Guidelines for the Treatment and Prevention of Migraine Headaches

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The full report is titled "Pharmacologic Management of Acute Attacks of Migraine and Prevention of Migraine Headache." It is in the 19 November 2002 issue of *Annals of Internal Medicine* (volume 137, pages 840-849). The authors are V Snow, K Weiss, EM Wall, and C Mottur-Pilson for the American Academy of Family Physicians and the American College of Physicians–American Society of Internal Medicine.

Who developed these guidelines?

The American College of Physicians–American Society of Internal Medicine (ACP–ASIM) developed these recommendations with the American Academy of Family Physicians (AAFP).

What is the problem and what is known about it so far?

Migraines are headaches related to changes in chemicals and blood vessels in the brain. Doctors use many types of drugs to treat or prevent migraines, but it is unclear which drugs work best.

How did AAFP and ACP–ASIM develop these recommendations?

The U.S. Headache Consortium released migraine recommendations in 2001 after evaluating published studies. The AAFP and ACP–ASIM considered the same studies but required higher levels of evidence of a drug's benefit before recommending its use.

What did the authors find?

To treat migraine symptoms after they develop, certain nonsteroidal anti-inflammatory drugs, such as ibuprofen and aspirin, are effective and safe. Good evidence supports the use of triptans (sumatriptan), but these drugs can cause serious side effects in people with heart disease, high blood pressure, or nerve weakness as a migraine symptom. While good evidence shows that dihydroergotamine nose spray works and is safe, evidence about other forms of ergotamines is unclear. There are very few studies of narcotics for migraine, and patients can become addicted to these agents. Anti-nausea drugs seem to work for patients who get nausea with migraines.

The literature supports using drugs to prevent migraines if patients get two or more migraines per month, have severe migraine symptoms 3 or more days per month, use drugs to treat migraine more than twice per week, do not benefit from migraine treatment, or have migraine complicated by neurologic symptoms.

Good evidence of benefit exists for only a few of the many drugs used to prevent migraine. Some beta-blockers (commonly used to treat high blood pressure) are clearly effective in preventing migraine without serious side effects. Studies of other types of blood pressure drugs are either of poor quality (calcium-channel blockers) or convincingly show no benefit (clonidine) in migraine prevention. The only antidepressant with good evidence for migraine prevention is amitriptyline. Weaker evidence suggests that the antidepressant fluoxetine might also work. Studies show that the seizure drugs divalproex sodium and sodium valproate work, but side effects are common. Strong studies show that the anti-inflammatory drugs naproxen or naproxen sodium and time-released dihydroergotamine prevent migraines without serious side effects. Other ergotamine-related drugs, such as methysergide, lisuride, and pizotifen, have less strong evidence of effectiveness or cause serious side effects. Lisuride and pizotifen are not available in the United States.

What do AAFP and ACP–ASIM suggest that patients and doctors do?

Effective nonsteroidal anti-inflammatory drugs should generally be the initial treatment for migraine, with triptans or dihydroergotamine next for patients who do not respond. Patients eligible for preventive therapy should use the beta-blockers propranolol or timolol, the antidepressant amitriptyline, or the seizure drugs divalproate sodium or sodium valproate. Migraine sufferers should participate in selecting treatment. Patient involvement is particularly important when proven drugs are not helpful and it becomes necessary to try less proven drugs.

What are the cautions related to these recommendations?

Recommendations may change as new studies become available.

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