Migraines and Perimenopause

Helping Women in Midlife Manage and Treat Migraine

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You may not be aware of how many of your patients suffer from migraine headaches, or to what extent your counseling can help them. It could be the woman who presents complaining of "frequent bad headaches that just won't quit." She suspects she's having migraines, but she's not sure. At 48, she also finds herself awake most nights with hot flashes, worrying about her mother's increasing forgetfulness and her son's inability to get a job. These headaches are just making it all that much harder to bear. Or maybe it's the woman with a consistent, predictable menstrual cycle who has been managing her migraines for years. She's able to anticipate which days of the month she might miss work

Abstract Migraine is more common in women than men, with lifetime prevalence rates between 15 percent and 26 percent for women. The World Health Organization ranks migraine as 12th among all causes of years lived with disability in women. This article reviews diagnostic criteria for migraine with and without aura, the impact of fluctuating hormones in perimenopause on the experience of migraine and medication and nonmedication approaches to managing migraine.
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or social events due to migraine. But with the recent onset of perimenopause, her cycle has become less predictable, and daily fluctuations in her estrogen levels can make her feel like she's lost what little control she once had over her headaches. Add to this the other stressful symptoms of perimenopause, such as fatigue, insomnia, irritability, hot flashes, night sweats, difficulty concentrating, heart palpitations, unexplained weight gain, urinary incontinence and reduced sex drive. Further complicate the picture with the social demands of an adult child who moved back home after college, the spouse who was just laid off, the elderly parents who need increasing attention, the stress of keeping her job, which may be the only source of income for the family, and it can be difficult to tease out which headaches are due to hormonal changes, and which are due to tension and fatigue. But you can help your patient begin to sort out which factors are under her control, and what she can do about them.

About Migraine

The World Health Organization (WHO, 2004) ranks migraine as 19th among all causes of years lived with disability, and 12th in women. Migraine is more common in women than men, with 21.8 percent of women versus 10 percent of men reporting migraine or severe headache in 2009 (Centers for Disease Control and Prevention, 2010a).

Migraine Without Aura

On its website, the International Headache Society (n.d.) defines migraine without aura as "recurrent headache disorder manifesting in attacks lasting 4-72 hours. Typical characteristics of the headache are unilateral location, pulsating quality, moderate or severe intensity, aggravation by routine physical activity and association with nausea and/or photophobia and phonophobia."

Migraine With Aura

Migraine with aura is defined as recurrent disorder manifesting in attacks of reversible focal neurological symptoms that usually develop gradually over 5 to 20 minutes and last for less than 60 minutes (International Headache Society, n.d.). Headache with the features of migraine without aura usually follows the aura symptoms. Less commonly, the headache lacks migrainous features or is completely absent.

Menstrual Migraine

Menstrual migraine is defined as those occurring "exclusively on day 1 ± 2 (i.e., days −2 to +3) of menstruation in at least two out of three menstrual cycles and at no other times of the cycle" (International Headache Society, n.d.).

Hormonal Factors

For many women, migraine onset is around menarche, when estrogen levels begin to

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fluctuate cyclically. Migraine prevalence peaks twice in women's lives—in the mid-20s and around age 50 (Shuster, Faubion, Sood, & Casey, 2011). For some women, perimenopause brings relief of migraine intensity and frequency; for others, migraines are exacerbated during this time (Lay & Broner, 2009). Perimenopause is a time of "erratic estrogen secretion and unbalanced estrogen exposure" (Nappi et al., 2009, p. 83). It may last from 45 to 55 years of age, although the timing varies among women.

Estrogen levels fluctuate during perimenopause, and for a woman with hormonally mediated headaches, it may be difficult to predict to what extent her migraines will affect her ability to function in her work and personal life. Keeping track of headaches with a tool like the diary found on the National Headache Foundation website (see Get the Facts) can help women identify specific triggers, such as certain foods, bright or flickering lights, strong smells, stress and fatigue. Triggers associated with migraine are stress, visual stimuli, weather changes, consuming nitrates, fasting and drinking wine; sleep disturbances and consuming aspartame are considered possible triggers (Martin & Behbehani, 2001). The American Headache Society provides an information sheet about alcohol and migraine, which may help patients decide how much and what kinds of alcohol they can consume while managing their migraines (Panconesi, 2011).

Identifying and avoiding known triggers is an important step in managing migraines. In the case of a bright-light trigger, wearing dark sunglasses anytime it's sunny, and closing the blinds or taking a chair in a room that allows a woman to have her back to the window can prevent migraines. Talking with family and co-workers about avoiding perfumes that trigger migraines can be touchy, but if they've seen the suffering of migraine, they may be willing to change, at least when they're around the person who experiences migraines.

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Prevention and Treatment

Nonmedication Strategies

Trigger avoidance and lifestyle changes are a first step in managing and preventing migraines. The American Headache Society (2007) recommends maintaining regular sleep patterns, regularly getting at least 30 minutes of aerobic exercise three times a week, eating regular meals and reducing stress (see Get the Facts for a link to "Headache Hygiene Tips").

Medications

Medications for prevention and treatment of migraines include nonsteroidal anti-inflammatories (NSAIDS), triptans, selective serotonin reuptake inhibitors, anticonvulsants, beta-blockers and calcium channel blockers (Lay & Broner, 2009; MacGregor, 2007). The U.S. Food and Drug Administration (FDA, 2010) even recently approved Botox injection to prevent headaches in adults with chronic migraine, defined as migraine more than 14 days of the month. Evans and Taylor (2006) reviewed "natural" or alternative medications for migraine prevention in the journal Headache. Of the agents reviewed, none had better than Grade B evidence. Grade B represents limited evidence from a single randomized trial, or nonrandomized trials or multiple trials with inconsistent outcomes. The authors suggested that of the agents reviewed, a patented, standardized extraction of *Petasites hybridus* (butterbur) was the best safety tested herbal to date (Evans & Taylor).

Hormone Therapy

The WHO concluded that the risks of estrogen-progestin contraceptives usually outweigh the benefits for women age 35 and older who have migraine without aura, and for women of any age who have migraine with aura. Progestin-only contraceptives, however, are not contraindicated in women with migraines (Centers for Disease

Get the Facts

American Headache Society
www.americanheadachesociety.org

American Headache Society Committee on Headache Education
www.achenet.org

Headache Diary
www.headaches.org/pdf/Headache_Diary.pdf

Headache Hygiene Tips
www.achenet.org/resources/trigger_avoidance_information

International Headache Society
www.ihs-headache.org/

National Headache Foundation
www.headaches.org

Control and Prevention, 2010b). While combined hormonal contraception is contraindicated, hormone therapy is not contraindicated for women with migraine (Lay & Broner, 2009; MacGregor, 2007).

When a woman's migraines are exacerbated by the estrogen fluctuations of perimenopause, hormone therapy via transdermal patch or gel delivers a more consistent dose of hormones than does oral medication, and therefore may be more effective in preventing migraines (MacGregor, 2009). If a woman still has her uterus and requires progesterone as part of her hormone therapy, a continuous delivery mechanism is preferred, such as a levonorgestrel intrauterine system, progesterone suppositories or vaginal gel (MacGregor, 2007).

In some cases, however, women's headaches are actually worsened on hormone therapy. The data are conflicting, and there is a need for more research. Before considering hormone therapy, clinicians should always do a thorough risk assessment, considering factors such as smoking, family and medical history, including risk for deep vein thrombosis and breast cancer.

Conclusion

Finding the right balance of nonmedication and medication strategies for women suffering from migraines requires careful questioning and a willingness to work with patients over time as their bodies change. Clinicians should ask patients about their history of migraines, and then ask what changes they've noticed in frequency, timing and symptoms as they go through perimenopause. With clear communication and an individualized approach, patients along with their nurses and other health care providers can find the best strategies for their individual experience of migraines. NWH

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