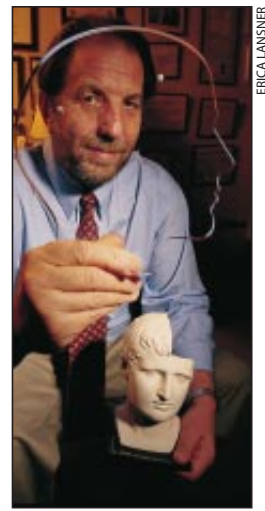


Q&A

Migraine Headaches



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Some 20 million women in the U.S.—nearly one in seven—suffer from migraines, making this ailment one of the most common to strike women. The majority of migraine patients have their first attack before age 30. **MIA SCHMIE-DESKAMP**, special correspondent for *SCIENTIFIC AMERICAN*, talks about migraine with **FRED D. SHEFTELL, M.D.**, co-founder of the New England Center for Headache and president of the American Council for Headache Education.

Q How would you describe a migraine headache?

A A typical migraine is characterized by throbbing pain on one side of the head, nausea, sensitivity to light and sound and, in some cases, visual or other sensory disturbances. Surprisingly, 60 percent of sufferers have never been diagnosed. Indeed, many U.S. doctors leave their training woefully unprepared to recognize and treat migraine: on average, they receive just one or two hours of instruction on common headache ailments.

What happens during a migraine? Who gets them?

The pain of a migraine results in part from dilation of blood vessels and irritation of nerves in the covering of the brain. This abnormality stems from the disrupted regulation of various neurochemicals, including serotonin, which can work to narrow blood vessels. We know, for example, that the female sex hormone estrogen is involved in regulating these chemicals and in priming blood vessels for the action of serotonin. When estrogen drops, a migraine can follow. Depression is also mediated by these same types of chemicals. In fact, migraine and depression often occur in the same people. In many cases, migraine appears to be hereditary. More than 70 percent of people with migraine have a close relative who also suffers from the disorder.

Does migraine affect women differently than men?

Migraine is not an equal-opportunity disorder. Although in childhood the prevalence of migraine in girls and boys is about equal, after puberty the ratio of female to male sufferers leaps to nearly three to one. The female hormonal cycle seems to be responsible for much of this difference.

Women often experience worsened migraines during times of falling (but not rising) estrogen levels, which occur with menstruation, ovulation and the onset of menopause. Sixty percent of women with migraine report headaches with their periods.

We know that migraines often worsen in women using cyclical hormone therapies—such as oral contraceptives—which subject the body each month to fluctuating levels of hormones. Unfortunately, most gynecologists do not consider a woman's history of migraine when prescribing hormones. We generally do not prescribe oral contraceptives for our migraine patients. And for menopausal and postmenopausal women with migraine, we suggest steady, daily doses of hormones.

Can migraines be prevented?

Migraine headaches can be triggered by a number of factors over which sufferers can exercise some control. The top two dietary triggers are alcohol, especially red wine and beer, and the artificial sweetener aspartame. We also look at chocolate, aged cheeses, nitrites, caffeine and MSG as potential dietary factors.

Sensory stimuli, including bright or flickering lights, computer screens and odors such as perfume and cigarette smoke can precipitate migraine headaches. Stress and changes in sleep patterns also exacerbate the disorder.

Finally, I cannot say enough about the importance of regular exercise. Exercise reduces stress, increases circulation and produces painkilling chemicals called endorphins. The more women do in terms of improving their daily habits—getting proper nutrition, exercise, consistent sleep—the less medication they are going to need in the long term.

What are some of the most useful migraine drugs?

The introduction of Imitrex in 1993 was probably the major innovation in migraine therapy of this century. This drug was designed to mimic serotonin—it reduces dilation of blood vessels. Attacks that might last one or two days can be aborted in one or two hours. The past eight months have seen the introduction of at least five new drug options for migraine. These include Imitrex and Migranal nasal sprays, which can be taken despite nausea and vomiting, drugs with high tolerability (Amerge) and very consistent effects (Zomig), and an over-the-counter analgesic marketed specifically for migraine (Excedrin).

For women who cannot take Imitrex or similar drugs because of risk of stroke, for example, we can prescribe effective painkillers. We also use preventive medications, including antidepressants, which raise the level of serotonin, and beta blockers, which are used more commonly against high blood pressure. With the array of drugs now available, the vast majority of women with migraine should benefit from treatment.

One of the biggest problems we still face is that many women do not see any doctor besides their gynecologist. Women should be particularly cautious about medicating themselves. Daily use of analgesics can lead to chronic, so-called rebound headaches. We find that when we get patients off daily analgesics, 80 percent of them greatly improve. Women should not believe the myth that they simply have to learn to live with migraines. “Migraine” is not just another word for headache; it is a debilitating disorder that can have a profound impact on a woman's ability to function at work, home and play. **5A**

For more information, contact the American Council for Headache Education at <http://www.achenet.org> on the World Wide Web or call 800-255-ACHE.