

THE WOMAN'S GUIDE TO

managing migraine

Understanding the Hormone Connection
to find Hope and Wellness

SUSAN HUTCHINSON, MD

The Woman's Guide to Managing Migraine

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*The Woman's
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Preface

Why write a book on women, hormones, and headache? Aren't migraines easy to manage? The short answer is that it is my passion to help meet the needs of the more than 22 million women in the United States who suffer from migraine headache. Headache in women is a major health issue and one that deserves special attention. Too many women are suffering from disabling headaches, mainly owing to improper diagnosis and inadequate treatment. My goal for this book is to help women with headaches get the right diagnosis and get on a treatment plan that will give them the quality of life they deserve.

Many self-help headache books are available in the health and medicine section of bookstores, yet none is devoted specifically to women, with a focus on hormonal factors and how they relate to women's headaches. (Interestingly, the women's health and medicine section of a large bookstore I visited recently was filled with hormonal advice for women dealing with menopause and perimenopause, as well as a myriad of other women's health issues, but there were only a small handful of books in the headache section.)

I saw a new patient this past week in my practice. Tearfully, she told of her kids' drawings showing her lying in bed. She has missed countless school performances owing to her disabling migraines. She spends many vacation days staying in their hotel room while her husband and kids explore. Is this the memory that her kids will have of their mother?

I want to give this patient her life back, to be fully engaged with her husband and kids, and to live her life despite her headaches. Too many women with headache live their lives “around” their headaches, tip-toeing through life, afraid of all possible triggers that can disrupt their days. I cannot cure migraines, but I can help women in my practice find effective treatment and get back to living the lives they deserve—as free of disabling migraines as possible.

Who am I? I am a family medicine physician with a specialty in headache. I also suffer from headaches. Countless women have told me their headache stories over my past 30 years of practice. I have become the headache doctor I am today because of the trust my patients have put in me, the patience they have demonstrated when initial treatment regimens fail or bring unwanted side effects, and their commitment to working together in partnership with me to do everything we can to minimize the impact of headaches on their life.

The field of headache medicine has witnessed incredible advances in recent years. My goal is to help explain to you, the headache sufferer, what we know. I want to empower you to understand as much as you can about your headaches. Understanding the relationship between hormones and headache is critical for women headache sufferers. Traditionally, neurologists have been the specialists that patients with headache are referred to by their primary care physicians. However, in general, neurologists don't understand the relationship between hormones and headache. They don't conduct well-woman exams and make decisions about birth control pills and hormones, as I have over the course of my career. In contrast, gynecologists are very comfortable with making decisions about hormonal treatments for birth control or menopausal symptoms but are often uncomfortable

with headache management. I hope to bridge that gap with this book. The information presented in *The Woman's Guide to Managing Migraine* should help facilitate improved dialogue between you and your health-care provider and result in improved treatment. Ultimately, the goal is for you to live as headache-free as possible. Let's get started!

Susan Hutchinson, M.D.

Director and Founder,

Orange County Migraine and Headache Center

Irvine, California

April 7, 2012

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The Woman's Guide to Managing Migraine

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An Introduction to Menstrual Migraine

HEADACHE IS AN ALMOST UNIVERSAL CONDITION. Almost everyone has had a headache at some point. However, there remains a big difference between mild tension headaches compared to more disabling migraine-type headaches.

The focus of this book is on migraine and especially on menstrual migraines. Just how common is migraine in the United States? Let's take a look at prevalence, which refers to the number or percentage of the population that experiences a particular condition in a given year. Physicians and epidemiologists look to prevalence data to understand who is experiencing a condition and whether there are age, gender, or other demographic trends.

A recent study looked at patterns of migraine in a U.S. population of 40,892 men, women, and children who participated in the 2003 National Headache Interview Survey.¹ Migraine prevalence was 17.5% in women and 8.6% in men in the study. The overall prevalence was 13.2%. In both sexes, migraine peaked in the late teens and twenties,

and again around 50 years of age. After the age of 10, females were more likely to have migraine than males.¹

According to these data, which are consistent with several large population-based studies dating back to 1989, 13.2% of the population of the United States is experiencing at least one migraine headache in any given year. This translates to about 30 million adult Americans (age 18 and up) suffering from migraines every year. Of those 30 million migraine sufferers, about 22 million are women.

Migraine tends to follow certain common trends over the lifespan. The 17–18% migraine prevalence for women is an average, and this figure is not constant throughout a woman's life span. Women between the ages of 25 and 55 often experience more migraines than do other women; in particular, migraine prevalence is as high as 25–27% for women aged 30 to 49. Figure 1-1 shows a snapshot of the lifespan of migraine prevalence in women.

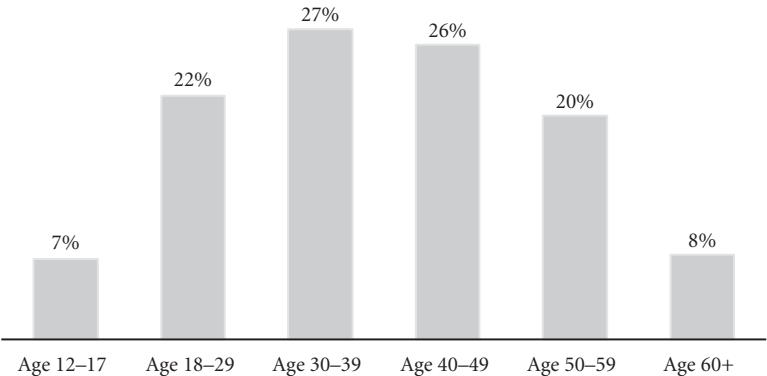


FIGURE 1-1 Migraine Prevalence: US Female Population. Reprinted with permission from Lipton RB, Stewart WF, Diamond S, et al. Prevalence and burden of migraine in the United States: data from the American Migraine Study II. *Headache*. 2001;41(7):646–657.

The prevalence ratio of females to males is highest during the female reproductive or child-bearing years and is often quoted at 3:1, with many more women having migraines than men. After the age of 42, the prevalence ratio is approximately 2:1 for women compared to men.¹



Why are prevalence data important? They help to show just how common migraine is. If you are a female between the ages of 25 and 55, there is an approximately 25% chance you have migraine. And if you are reading this book because you tend to get headaches around your period, I estimate a more than 75% chance that your headaches are migraine! You are not alone. Many other women know the pain of migraine and how disabling this condition can be throughout one's life. Here are some of their stories. We will be visiting these women again over the course of this book.

Meet Nancy, a 29-year-old woman. She is an attorney, striving to become a partner in the law practice where she works. Her migraines are becoming more frequent and can last for 2–3 days, especially when she is on her period. Recently, she woke up vomiting, with a very bad headache, and had to miss work for 2 days. Her male colleagues were not very happy that they had to do some of her work in her absence. She is worried that she may have a bad headache on a day when she is scheduled to go to court. In fact, she is getting so worried about getting a headache that she is not enjoying life, even when she does not have a headache. She has begun to date Keith, a 36-year-old attorney, who has made partner at a different law firm. He does not understand why she can't just lie down until her headache goes away.



Lisa is a 25-year-old teacher working in a classroom of 30 high-energy second graders. She loves her work but migraines are causing major

problems for her students and her career. If she has a mild to moderate headache, she simply takes Excedrin (acetaminophen-aspirin-caffeine combination) and goes to work. However, around her period, she may wake up with a headache that is so severe she can barely lift her head off her pillow. Her head is pounding, she is nauseated, and the morning light is unbearable. On these days, she has to call in sick. Her doctor has prescribed Imitrex (sumatriptan) tablets for her, but she “saves” them for her bad migraines so she won’t run out of the nine Imitrex tablets a month that her insurance allows. She is using up all her sick days and is worried that she may lose her job. When she complains to her husband, Rick, he simply tells her she needs to exercise more and learn to handle stress better. He has never had bad headaches.



Melanie is a 35-year-old mother of two; her children are 7 and 5 years old. She always wanted to be a mother but now wonders if she made a mistake in having kids. Her husband travels a lot, and she often feels like a single parent. When she gets near her period, she suffers from unbearable headaches and does not even want to get out of bed. She finds that she is irritable with her kids and often yells at them during a headache attack. She yells at them to turn the TV volume down and to quit running around their house. She even has them take their shoes off and instructs them to tip-toe around the house when her head is pounding. Depression is now setting in because she feels guilty that she yells at her kids and gets so irritable with them. Her husband, Tom, gets frustrated when he comes home from a trip, and she just wants to go to bed and lie down with an ice pack on her head. He feels as if he does not have the wife he married. Her headaches often start 1–2 days before her period and can last for days; sometimes a headache can last for 1 week straight.



Beth is a 19-year-old single college student struggling to keep up her GPA. She is considering applying to medical school, but lately

her headaches make it almost impossible to study during the week of her period. She is dating; she visited her gynecologist's office to be put on birth control pills to help regulate her periods and for birth control. She has been dating Ryan for 3 months, and they are now sexually active. She was hoping the birth control pill would help her period-related headaches but now they are worse. In addition, she suffers from severe premenstrual symptoms (PMS) including mood swings, bloating, and breast tenderness before her period. She called her gynecologist's office, and the nurse told her to stop taking the birth control pills since her headaches have gotten worse.



Theresa is a 40-year-old woman in the middle of a messy divorce. Her husband was having an affair over a 2-year period. She has two teenage sons and is struggling to pay the bills. She works part-time for a real estate firm. She is getting sinus headaches with her period every month; they are making it difficult for her to function. She is trying over-the-counter antihistamines and decongestants, but they do not completely relieve her period-related sinus headaches.



Christy is a divorced 47-year-old woman with irregular periods and hard-to-predict migraine headaches. When she was younger, her migraines were easier to predict since her periods were regular. Now, she feels as if her life and headaches are totally out of control. She works in sales and is on commission; in recent months, she has not met her quota and is worried about her job. She is on several Internet dating sites but has not had very good luck lately with the men she has been meeting. Her 21-year-old daughter, Alexis, lives with her and goes to a local community college. A son, Brian, is 18 and in his senior year of high school. Alexis has been having headaches with her period and may miss classes for 1–2 days a month.



Kate is 55 years old, happily married to Bob, and the mother of three grown children. She had migraines for many years, sometimes with her period. She is now completely menopausal and her headaches occur less often, but she now struggles with hot flashes, night sweats, and insomnia. She is considering estrogen but is afraid it will aggravate her migraines. She is also afraid of increasing her risk of breast cancer. She works as an office manager in a busy dental practice. One of the dental hygienists, Claire, calls in sick 2–3 days a month because of migraines. This is a major disruption to all the patients who are booked with Claire on those days. Claire has used up all her sick time. As office manager, Kate is struggling with how to handle this situation. The two owners of the practice are frustrated with Claire and are asking Kate to do something about this situation.

112 MILLION BEDRIDDEN DAYS

Nancy, Lisa, Melanie, Beth, Theresa, Christy, and Kate represent many of the patients in my practice who I see for menstrual migraine. Each has a unique story to tell, and I hope their stories will help you to find the path that will help you find relief for your menstrual migraines.

Through the prevalence data discussed in this chapter, we can begin to understand the impact of migraine in society. The disability associated with migraine causes great disruption in family and work life. Not only does the individual who has migraine suffer during an attack, countless coworkers and family members also suffer, in different ways. Migraine affects one out of every four households in America. There are stories like Nancy's, Lisa's, Melanie's, Beth's, Theresa's, Christy's, and Kate's playing out every day in this country.

Migraine is often a life-long condition. The World Health Organization ranks migraine 19th among all causes of “years lived with disability.” Migraine is a common reason for disability claims

and is often the reason that patients request family medical leave. Many sufferers are afraid they will lose their jobs because of absences. According to one study, migraine is responsible for 112 million bedridden days per year in the United States,² and, in another—a large population-based study called the American Migraine Study—51.1% of women and 38.1% of men with migraine experienced the equivalent of 6 or more lost workdays per year.³ It is not uncommon for one of my patients to tell me “I want to cut my head off . . .”

Prevalence of Menstrual Headaches (Menstrual Migraine)

Between 21 and 22 million women in the United States suffer from migraine every year. Thirteen million of them, about 60%, have a hormonal connection between their headaches and their menstrual cycles, and these women suffer from menstrual migraine. This hormonal connection can happen whenever a woman’s estrogen and progesterone levels change. In particular, the drop in estrogen and progesterone that occurs just before menstruation is considered the key trigger for menstrual headache.

The time in a woman’s life when migraine is most likely to occur—her 20s through her early 50s—represents her peak career earning-power years and child-rearing years. The associated disability can have disastrous consequences, financial and emotional. Figure 1-2 illustrates the breakdown of migraine prevalence.

In contrast, only 7 to 8 million men in the United States suffer from migraine every year. The simple reason for the disparity between genders is the different behavior between dominant “male” (e.g., testosterone) and “female” (e.g., estrogen, progesterone) hormones. Testosterone levels do not cycle and change as estrogen and progesterone levels do. We will explore the relationship between estrogen and headache more deeply in Chapter 6.

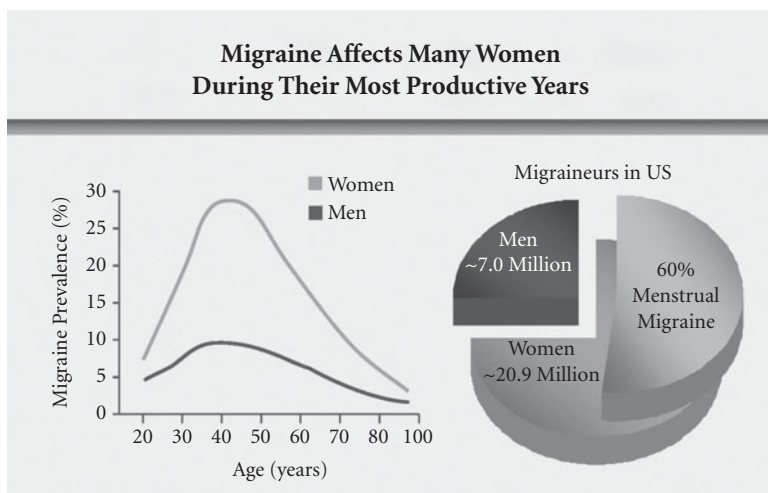


FIGURE 1-2 Migraine Peaks in Women Age 30–49. Reprinted with permission from Lipton RB, Stewart WF, Diamond S, et al Prevalence and burden of migraine in the United States: data from the American Migraine Study II. *Headache*. 2001;41:646–657 and Mannix LK, Calhoun AH. Menstrual Migraine., *Curr Treat Options Neurol*. 2004;6(6):489–498.

To better understand the impact of the prevalence of menstrual migraine, it's important to clearly define what menstrual migraine is.

Not “Just a Headache”

A few years ago, Theresa asked her small Bible Study Women's Group to pray for the “sinus” headaches she was getting every month with menstruation. I explained to her that we would pray for her, but I felt confident that what she was experiencing was menstrual migraines. I recommended that she ask her healthcare provider for a migraine-specific medication like a triptan (more about triptans in the Chapter

5). She came back to Bible Study several weeks later with good news: Her doctor had given her a prescription for Imitrex (sumatriptan, a migraine-specific medication), and she finally had an effective treatment plan for her monthly headaches.

BOX 1-1

Many women mistakenly think it is normal to suffer “period headaches,” thinking that not much can be done. I have heard of male gynecologists who tell their patients, “Honey, it is just a headache. Live with it.” In so many of these cases, physicians who give this kind of advice are wrong.

Menstrual migraine is a disabling headache that occurs sometime between 2 days before and 3 days into a woman’s period. A physician will consider the pattern menstrual migraine if it occurs in at least two-thirds (66%) of a woman’s cycles.⁴

Are all monthly headaches menstrual migraine? In almost every case, the answer is yes. It may be possible for a woman to occasionally suffer from a tension headache with menstruation, but in my experience, I find this to be rare.

Premenstrual Syndrome and Headache: What’s the Connection?

Premenstrual syndrome (PMS) refers to all the physical and emotional symptoms that often accompany the time leading up to a women’s menstrual period. Symptoms like bloating and breast tenderness are common, but a disabling headache is not. This is not necessarily common knowledge. Many women accept monthly headaches as part of PMS and never have their headaches evaluated as a separate condition.

Box 1-2

Menstrual migraine (monthly disabling headaches with menstruation) is a completely separate condition from premenstrual syndrome (PMS). A woman can have both conditions or suffer from just one. Never accept a disabling monthly headache as simply part of PMS. Monthly headaches deserve evaluation and treatment apart from PMS.

Significantly, the majority of women with menstrual migraine have *menstrual-related migraine*. This refers to women who have migraines during times not related to their menstrual cycles *in addition* to their menstrual migraines. Data suggest that 46% of female migraine patients show this pattern.⁵ In contrast, only 14% of women migraine patients suffer from pure menstrual migraine, in which they only have

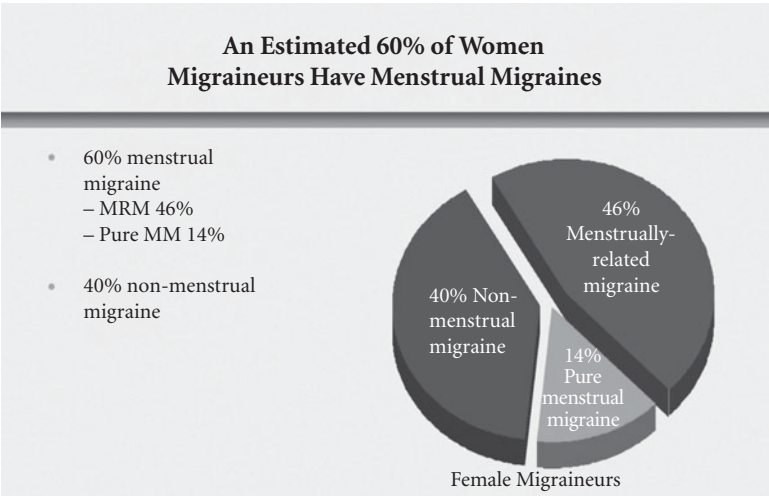


FIGURE 1-3 Prevalence of Menstrual Migraine. Reprinted with permission from Mannix LK, Calhoun AH. Menstrual migraine. *Curr Treat Options Neurol.* 2004;6(6):489–498 and Lay CL, Mascellino AM. Menstrual migraine: diagnosis and treatment. *Curr Pain Headache Rep.* 2001;5(2):195–199.

migraines during their menstrual time of the month.⁵ The remaining 40% of women with migraine have no clear association between their migraine headaches and their menstrual cycles (see Figure 1-3).

As a headache specialist, understanding this prevalence data helps me to diagnose patients who come to my practice and to make the best treatment decisions for each particular patient. Prevalence data can also assist patients in determining what type of headache pattern they might have and what treatment approaches may help. To illustrate, let's learn more about Beth's story.

Beth's disabling headache typically begins 1–2 days before her period and lasts for 3–5 days. She estimates this headache happens with 90% of her menstrual cycles. She occasionally reports a headache not related to menstruation that is very mild compared to her “period-related headaches.” She also gets moody and tearful before her period; her gynecologist prescribed Zoloft (sertraline) for her to take for a diagnosis of premenstrual dysphoric disorder (PMDD). She was told that her headaches may improve with Zoloft. After several months, she reports back to her doctor's office. She is still suffering from disabling period-related headaches despite taking Excedrin Migraine (acetaminophen-aspirin-caffeine).

Prevalence data would strongly suggest menstrual migraine as Beth's diagnosis. Her headache should not be considered as simply part of her premenstrual symptoms. Her premenstrual dysphoric disorder (PMDD) and PMS symptoms would be expected to improve with Zoloft (sertraline), but not her migraines. She needs migraine-specific medication for her disabling headaches, such as a triptan (see Chapter 5 for an in-depth discussion of treatment). Keeping a headache calendar will help determine if Beth suffers from menstrual-related migraines, which we know from prevalence data to be more common, or from pure menstrual migraine.

On follow-up, Beth's headache calendar showed only an occasional, mild, tension-type headache during the weeks she was not on her period, and she was able to take Tylenol (acetaminophen) or Excedrin for those headaches. They were not associated with any nausea or sensitivity to light. She was diagnosed with pure menstrual migraine.

Now let's look at Melanie, the mother of two, who suffers from severe menstrual migraines that can last for 5–7 days. Her physician encourages her to keep a headache diary for 3 months. It shows one to two headaches a week, including the bad headache the week of her period. Some of her nonmenstrual headaches can be severe; triggers include lack of sleep and stress. She has menstrual migraine but, unlike Beth, Melanie has menstrual-related migraine as well. Management for Beth can focus on her one bad week of the month. Management for Melanie will need to focus on all her migraines, including those that occur apart from her period.

What Happens as Women Get Older?

Good news: The prevalence of migraine goes down after age 50. In particular, for women who go through menopause spontaneously (their ovaries are not surgically removed), two-thirds will find their migraines go away or improve dramatically. As we've seen, and as we discuss in more detail in later chapters, hormones and migraine in many women are intimately connected.

For men, also, the prevalence of migraine decreases with advancing age.

Other Types of Headache

Women often come into my practice thinking they have *cluster headache*. This is often because they see a pattern where their headaches “cluster together” in a concentrated period of 5–7 days (for example, with menstruation), followed by a headache-free period of 3 weeks.

On further questioning and evaluation, they usually end up with a diagnosis of migraine. The prevalence of cluster headache is very low compared to that of migraine—only 0.1–0.4% of the population, compared to 13% for migraine. It is the only primary headache that is more common in men than in women; in fact, the ratio is 7:1, in favor of males. It is characterized by a boring, piercing pain behind one eye, tearing in the eye that hurts, and drooping of the eyelid on the affected side. It is often referred to as the “suicide headache,” based on its extreme pain. In contrast to a migraine attack, during which the sufferer wants to be in a dark, quiet room, the cluster headache patient is usually pacing, agitated, and often hitting his or her head into a wall.

As the name “cluster” implies, someone with this kind of headache can go for weeks, months, and even years without a headache, but during a “cluster” episode, the headache can occur several times a day and can last for weeks or months. It then will go away for long stretches at a time.

In contrast, menstrual migraine is usually much more predictable. It occurs with almost every menstrual cycle and does not go away for months or years.

BOX 1-3

Prevalence data suggest that most women with disabling headaches have migraines. Cluster headache is very rare in women.

Where Does Tension Headache Fit in with Migraine?

Tension headache is an almost universal condition that almost everyone has experienced at some time. Tension headache, by definition, is only mild to moderate in severity, is not associated with nausea, and only occasionally causes sensitivity to light or noise. Most individuals with tension headache “power through” them and take either