Headache

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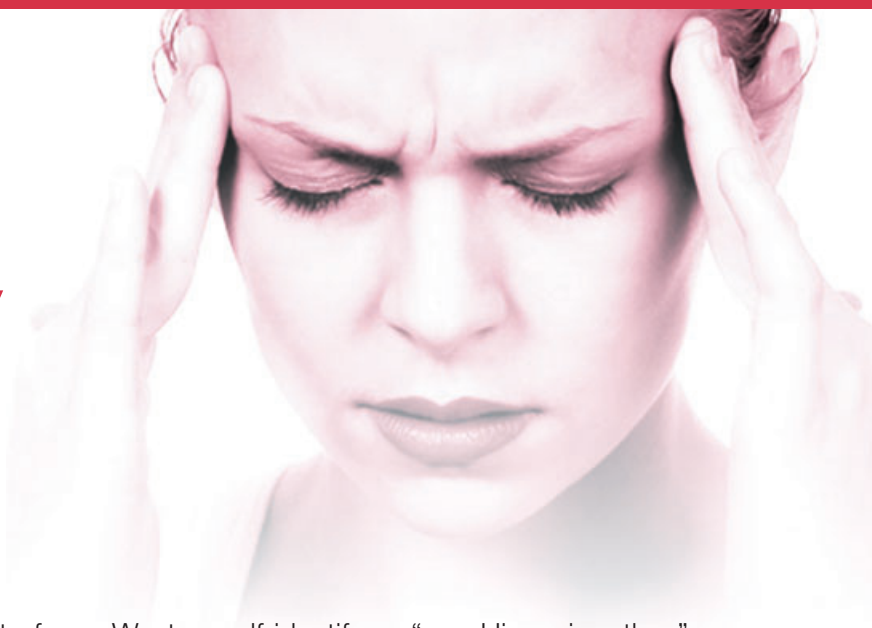
Headache Prevention With Complementary and Alternative Medicine



In patient-centered approaches the best of conventional medicine is used with complementary and alternative medicine (CAM) to combine the best of both for patient benefit. CAM methods, used in this way, are becoming more commonplace in headache management. CAM may be indicated if you simply prefer it, have low tolerance of or poor response to conventional drugs, or have a medical contraindication to certain drugs.

If you use herbal therapy, you are one of the 20% of Americans who do so for a health condition and/or health promotion. But more than half do not disclose their use. However, reporting is necessary, as 72% of those using medicinal herbs also use prescription drugs, and 84% also use over-the-counter medications. If you use herbal preparations, you are more likely to be between 45 and 64 years of age, uninsured or underinsured, female, have higher education levels, live in the West or self-identify as “non-Hispanic, other.” Roughly two-thirds of Americans using medicinal herbs do not do so for proven uses.

There are 5 commonly utilized CAM medications for headache prevention. While considering preventive CAM therapy realize that this should be just a component of your overall program aimed at reducing trigger factors, implementing behavioral headache management and taking medications acceptable to you and your practitioner. The goal is to find effective means to reduce, by at least 50%, the number of headaches, their intensity or their length, while improving function and quality of life.

The American Migraine Prevalence and Prevention study suggests considering drug prevention with only 4 days per month of headache and no functional limitations or for 2 days per month with severe impairment. While

nearly 40% of headache sufferers meet criteria for prevention just over 10% receive any.

If prevention is warranted, discuss your motivations, preferences, and concerns with your providers. Be aware that CAM headache therapies are not as rigorously proven as many conventional preventatives and not as strictly regulated by the Food and Drug Administration of the USA as are prescription therapies and devices. They are classified as dietary supplements and not drugs; and therefore no proof of safe manufacturing, effectiveness, or safety is required for marketing in the USA. You should have concern for the lack of industry standardization as regards the contents and purity of herbals, along with batch-to-batch consistency. Finally, one should recall that the total number of subjects involved in studies evaluating "herbals" for headache treatment typically is very small. Thus, the admonition: "consumers beware."

FEVERFEW

Feverfew (*Tanacetum parthenium*) is a species in the chrysanthemum family, whose dried leaves have long been used as a headache remedy. Available feverfew preparations have a >400% variation in dosage strength of the active ingredient parthenolide. Because feverfew also contains melatonin and other compounds, uncertainty exists regarding the major active ingredient. Currently, there are no commercially available standardized feverfew products; therefore, recommendations about dosing are not possible. Feverfew adverse events include sore mouth and tongue (including oral ulcers), swollen lips, loss of taste, abdominal pain, and gastrointestinal disturbances. Adequate long-term studies are available on some preparations.

PETADOLEX

Petasites hybridus, known as butterbur, is a perennial shrub which grows wild on German riverbanks. The butterbur root is supposed to have antimigraine properties. Some plant parts may cause cancer, liver, lung, and bleeding disorders. The German Health Authority (Commission E) certifies brand name Petadolex as nontoxic. Two adequate trials support effectiveness with 150 mg per day but not 100 mg. Adverse events compare favorably with placebo except for excess burping. Long-term safety data are limited. The average duration of use has been approximately 3 months with 450,000 users assessed short term with >75,000 patient years of exposure as of 2003.

MAGNESIUM

Low brain magnesium levels in migraineurs are reported in several studies. Magnesium prevention trials have yielded mixed results. It appears that prolonged "high dose" supplementation of a minimum of 400-600 mg per day may be required to achieve any benefit from therapy. No comparison of different magnesium formulations exists to inform decisions. Adverse events are mainly gastrointestinal (diarrhea predominating). Amino acid chelates may be better tolerated, but are lower strength and therefore cost is slightly higher. There is no evidence of any short- or long-term safety issues if serious kidney disease is absent.

RIBOFLAVIN

Riboflavin is a water-soluble essential vitamin (B2). There is no proof of best dosage or definite proof of efficacy. Doses of 25 mg and 400 mg have had benefit. Adverse events are limited to diarrhea and frequent urination of fluorescent yellow urine. No known long-term toxicity is known.

COENZYMEQ10

CoQ10, like riboflavin, plays a role in cell energy production. The preparation used in the only rigorous study is not commercially available. The dose of 300 mg was divided into 100 mg 3 times per day. Adverse events were not different between groups. CoQ10 is well-tolerated and long-term safety is acceptable.

MELATONIN

There are many reasons melatonin should be beneficial in headache, but no proof exists presently. It has been shown to be useful for insomnia.

VITAMIN D3

While not evidence based, vitamin D deficiency/insufficiency is common and harmful. Consider optimizing to a blood level of between 50-80, which may require 1000 IU per every 25-30 pounds. Such dosing requires a 2-month blood level for 25(OH)D and calcium. Visit vitamindcouncil.org and discuss with your practitioner.

OTHER CAM THERAPIES

In a survey of CAM organizations aromatherapy, Bowen technique, chiropractic, hypnotherapy, massage, nutrition, reflexology, Reiki, and yoga were all recommended for headache. Little to no proof of benefit exists on these approaches. Fish oil research is currently negative. 5-HTP may not affect headache. Phytoestrogens may be promising.

SUMMARY

As none of the herbal treatments above have been tested in pregnancy, it is best for pregnant women to avoid all but magnesium. No firm consensus exists as to the relative effectiveness CAM agents, but given the number of patients studied and data available, I tentatively suggest the rank order may be: Petadolex ≥ Magnesium > Feverfew (if MIG-99 forms become commercially available) > Riboflavin > CoenzymeQ10 >> Melatonin.

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