



Migraine Headaches: Bothersome and Benign, or Something Else?

By: Ellen Hosafros

If you've ever had a migraine you know it's the Godzilla of all headaches. It often begins with pulsating lights before triggering a vice-like, throbbing head pain that makes its victims want to run screaming into the night. Instead, they curl up in a dark room with an ice pack pressed to the forehead.

I've had migraines for 45 years. Sure, the headaches have always been annoying and sometimes debilitating for a day or two, but following treatment with prescription drugs, things go back to normal...until another one strikes. Migraine disease tends to be a sequence of headache and treatment, rinse and repeat.

What I Didn't Know

Migraines can have an adverse impact on brain health. Studies have shown a positive correlation between migraines and brain lesions called white matter disease, which is another name for damaged brain tissue. Those at greatest risk for white matter disease experience migraines with aura and other visual symptoms, have more frequent attacks, a longer history of migraines, and are women. Overall, the odds of brain lesions affecting health are less than 1 in 1,000, but the more lesions that appear in the brain, the greater the odds of eventual issues with mobility, cognition, dementia, and the risk of stroke.

Although white matter disease is present in more than half of people who are 60 years old, it can appear in younger people who have migraine disease. In one study of 65 (otherwise healthy) migraine patients, ages 18 to 50, researchers found white matter lesions present in 43.1% of participants. Age, presence of aura, nausea, disability during attack, resistance to treatment, and severity of headache and duration of migraine are now considered a risk factor for development of white matter lesions.

My brain MRI from a few months ago was lit up with white matter lesions and evidence of a prior silent stroke. Were my migraines the culprit? Most likely, my neurologist said. He prescribed magnesium and vitamin B complex supplements as well as a new medication to prevent future headaches. Always check with your physician before starting new supplements.

Bottom line: If I had known about the potential impact of migraine headaches on my brain health, I would have changed my approach from headache pain management to headache prevention. But the first time I'd ever heard the term "white matter disease" was six months ago. And as I said, I've had migraines for 45 years.

A Deeper Dive Into White Matter

- The brain's white matter consists of nerve fibers that connect different areas of the brain to each other and to the spinal cord.
- White matter allows the exchange of information and communication between different areas of the brain.
- The name "white matter" comes from the nerve fibers covered in a protective sheath called myelin; this tissue is white.
- For white matter to remain healthy, it needs good blood flow and nutrients, as well as blood pressure and blood sugar control.
- Decreased blood flow and nutrients to the white matter can cause damage to these nerve fibers including swelling, breaking and complete loss.

A Deeper Dive Into Migraines

Migraines impact people in different ways, but it's often severe and temporarily debilitating. It's also common. Migraines affect 39 million people in the U.S.; of them, 26 million sufferers are women.

Before age 12, an equal number of boys and girls get migraines. But during and after puberty, migraines affect girls twice as often as boys. Infant colic has been linked with childhood migraines. Researchers now think colic might be an early form of the disease.

Here are more interesting stats:

- Left untreated, a migraine can last from 4 hours to 3 days.
- 315 million people around the globe have chronic migraines with a minimum of 15 headaches a month.
- 90% of migraine sufferers can't work or function during an attack.

Migraines can be expensive. Every 10 seconds, someone in the U.S. goes to the emergency room complaining of head pain; about 1.2 million ER visits are for acute migraine attacks. ER visits typically have a much [higher copay](#) than treatment at an urgent care center, for example. The cost is reflected in insurance claims that impact the employer's bottom line and the employee's out-of-pocket expense.

A migraine isn't just a bad headache. It's a neurological disease that can involve other parts of the body. About 20% experience the forewarning of an attack with flashing lights, which is called an aura. This visual disturbance is a result of a particular nerve that releases neurochemicals and causes blood vessels to swell and become inflamed. A cranium-squeezing headache soon follows.

An episode can also include nausea, vomiting, dizziness, and extreme sensitivity to sound, light and smells. Migraines are typically worse with movement. It's not unusual to want to hide in bed under the covers until the attack passes.

A sub-type of the common migraine is called the **ocular migraine**. This version is known for triggering visual disturbances, like zig-zaggy flashing lines, temporary visual loss, blind spots, or seeing stars. These visual disturbances are called auras. The American Migraine Foundation describes two types of ocular migraine:

1. *Retinal Migraine*: Symptoms can include reduced vision, flashing lights and even temporary blindness. The headache arrives either during or after the visual disturbance. Nausea and painful head throbbing often accompany the headache, which typically affects one side of the head. Retinal migraines can last a few hours or days. It's important to talk to your doctor if you suspect you're having retinal migraines. Prolonged and even permanent vision loss in one eye appears to occur more commonly in people who have retinal migraines than in cases of the visual aura experienced by those with a conventional migraine (see next item). Obviously, a retinal migraine is a more serious condition than one with a conventional visual aura.
2. *Migraine with Aura*: These auras, which often predict an impending headache, are likely a result of abnormal electrical activity in the outer surface of the brain, called the cortex. The aura can happen with a headache or just by itself, and triggers flashing lights, blind spots, star bursts and other visual disturbances. Either way, it doesn't last very long—usually several minutes to an hour will pass and

The Cleveland Clinic states, "Researchers also suspect several processes could contribute to migraines, including:

- Blood flow changes in your brain because of a widening or narrowing of blood vessels
- Temporary changes that make it harder for brain cells to conduct electrical signals
- Brain chemistry changes, including shifts in levels of neurotransmitters like serotonin
- Incorrect signaling from nerve clusters around your eyes or elsewhere on your head
- Malfunctions in pain/signal processing centers in different areas of your brain
- Changes in how your body processes and feels pain because of the effects of chronic pain

the squiggly lines or flashing stars go away, only to come back another day. Migraine with aura can also interfere with speech and motor skills. It warrants a conversation with a healthcare professional.

Medical experts believe migraine headaches are a chronic condition with periodic attacks, similar to what happens with asthma.

Medications can help prevent some migraines and make them less painful. Initial treatment suggested by the doctor might include pain medication like ibuprofen and acetaminophen for the headache, medication for the nausea, and the avoidance of triggers. Some physicians are now prescribing magnesium to prevent migraine attacks. It's a good idea to check with your doctor before adding supplements and be sure to take only the recommended dose.

When prescribed medications, be sure to check your insurance carrier's "[drug formulary](#)" to see if a prescribed migraine medication is on the list. If it's not, it can be very expensive. Also, beware of opioids prescribed for any pain. Talk to your doctor about alternatives to these highly addictive drugs.

Emerging research shows that migraines are more than just a painful inconvenience. If you suffer from migraines, ask your doctor how to prevent them.

SOURCES:

[American Migraine Foundation](#)

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[Cleveland Clinic](#)

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