AAN Summary of Evidence-based Guideline for PATIENTS and their FAMILIES

NSAIDS AND COMPLEMENTARY TREATMENTS FOR MIGRAINE PREVENTION IN ADULTS

This information sheet may help you understand which antiinflammatory and complementary treatments help prevent migraine headaches in adults. This information is a service of the American Academy of Neurology (AAN) and the American Headache Society. A companion information sheet is available regarding prescription drug treatments for migraine prevention.

Neurologists from the AAN are doctors who identify and treat diseases of the brain and nervous system. The following evidence-based information* is provided by experts who carefully reviewed all available scientific studies on use of antiinflammatory and complementary treatments for migraine prevention in adults.

Research shows many antiinflammatory and complementary treatments can help prevent migraine in people who are candidates for treatment. However, other treatments used in some people have been shown not to be helpful.

DRUG WARNING

The US Food and Drug Administration has issued a warning for the following treatment:
Petasites (butterbur): *www.accessdata.fda.gov/scripts/plantox/detail.cfm?id=23110*

What is migraine?

Migraine is a condition that involves recurring headaches. Each headache may last from four hours to two days. It can cause throbbing pain in the head. Other symptoms may include nausea (upset stomach), vomiting, and extreme sensitivity to light or sound. Most people with migraine have attacks that happen repeatedly. In some people, these can be triggered by certain foods, drinks, or odors. Stress and release from stress also may trigger migraine attacks.

Migraine can interfere with daily life activities. It can be disabling. The person may feel unable to go to work or perform other daily tasks. If a person has a migraine headache and goes to work or performs activities anyway, performance may be impaired. For this reason, it is important to try to prevent migraine attacks. Talk with your doctor about strategies for avoiding them.

Who can benefit from preventive treatment?

Evidence suggests that migraine headaches often are not recognized or treated effectively in many people who have them. According to one study, about 38% of people who suffer from migraine attacks could benefit from preventive treatments. However, less than a third of those people currently use these treatments. Fortunately, in many people the frequency and severity of migraine attacks can be reduced with preventive treatment. In fact, some studies suggest migraine attacks may be reduced by more than half.

At the same time, it is important to be aware that not everyone with migraines is a candidate for preventive treatment. For example, people whose attacks are mild or occur infrequently may not qualify.

What complementary treatments help prevent migraine attacks?

Allergy/Asthma Treatments

Histamine injection has been studied for migraine prevention. Histamine is a chemical the body produces as part of an allergic reaction. Some experts say that some migraine attacks are triggered by exposure to allergens. It is thought that histamine, when injected, can make the body less sensitive to an allergen. Moderate evidence shows histamine injections can help prevent migraine. Likewise, some antihistamines have been studied for migraine prevention. The antihistamine suppresses an allergic response that may be the cause of a person's migraine headaches. There is weak evidence that the antihistamine cyproheptadine may help prevent migraine headaches.

In contrast, there is moderate evidence that montelukast, an allergy and asthma treatment, is not helpful in preventing migraine attacks.

Antiinflammatory Drugs

Several drugs for inflammation have been studied for migraine prevention. These are known as nonsteroidal antiinflammatory drugs or NSAIDs. Moderate evidence shows the NSAIDs fenoprofen, ibuprofen, ketoprofen, naproxen, and naproxen sodium can help prevent migraine. There is weak evidence that the NSAIDs flurbiprofen and mefenamic acid may help prevent migraine. There is not enough evidence to show if aspirin or indomethacin is helpful.

It is important to be aware that regular or daily use of certain NSAIDs for acute migraine treatment may make headache worse. This may lead to a condition known as medication overuse headache. NSAIDS also are associated with stomach upset or bleeding.

Herbal Preparations, Vitamins, Minerals, and Other Treatments
Several herbal preparations, vitamins, and minerals are used for preventing migraine. Strong evidence shows that the herbal preparation Petasites (butterbur) can help prevent migraine. There is moderate evidence that riboflavin (vitamine B2), the mineral magnesium, and the herbal preparation MIG-99 (feverfew) help prevent migraine.

Coenzyme Q10 and estrogen are both substances produced in the body. They also are used as health supplements. Weak evidence shows coenzyme Q10 and estrogen help prevent migraine. There is not enough evidence to show if omega 3 or hyperbaric oxygen therapy is helpful.

How can I know which drug is right for me?

There are several complementary treatments available with evidence to support their use. Before choosing a treatment, it is important to discuss treatment options with a doctor experienced in migraine prevention. It also is important to share with your doctor any other health conditions you may have.

A treatment that works for one person may not help another person. Moreover, some treatments for preventing migraine can be costly. All treatments for preventing migraine have side effects. Discuss these matters with your doctor when choosing a treatment. Be aware that your doctor may need to monitor your treatment in the long-term. Communication with your doctor is especially important given that many NSAID and complementary treatments are available over the counter and may be unregulated. It is important to inform your doctor of all treatments you are taking, including those available over the counter. Your migraine headaches may worsen or improve over time. You also may experience general health or lifestyle changes. These may require adjusting the dose or changing to another treatment.

At this time, there is not enough evidence to know how one treatment compares with another. In addition, more research is needed to understand the long-term effects of treatments for preventing migraine.

This AAN and AHS guideline was endorsed by the American Osteopathic Association.

This statement is provided as an educational service of the American Academy of Neurology. It is based on an assessment of current scientific and clinical information. It is not intended to include all possible proper methods of care for a particular neurologic problem or all legitimate criteria for choosing to use a specific procedure. Neither is it intended to exclude any reasonable alternative methodologies. The AAN recognizes that specific patient care decisions are the prerogative of the patient and the physician caring for the patient, based on all of the circumstances involved.

*After the experts review all of the published research studies, they describe the strength of the evidence supporting each recommendation:
Strong evidence = more than one high-quality scientific study
Moderate evidence = at least one high-quality scientific study or two or more studies of a lesser quality
Weak evidence = the studies, while supportive, are weak in design or strength of the findings
Not enough evidence = either different studies have come to conflicting results or there are no studies of reasonable quality

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Copies of this summary and additional companion tools are available at *www.aan.com* or through AAN Member Services at (800) 879-1960.

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