs and painkillers as well as with migraines themselves. Because of this, it is sensible to look for ways not just to treat migraines, but to reduce the frequency and severity of migraines.

Finding Your Own Best Approach To Migraines

The first step is to look at migraines in general and then to look more closely at your own migraine triggers and the options that make the most sense for your own unique situation.

WHAT HAPPENS DURING A MIGRAINE?

In very simple terms, a migraine is caused by enlargement of blood vessels in the brain. This prompts blood vessels to release substances to help them constrict back to normal size. These substances can produce inflammation.
Let’s look at some of the options you and your doctor may want to explore.

A NUTRITIONAL APPROACH

A wholesome, balanced diet is a good first step in addressing migraines and maintaining good overall health. In light of research that suggests a link between migraines and a deficiency of magnesium, B2 and CoQ10, you may want to talk with your doctor about using a dietary supplement. The reason for supplementation is that it may be difficult for your diet alone to provide enough of the targeted nutrients needed to correct the level of deficiency that the study found to cause a disruption in brain energy.

Let’s look at the role of specific nutrients you may want to supplement.

Magnesium

Magnesium is important in synthesizing ATP (adenosine triphosphate) which provides a vital source of energy for cells, stabilizes the nervous system, counteracts vascular cramping and inhibits inflammatory substances.

Studies of magnesium and migraines suggest its effectiveness may relate to ionized magnesium levels. From the studies, it appears that prolonged high-dose supplementation for a minimum of 3-4 months may be required to normalize a magnesium deficiency.*

Nutritional deficiencies have also been documented in migraine sufferers. Nutritional deficiencies have also been documented in migraine sufferers.

WHAT CAUSES MIGRAINES?

Migraines can occur differently in different people. Some people report that migraine attacks seem to be triggered by external factors such as changes in the weather, bright lights, certain foods or strong scents. Some people link migraines to hormonal changes, stress, or lack of sleep.

Behind these observable migraine triggers, other factors may be at work. For example, research raises the possibility that people who suffer migraine headaches may have lower-than-normal levels of magnesium, vitamin B2 (riboflavin), and coenzyme Q10. It is thought that a deficiency of these nutrients can lead to an imbalance in energy levels in the brain that, in turn, causes cramping and inflammation which can trigger migraines.*

So, in approaching your own migraines, the bottom line is to look at ways to address these factors:

• Possible nutrient imbalance
• Ways to reduce inflammation
• Ways to defuse your specific triggers

*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.
Adverse events reported during the studies have been mainly gastrointestinal (e.g., diarrhea). There has been no evidence of any short- or long-term safety issues for taking magnesium, although magnesium should not be used by people with serious kidney disease.

**Vitamin B2 (riboflavin)**

Water-soluble vitamin B2 (also known as riboflavin) is needed by the body to support electron transport in all energy-related cellular functions. It has the ability to increase the energy metabolism of brain cells. As a coenzyme, B2 also plays a key role in carbohydrate, fat and energy metabolism.*

There is no known long-term toxicity from vitamin B2 supplementation. Extremely low instances of diarrhea and frequent urination have been noted. A harmless side effect of vitamin B2 is that it will give urine a fluorescent yellow color.

**Coenzyme Q10 (CoQ10)**

By promoting electron-proton transfer in the cells’ mitochondria, CoQ10 helps activate energy metabolism.*

Widely used as a supplement for many years, CoQ10 has a low rate of reported side effects that include mainly gastrointestinal disturbances.

**Bioflavonoids**

Key vitamins, minerals and trace elements called bioflavonoids support brain function as well as overall health. These naturally occurring plant compounds have powerful antioxidant properties and support the circulatory system by increasing capillary strength.*

**ADDRESSING INFLAMMATION**

As noted earlier, migraine symptoms appear to come from inflammation that results as the brain’s blood vessels repeatedly enlarge and constrict. One way to deal with this inflammation is to support proper blood flow and “tone up” cerebral blood vessel muscles so they are more resilient as they enlarge and contract.*

**Butterbur root extract**

One non-drug approach to reducing inflammation is offered by a patented butterbur root extract. Butterbur is an herb valued for centuries for its anti-inflammatory, pain-relieving and muscle-relaxing properties. Note that it must be the extract because butterbur root itself contains liver toxins. These must be removed from the butterbur root. This toxin-free herbal extract is called *Petasites* and it is the only purified form of butterbur root.

**ONLY PETASITES BUTTERBUR EXTRACTS THAT ARE LABELED PA-FREE SHOULD BE USED**

These products have been purified to remove pyrrolizidine alkaloids (PAs), which can damage the liver and cause other serious harm. In particular, look for *Petasites* formulations manufactured in Germany.

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The Petasites formulation manufactured in Germany is the only brand of butterbur used in clinical studies. This is because its patented manufacturing process uses only organically grown, pesticide-free butterbur root and removes harmful PA liver toxins to below any detectible levels.

In addition, well-documented usage data shows good tolerance and safety with side that include mild burping.

In a variety of clinical studies, this Petasites butterbur root extract has been shown to help maintain proper cerebral blood vessel muscle tone and blood flow.

In controlled trials conducted at multiple headache treatment centers, 71% of migraine sufferers who were studied reported having at least half the number of migraines while using 75mg of the Petasites butterbur extract manufactured in Germany.

One of the most recent studies (2014) shows the Petasites butterbur extract as a promising preventive treatment for childhood migraines. Of the 245 patients studied in a double-blind, multi-center, placebo-controlled trial that was conducted in accordance with International Headache Society (IHS) criteria, 71% of participants reported having fewer migraines while using the German-manufactured butterbur extract in softgel capsules.

After reviewing over 10 years of research and toxicity tracking, the Quality Standards Subcommittee of the American Academy of Neurology and American Headache Society issued guidelines recommending Petasites as a “Level A” option physicians can recommend. The German-sourced Petasites form of butterbur extract is available as softgel capsules in 75mg strength as well as 50mg strength (which has been shown safe for use by children as young as eight years old). In addition to clinical research, this Petasites formulation has been referenced in articles appearing in Prevention, the Berkeley Wellness Letter, WEBMD and many other reputable sources.

Multi-center, Placebo-controlled, Double-blind Study With 245 Patients In Accordance With The International Headache Society (IHS) Criteria

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Feverfew

Feverfew is an herb that contains parthenolides – substances that may have anti-serotonin effects and inhibit inflammation. Research results on feverfew are not as strong as for butterbur root extract, and side effects can include joint aches, gastrointestinal disturbances and mouth ulcers.

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KNOWING YOUR MIGRAINE TRIGGERS

The starting point for creating your best migraine prevention strategy is to know your own migraine triggers. To do this, keep a diary.

In your diary, record daily observances about such things as the weather, stress, exercise, foods you’ve eaten, menstrual cycle, and sleep. Also record when migraines occur and how severe they are. This will help you begin to identify patterns that reveal possible triggers. Once you become more aware of triggers, you have a chance to avoid them before they cause migraines, or to take precautions to minimize the pain and duration if a full-blown attack should develop.

Should supplements be part of your strategy?

Once you’ve kept your diary for a month or two, share it with your doctor. Together, you can discuss your own unique pattern with migraines and begin to look at ways to reduce the frequency and severity of the attacks.

WHAT TO KNOW ABOUT A SUPPLEMENTATION STRATEGY

Supplementing with butterbur root extract or nutrients such as magnesium, B2 and CoQ10 can be beneficial. However, there can be wide variations in the formulations and manufacturing processes used in making supplements. For this reason, you and your doctor will want to be sure that any supplements meet rigorous criteria and employ proven purity and quality-control processes, such as those used by German manufacturers.

HERE IS WHAT DOCTORS LOOK FOR IN SUPPLEMENTS: 

- **Evidence-based effectiveness.** The effectiveness of the supplement must be documented by solid research and following criteria set by organizations such as the International Headache Society.
- **Formulation.** The supplement must contain consistent and pure active ingredients at high enough levels to be effective. The formulation must also be free of pesticides, hidden allergens or naturally occurring toxins.
- **High tolerability.** Patients must be able to take the supplements without experiencing serious side effects.
- **Safety.** The supplements must be backed by solid safety data, including the use by many patients over a substantial period of time without adverse effects or drug interactions.

Ready to take action

If you and your doctor decide to include herbal or dietary supplementation in your strategy, high-quality products are available without prescription. Again, be sure to choose products that meet all the above criteria for safety, purity and quality.

Remember that best results are seen by taking supplements consistently over a period of several months.

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1, 2 American Academy of Neurology press release, January 15, 2013: Migraine with Aura May Lead to Heart Attack, Blood Clots for Women