HealthCentral

Chronic Migraine

\+

Best Ways to Tame Migraine Triggers p. 24

Scan for More Info

WELCOME to HealthCentral's guide to **Chronic Migraine**. On these pages, you'll learn about current research, how to make the most of every doctor visit, the latest treatments, and more.
For additional tips and info, go to HealthCentral.com/ChronicMigraineGuide.

VIRTUALLY SPEAKING

SOCIAL DISTANCING BECAME a way of life during the COVID-19 pandemic—and for many migraine patients that meant having virtual office visits with healthcare practitioners via videoconferencing. And many were just fine with using technology to receive care remotely—a practice called telemedicine—according to a study by the American Migraine Foundation (AMF) that was published in the journal *Headache*.

Researchers conducted an online survey of headache sufferers (most with migraine) asking them to describe their experience using telemedicine during the pandemic. Of 1,127 respondents, 648 (58%) had used telemedicine during the study period. Nearly 83% of telemedicine users rated the experience as "very good" or "good." And about nine out of 10 said they would like to have the option of using telemedicine for care in the future.

These results may be biased, since the survey was administered through the AMF's Facebook page and by email. Consequently, people who lack internet access or aren't comfortable interacting online—who would probably be less likely to use telemedicine—may not have been well represented among the participants. Still, this study indicates that many people like the convenience of telemedicine for nonurgent encounters, which means virtual visits may be here to stay.

1
Migraine's rank among causes of disability in women ages 15 to 49

REBOUND #1: CANNABIS

Chronic migraine patients who regularly use cannabis for symptom relief may up their risk for medication overuse headache (MOH), or rebound headache, according to a study published online in *Headache* in August.

Cannabis may have promise for pain relief, including possibly for migraine symptoms. But some migraine patients who use it develop MOH, prompting Stanford University researchers to look into the potential link. Researchers examined health records for 368 patients who had chronic migraine for at least one year, 150 of whom reported using cannabis, including marijuana cigarettes and edibles. They found that cannabis users were six times more likely to develop MOH than nonusers. Cannabis users were also significantly more likely to take opioid drugs.

The findings are preliminary, stresses Stanford physician-scientist Yohannes W. Woldeamanuel, M.D., one of the study's authors. Still, he cautions against daily cannabis use.

ISTOCK (2), COVER: ISTOCK

A MIGRAINE DIET?

CAN YOU EAT your way to fewer headaches? Maybe. While avoiding foods that tend to trigger migraine attacks is often effective, new research suggests that adding certain other foods to your diet could help prevent and reduce the severity of attacks.

Scientists have known for some time that the body uses omega-3 fatty acids from fish and various other foods to make pain-fighting molecules called oxylipins. Omega-6 fatty acids from corn oil and some other foods are also used to make oxylipins, only these are a rogue variety that actually promotes migraines—at least in lab studies. In the new study, published in *The BMJ,* researchers asked 182 migraine patients (two-thirds of whom had chronic migraine) to follow one of three special diets. After four months, they found that patients on a diet high in omega-3s and low in omega-6s had four fewer headache days per month compared to others in a control group given a diet low in omega-3s and high in omega-6s—that is, similar to a typical American diet. A third group that only boosted their omega-3s reduced their monthly headache days by two. Headache severity also lessened in both groups that had a high omega-3 intake, but neither diet significantly improved quality of life.

Scientists are still studying how dietary fatty acids affect migraine, but for now it can't hurt to eat more salmon, mackerel, sardines, and other fatty fish—the best sources of omega-3s. What to skip? Omega-3 supplements; earlier studies have failed to show conclusively that they help treat or prevent migraines.

REBOUND #2: MEDS

ISTOCK (2)

Taking too much medicine to treat migraine symptoms can backfire by causing medication overuse headaches (MOH). But adding migraine preventive medications may help curb the problem, suggest the authors of a recent study.

A team of researchers from 34 clinics in the United States is currently studying ways to reduce MOH in 607 patients with chronic migraine, and reported some early observations from their trial in the journal *Headache.* As in past studies, they found that the most commonly overused medications are analgesics (such as ibuprofen or aspirin), combination analgesics (such as pills that contain aspirin, acetaminophen, and caffeine), and triptans. Not surprisingly, they also found that having chronic migraine and MOH severely limits people's ability to function and lowers their quality of life.

Other research has shown that preventive medications can reduce headache frequency and headache-related disability in chronic migraine patients with MOH. But the current research team found that fewer than half the study participants were taking meds that prevent migraine attacks. If you have rebound headaches but have not been prescribed a preventive medication, ask your doctor about the option.

50
Percentage of migraineurs who had their first attack before age 12

Taking steps to help keep migraine in check will let you enjoy life with the people you love.

Migraine, Explained

The symptoms of migraine vary from person to person and can include not only headaches, but also nausea, vomiting, and dizziness, as well as sensitivity to touch, smells, and light. In a few people, numbness and difficulties with speech can occur. The headache pain in migraine is usually on only one side of the head.

Estimates vary, but up to 39 million Americans live with migraine. The condition often starts in childhood; in fact, half of all people with migraine had their first attack before age 12, and children as young as 18 months have been known to have migraine.

Episodic or Chronic?

Most people with migraine have an attack every few months or less often; this is episodic migraine. But some people have attacks much more frequently. When migraine episodes occur 15 or more days per month, for three months or more, the condition is known as chronic migraine.

Episodic and chronic migraine are not two separate illnesses, explains Robert Pearlman, M.D., associate professor of neurology at University of Alabama at Birmingham Hospital. "Migraine is there all the time," he says, "but people with chronic migraine have more attacks."

According to Juliette Preston, M.D., director of the headache center at Oregon Health & Science University in Portland, over time people with episodic migraine may develop more and more headaches for various reasons, including changes in hormones, elevated stress, illness, or an increase in the use of pain medications. Having more headaches decreases the threshold for new headaches, and the condition can become chronic and less responsive to medications.

A healthy daily routine that includes physical activity is essential for managing migraine.

PAYING THE PRICE

MIGRAINE'S IMPACT reaches far beyond its debilitating physical aspects, resulting in "serious social and economic consequences," according to the Migraine Research Foundation. In the U.S. alone, the organization estimates that healthcare and lost productivity costs associated with migraine are as high as $36 billion a year. More than 157 million workdays are lost each year because of migraine. And the medical cost for treating chronic migraine is more than $5.4 billion a year.

For more info, go to **HealthCentral.com/ChronicMigraineGuide.**

Migraine Origins

Both genetics and environment play roles in who gets migraine. Up to 90% of people who live with migraine have a family history of the illness. If one of your parents has migraine, you have a 50% chance of having it as well. If both parents do, your risk is 75%.

Various foods, certain medications, stress, and changes in weather or routines can trigger attacks. Note that a trigger isn't the same as a cause; a trigger is simply something that is likely to set off a migraine attack. Triggers vary greatly from person to person and can even vary for the same individual—something that triggers a migraine episode one day might not have that effect on another day.

The cause of migraine is something else entirely, and in some ways, more mysterious. "No one knows for sure exactly what causes migraine," explains Dr. Pearlman, "but changes in the levels of serotonin and other neurochemicals are definitely involved. This affects the trigeminal nerve system, a constellation of nerves in the face and head. The thinking now is that patients with migraine have some basic neurological problem that manifests as migraine headaches."

Both men and women get migraine. Prior to puberty, boys are more likely to experience attacks than girls, but overall, women are three times more likely to have the condition than men. It is not entirely clear why.

Many women find that they are more likely to have attacks just before or during their menstrual periods, and often migraine improves for women after menopause. This suggests that hormones (probably estrogen) are involved. However, the situation is likely more complex than that, says Dr. Preston. "Estrogen is a trigger for some women, but not all," she says. "Some women find that their headaches lessen after menopause, but others, unfortunately, do not."

A Challenging Condition

It is hard to overestimate the costs, both personal and economic, of migraine. When you have a migraine attack, it is difficult, if not impossible, to work, study, or conduct any of the routine activities of daily life. Add to that the fact that attacks typically last between four and 72 hours (and in some cases a week or longer), it's not surprising that migraine is ranked the second most disabling disease in the world, according to the Global Burden of Disease Study, which estimates the prevalence of disease and the relative harm it causes.

"If you have chronic migraine, it can be very difficult to maintain employment or keep up in school. It really changes daily life," says Dr. Pearlman. "When you're experiencing an attack, you're just miserable; you're unable to do much of anything."

The good news is that complications from migraine are rare. "Generally, there is no long-term issue," says Dr. Pearlman, "though there is a slight increase in the risk of stroke for some people with migraine."

Chronic migraine is a challenging illness. Unfortunately, there is no cure; it is a condition that you need to learn to manage. But thanks to new medications and various lifestyle measures, such as avoiding triggers, it is possible to live a full and productive life with the condition. ■

MORE THAN JUST A HEADACHE

YOU MAY CYCLE through one or more of the following stages when experiencing a migraine attack:

- **Prodrome:** As early as three days before a migraine headache, some people may start yawning more for no reason, become sensitive to light, have food cravings, or experience mood changes.
- **Aura:** This term refers to transitory symptoms that may start five to 60 minutes before a migraine headache begins. You may start seeing flashing lights or wavy lines, or temporarily lose part or all of your vision. Aura can sometimes include verbal disruptions, sensory disturbances such as mild hallucinations, vertigo, dizziness, or motor problems such as tingling, weakness, or numbness in the extremities.
- **Headache:** For the majority of migraine patients, this is the worst phase. You can be in this corner of hell for four to 72 hours.
- **Postdrome:** After the headache phase is finished, you may feel exhausted, as though you were run over by a truck. This is the final stage of the migraine attack. You probably need at least several hours to recover.

PREVIOUS SPREAD & THIS SPREAD: ISTOCK

ISTOCK

Your Doctor Needs to Know

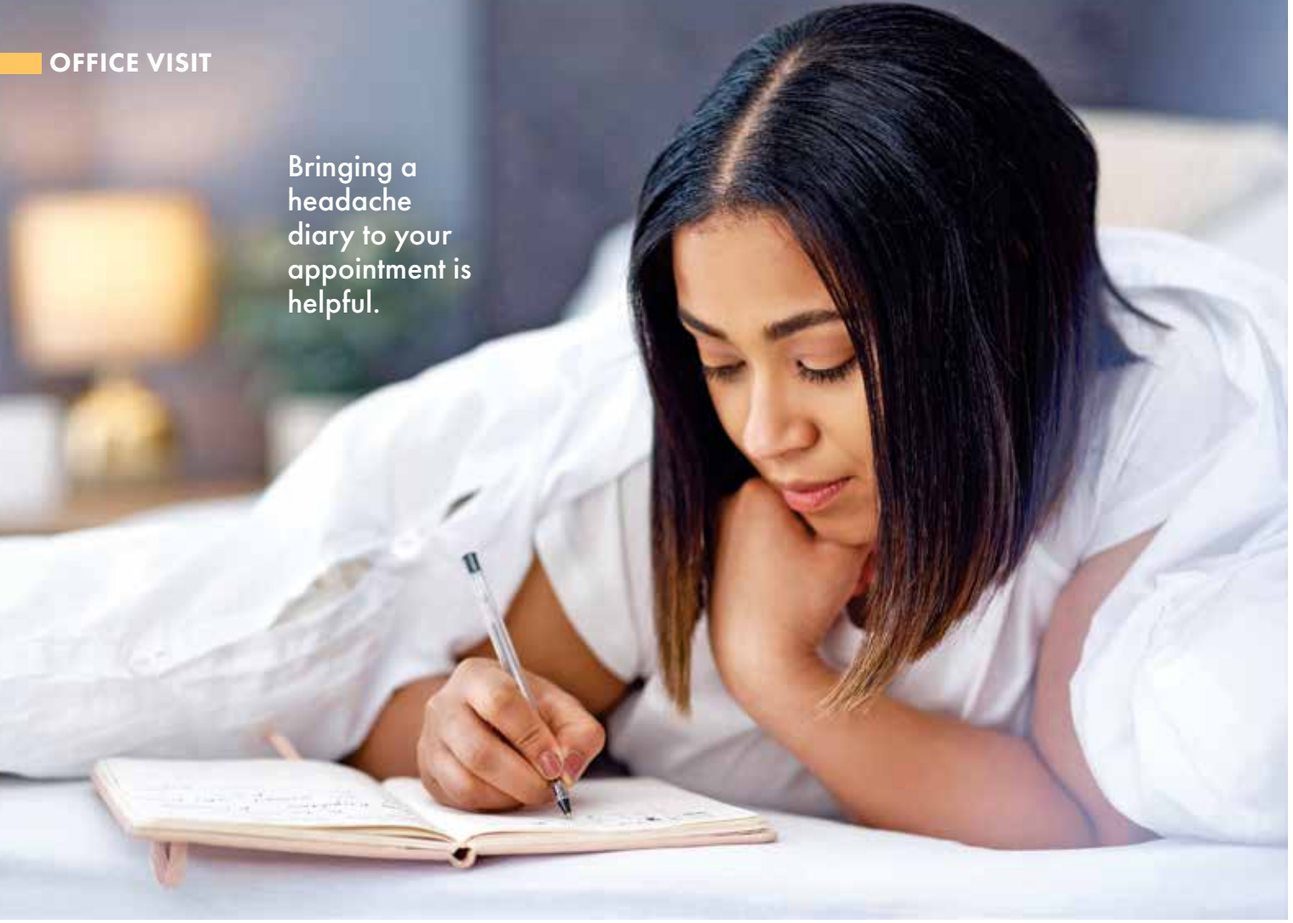
Sharing details about your migraine experiences will ensure you get the best care possible.

If you have frequent headaches and you or your primary care doctor suspects that you have chronic migraine, you may be referred to a neurologist—a doctor who specializes in disorders of the brain and nervous system. Because a doctor will diagnose chronic migraine based on your symptoms and the pattern of your headaches, most of your initial appointment will consist of talking, as opposed to undergoing a detailed physical exam.

Of course, as in almost all office visits, someone will record your blood pressure and weight, and ask about any pain or discomfort you have. Following are a few other things you can expect when you go to the doctor, as well as some steps you can take to make the most of your appointment.

How to Prep for a Visit

You'll be better able to help your doctor help you if you thoroughly plan for your visit. Juliette Preston, M.D., director of the headache center at Oregon Health & Science University in Portland, suggests that you make the



Bringing a headache diary to your appointment is helpful.

following lists and bring them to your appointment:

- **All the medications you are currently taking**
- **Medications that help relieve your headaches**
- **Drugs you have tried that did not help your headaches**
- **All of the people in your family who you know have or had migraine; be sure to include the relationship of each to you.**
- **Things you want to know (see the sidebar on the opposite page)**

Dr. Preston also suggests keeping a headache diary and bringing it to your appointment. It is very helpful for your doctor to know as much as possible about your symptoms—details such as when each episode started, how long it lasted, what you were doing just before it began, and what helped it, as well as what made it worse. Here are a few questions to consider (also see "Migraine Tracker" on page 15):

- **What were you doing in the days and hours before each episode began? Make note of any foods you ate or activities you did.**
- **Did any life stresses increase in the days before each attack?**
- **Did you have any symptoms in the hours before the pain began? If so, be as specific as you can in describing them.**

In the Exam Room

"At first, we just chat a little, get to know each other," Dr. Preston says of a typical visit with her. "I'll want to know what brought you in, about the stresses in your life, what you eat, how well you sleep, how much exercise you get, and what your lifestyle is like."

Before the visit, Dr. Preston—like many doctors—provides her patients with a questionnaire. If your doctor gives you something similar, fill it in as accurately and with as much detail as possible. This will save time at your appointment, allowing you and your doctor to discuss your information in greater depth and giving you both more time for follow-up questions.

Tests to Expect

Your doctor is unlikely to order many laboratory tests. "Any testing I do is to rule out other things," says Robert Pearlman, M.D., associate professor of neurology at University of Alabama at Birmingham Hospital. "Not often, but in certain cases, I might order brain scans—for example, if the patient never had headaches before and the headaches started suddenly, or if the headaches were accompanied by weakness. These tests would be performed to rule out various things that can cause headaches, like tumors or sinus problems."

Scans your doctor might order would likely be CT (computed tomography) or MRI (magnetic resonance imaging). But don't be concerned if your doctor sees no need for brain scans. The likelihood that your headaches are caused by a tumor is slim, and your doctor will know which symptoms indicate that a brain scan is necessary. "Most people who have brain tumors have headaches, but most people with headaches do not have brain tumors," Dr. Preston explains. So try not to let yourself jump to thoughts of cancer.

Your doctor may order some blood tests to check for infection, and in rare cases, may want to examine some spinal fluid, which is taken by inserting a thin needle between two of the vertebrae in your lower back. This can be done as an outpatient. Like the brain scans, these tests are performed in order to rule out other possible but unlikely conditions that might be causing your symptoms. ■

ISTOCK (2)

ISTOCK

ASK YOUR DOCTOR . . .

What exactly do I have? Be sure that you understand what your diagnosis is and what it means. "There are over 200 subtypes of headaches," explains Dr. Preston, "and sometimes people leave their doctors' offices without knowing their diagnosis or understanding what the diagnosis means."

What can I do to reduce the frequency of my headaches? Preventive drugs are designed to lower the number of attacks you have, so ask your doctor if any might be an option for you. Also, ask if there are any lifestyle changes that could help. Dr. Preston recommends avoiding your migraine triggers (alcohol and fermented foods are some common ones) and practicing stress-reduction techniques, such as mindfulness meditation.

How often will I need to see you? Because migraine is an ongoing illness, you will probably need to see your doctor regularly, so ask how often you should expect to have appointments. Dr. Preston sees her patients every two months until they are stable; after that, they check in once a year to make sure things are still going well and to address any new issues that may have arisen.

How do I explain migraine to my family and boss? Managing family life and a job is hard enough without needing to manage migraine as well. But it will be much easier if the people in your life understand your illness and what you are going through. Your doctor may be able to give you some tips on how best to explain to others what migraine is and how it affects you.

For more tools and tips, go to **HealthCentral.com/ChronicMigraineGuide**.

Doctor Discussion Guide

Chronic Migraine

When managing migraine, it's important to monitor your symptoms, ask the right questions, and work with your doctor to receive the appropriate care. Complete the guide below and the tracker on the opposite page, then share them with your doctor to make the most of your appointment. This will help you and your doctor develop a better understanding of your triggers, symptoms, and treatment options.

Your Migraine Experience

On average, how many migraine attacks do you have in a month? ☐

How would you describe your migraine symptoms during the past month? *(check on scale below)*

1 No Pain · 2 Tolerable · 3 Intense · 4 Very Intense · 5 Unbearable

How long (minutes, hours, days) do your migraine attacks last on average? ☐

How much time (minutes, hours, days) does it take for you to feel normal again once a migraine attack has passed? ☐

How often do migraine attacks disrupt your sleep habits? ☐

In relation to migraine, do you ever experience:
(check all that apply)

- ☐ Aura
- ☐ Light-sensitivity
- ☐ Nausea
- ☐ Vomiting
- ☐ Smell-sensitivity
- ☐ Sound-sensitivity
- ☐ None of the above
- ☐ Other _____

Your Life and Migraine

In the past month, how many days has migraine affected your ability to work? ☐

How many social/family events have you missed in the past month due to migraine? ☐

Has migraine interfered with your daily life?
☐ Yes ☐ No If yes, please explain:

_____

_____

_____

_____

Your Migraine Treatment

Have you tried these types of migraine medications?

Acute:	☐ Yes	☐ No
Preventive:	☐ Yes	☐ No

Are you currently on a treatment for migraine?
☐ Yes ☐ No If yes, which treatment:

_____

_____

_____

On a scale of 1 to 5, how well do you believe your current migraine treatment is working? *(check on scale below)*

1 Great · 2 Very Helpful · 3 Helpful · 4 A Little Helpful · 5 No Help At All

▶ **Find more information and tools at: HealthCentral.com/ChronicMigraineGuide**

Migraine Tracker

Monitoring your migraine attacks can help you and your doctor uncover patterns and identify triggers. While some people turn to apps to help them with this, you can also use pen and paper. Feel free to make copies of the tracker below to record details about your migraines over the next two or three months, or simply use it as a jumping-off point for creating your own migraine diary. Then, bring this info to your next appointment. The more details you share at your visit, the better equipped your doctor will be to help you manage your condition.

Month/Year:

Date	Time	Symptom(s), Severity, Duration	Medication Taken, Dosage, Effect	Possible Trigger(s)	How My Day Was Affected

HealthCentral

Migraine Solutions

Remember that your pharmacist is an excellent resource for answering questions about your medication.

Relief is possible, thanks to the many treatment options currently available.

Although chronic migraine can't be cured, the treatments available today can help decrease the frequency and severity of migraine attacks. "The condition can be properly treated, and the overwhelming majority of patients experience relief," says Lawrence C. Newman, M.D., professor of neurology at NYU Grossman School of Medicine and director of the headache division at NYU Langone Health in New York City.

To manage chronic migraine, you typically need a preventive medication, to stop attacks from occurring, and acute meds, to lessen symptoms after an attack starts. Finding a treatment regimen that works may require some trial and error.

Preventive Medications

Not all preventive medications work for everyone, and these drugs don't stop all migraine episodes, but they can significantly cut down on the frequency of attacks.

- **OnabotulinumtoxinA (Botox):** This treatment has been shown to reduce the number of hours of headache per month by about one-third—plus, you may be better able to perform your everyday activities while having headaches. A typical course of treatment involves getting injections every 12 weeks. It isn't effective for everyone, but for many people, "it really works. Patients tell me it gives them their lives back," says Greg Dussor, Ph.D., associate professor at the School of Behavioral and Brain Sciences at the University of Texas at Dallas. Neck pain and headache are rare side effects.

- **Monoclonal antibodies:** Several newer medications—eptinezumab (Vyepti), erenumab (Aimovig), fremanezumab (Ajovy), and galcanezumab (Emgality)—work by blocking the activity of CGRP, a molecule involved in migraine. Research has shown that for many people these drugs reduce the number of migraine days per month.

ISTOCK

- **Cardiovascular drugs:** Some meds used to treat high blood pressure can also help prevent migraine attacks. These include beta-blockers and calcium channel blockers. Side effects for beta-blockers include dizziness, fatigue, depression, nausea, and insomnia. Calcium channel blockers can lead to weight gain, constipation, dizziness, or low blood pressure.

- **Tricyclic antidepressants:** Amitriptyline and nortriptyline may reduce the number of migraine attacks by changing levels of brain chemicals such as serotonin. They can induce dry mouth, tiredness, weight gain, and constipation, however.

- **Antiseizure meds:** Topiramate (Topamax) and divalproex sodium (Depakote) can also lower migraine frequency. Possible side effects include weight change, dry mouth, sedation, memory issues, and decreased libido. Both drugs have been associated with fetal abnormalities.

Acute Medications

Also called abortive meds, these tend to work best if taken as soon as you feel an episode coming on. But taking them too often can lead to medication overuse headaches. Ask your doctor about how often to take these.

- **Triptans:** These drugs stop the release of certain neurotransmitters, constrict blood vessels, and block pain pathways in the brain. They include sumatriptan (Alsuma, Imitrex, Onzetra Xsail, Sumavel, Tosymra, Zembrace), naratriptan (Amerge), zolmitriptan (Zomig), rizatriptan (Maxalt), almotriptan (Axert), frovatriptan (Frova), eletriptan (Relpax), and a combo of sumatriptan and naproxen sodium (Treximet). Triptans should not be taken by people with heart conditions or impaired liver function, or those who have had a stroke.

- **Lasmiditan (Reyvow):** This drug is the first in a new class of meds called ditans. It's like a triptan, except that it doesn't constrict blood vessels. The makers of lasmiditan caution that a small number of users may experience serotonin syndrome (excessive levels of serotonin), driving impairment, or medication overuse headaches.

- **Gepants:** This drug class includes ubrogepant (Ubrelvy) and rimegepant (Nurtec). While not as fast-acting as some other meds, gepants are generally better tolerated and don't constrict blood vessels. Both drugs can cause nausea. Another common side effect of ubrogepant is drowsiness.

- **Analgesics:** Over-the-counter painkillers such as aspirin, naproxen, ibuprofen, and acetaminophen may be taken alone or combined with other meds to relieve mild to moderate headaches. Regular use of some can lead to gastrointestinal bleeding.

- **Ergots and ergot derivatives:** These drugs, which are often combined with caffeine (e.g., Migergot, Cafergot), narrow the blood vessels around the brain and prevent inflammation produced by neurotransmitters. Because they can cause or worsen nausea, they are sometimes taken with anti-nausea meds. Dihydroergotamine, available as an injection (DHE 45) or a nasal spray (Migranal), has fewer side effects. These drugs should not be used by people with heart conditions.

- **Opioids:** Narcotic pain medicines, such as oxycodone (e.g., Oxycontin) and hydrocodone (e.g., Vicodin), are sometimes used as a last resort for severe pain. Opioids are *highly* addictive, so they're used much less often than they used to be.

Other Approaches

- **Behavioral treatments:** Cognitive behavioral therapy (CBT), biofeedback, and relaxation techniques can be useful adjunct treatments. They often address common migraine triggers, such as stress, sleep disturbances, anxiety, or depression. CBT is a type of psychotherapy that helps people understand how their thoughts and behaviors affect their symptoms. Biofeedback involves hooking patients up to computers that provide feedback on physiological processes, such as muscle tension, and teaching them relaxation techniques.

- **Neuromodulators:** These devices use electrical currents or magnets to stimulate neural pathways in the brain to prevent or relieve pain. FDA-cleared devices include the Cefaly, a visor-like trigeminal nerve stimulator; the sTMS mini, a transcranial magnetic stimulator; gammaCore, a handheld vagus nerve stimulator; and Nerivio, a smartphone-controlled armband stimulator. ■

MORE TREATMENT OPTIONS

COMPLEMENTARY THERAPIES may offer migraine prevention and relief for some:

- **SUPPLEMENTS:** Many supplements—magnesium, riboflavin, coenzyme Q10, and feverfew—have been touted to prevent migraine. "Supplements will not work that well for many people with chronic migraine," says Dr. Dussor. "But they often have no side effects, and for that reason they're worth trying." Talk with your doctor first to make sure there aren't any interactions between supplements you're considering and meds you're taking.

- **MASSAGE AND ACUPUNCTURE:** Acupuncture (the insertion of very fine needles into specific points on the body for pain relief) and massage may help, though little research has been done to show their effectiveness in people with chronic migraine.

For more info, go to **HealthCentral.com/ChronicMigraineGuide**.

Not Alone Anymore

A college student's life is transformed when she connects with others who have migraine.

GENEVIEVE WETTERHUS

For **Alexis Ziegler**, walking into the event hall at a migraine retreat in San Antonio, Texas, was a turning point. "That changed my life forever," she says. "The minute I saw the room, I immediately felt at home. It was amazing to be surrounded by so many other people with migraine."

Before that spring day in 2019, Ziegler, 23, says she was mostly on her own in dealing with chronic migraine, including the constant attacks and numerous medications, emergency department visits, and canceled plans. She had the support of her family and friends, but still, she felt alone. "I didn't have many people to talk to about it," she says. "I wasn't involved in the migraine community because I didn't know there was one."

But then she came across the Facebook page for a nonprofit called Chronic Migraine Awareness (**chronicmigraineawareness.org**), which provides online support groups and advocacy resources. There, she noticed a post announcing a ticket lottery for RetreatMigraine, an annual conference that provides disease and treatment education and advocacy training. She entered, was selected, and booked a flight to Texas. "I had no idea what was going to happen," she says. "I'm very much an introvert, so being in a big group of people is really hard for me. But I figured I would just get there and see how it goes."

For Ziegler, seeing a hall filled with some 200 people in search of information about chronic migraine helped her realize she was not alone—and that she was understood.

"The conference was completely tailored to us," she says. "The lights were dim, the room was cold, and instead of clapping, everyone had sticks with purple ribbons that you would shake in the air as applause, which was the cutest thing ever."

Pushing Through Pain

For years before the retreat, life was certainly not going well for Ziegler. She was struggling with unrelenting migraine symptoms that had started suddenly on January 26, 2016—yes, she remembers the exact date—during her senior year of high school in O'Fallon, Illinois.

In the fall of that year, Ziegler started as a freshman at Eastern Illinois University (EIU). Over the course of the next year, her symptoms grew progressively worse. In 2017, halfway through her sophomore fall semester, she took medical leave, moving back in with her parents, seeking additional medical help, and taking one class per semester at a nearby community college. "I wanted to get my general education credits done," she says. "And I knew I'd go crazy without going to class or doing something."

Ziegler has been diagnosed with chronic migraine and daily persistent headaches, with the symptoms not subsiding despite treatment. In short, she's constantly had a migraine or headache for more than five years.

"I go to bed with pain and wake up with pain," she says. "Most mornings I have pretty bad flare-ups, where my pain is a 6 or 7 [on a scale of 1 to 10], and within an hour it might go down to a 3 or 4. I have to keep rotating through my medications—preventives and abortives [acute meds]—because once my body gets used to a medicine, it stops working."

Despite such debilitating symptoms, Ziegler was determined to continue her studies, having decided to pursue a bachelor's in psychology.

"There's a stigma. At first some of my friends didn't believe I had migraine. They thought I was making it up. People just don't understand, especially when it pops out of nowhere. It's an invisible illness."

She resumed classes at EIU in the fall of 2019—this time taking courses online and living near friends who are part of her support network. But the school had fewer psychology classes online than in physical classrooms, so in January 2021, Ziegler transferred to Southern New Hampshire University, which has offered online education since 1995.

"I can go at my own pace," she says. There aren't any scheduled group classes or virtual lectures, but classwork and discussion board participation are due weekly. "When I'm having a good migraine day, I can knock the homework out, and when it's not a good day, I don't have to worry about it. And for me, reading for a long time can trigger a migraine. But because it's all digital, I can listen to the audio."

ALEXIS ZIEGLER

Alexis and her mom, Mercedes Ziegler, at a headache clinic in Chicago.

A Migraine Crusader

Knowing the pain, frustration, and challenges of a chronic condition firsthand, Ziegler is determined to earn her degree and pair it with her experience so she can help others. "I hope to become a chronic pain psychologist. I am religious, so I believe that I have these migraines for a reason, and that reason is to help others," she says. "I want to be there for someone and help them. That's what people at the retreat did for me, and I want to give back. I want others to know they are not alone and don't have to go through this alone—that the community is there for them."

Ziegler's own path certainly serves as inspiration. In addition to her class schedule—and despite the day-to-day hurdles she faces—Ziegler advocates for the migraine community. A volunteer for Chronic Migraine Awareness, she has blogged for its website and posts as @smileymigraine on Instagram—her contribution to the migraine organization's Advocates Removing Migraine Stigma (ARMS) group, which aims to increase awareness about the condition. Ziegler

Alexis with Solo, one of her two pet guinea pigs.

also makes necklaces and plaques—decorated with purple ribbons and lotus flowers, symbols of migraine awareness—for "triage kits" that the organization distributes. This past March, Ziegler participated in the annual Headache on the Hill event—hosted by the Alliance for Headache Disorders Advocacy (AHDA)—to push state and U.S. senators and representatives to take legislative action to benefit migraine patients. (The event usually takes place in Washington, DC, and numerous state capitals, but this time it was held virtually.)

For the 2021 event, 217 advocates held meetings with representatives from 272 legislative offices in 47 states. The advocates lobbied for funding for National Institutes of Health headache disorders research and for the expansion of the existing VA Headache Centers of Excellence, to ensure access to specialty headache healthcare for all veterans.

Ziegler clearly realizes the importance of advocacy work, but her mission to raise awareness is also personal. At times, she's found herself in situations where people don't understand what living with the condition is like.

"It's when you complain that you have a bad migraine and someone says, 'Oh, yeah, I had a really bad headache, but I took two Tylenols and it's better now.' That's not comparable!" Ziegler says. "In high school, this girl sitting behind me in class said loudly, 'Monday I'm going to call in with a really bad migraine.' I knew she didn't have migraine, and I knew she didn't like me—and that's just not OK.

"Migraine is a neurological disease. It's something that doesn't have a cure. It's excruciating and very debilitating," she says. "With a headache, it's unpleasant, but I can go about my day. With migraine, you're sensitive to light, sound, smell, even touch. When I have a really bad migraine, if anything is touching my head it feels like a hammer is hitting it. Even my hair hurts. And lying on a pillow, that's excruciating.

"There's a stigma," she says. "At first some of my friends didn't believe I had migraine. They thought I was making it up. Others were super supportive from the start. And my parents were confused, and maybe didn't believe me. Now they're my biggest supporters. People just don't understand, especially when it pops out of nowhere. It's an invisible illness."

The tattoo on Alexis' shoulder is a reminder of a life-changing event.

A Lasting Impression

This summer, Ziegler underwent a weeklong stay at the Diamond Headache Clinic Inpatient Unit at AMITA Health Saint Joseph Hospital in Chicago, more than a six-hour drive from her home. Her hope was to get relief through treatment at the facility, which was recommended by her physician—her seventh migraine specialist in five years. There, Ziegler says, the doctors sought to "figure out a protocol for when I have a bad migraine, to give me different medications to try to bring down my symptoms."

So far, the doctors seem to have been successful. Two months after her treatment, Ziegler says that her daily pain measures at a 2 most days, and she's even had some days at 1. "It's amazing," she says. "I feel human again."

Ziegler is excited about this year's RetreatMigraine (**headachemigraine.org/retreatmigraine**), scheduled for October as both a virtual and in-person event in California.

"A friend I made in 2019, Abby—we're best friends to this day," Ziegler says. "She's come to visit me, and I've visited her, and we'll be roommates at the conference this year."

At last year's virtual retreat, many attendees wore temporary tattoos of the event logo—a lotus flower. In 2019, several women decided to have the design inked permanently. "The meaning behind it," Ziegler says, "is that the lotus flower grows in murky water, but even with all the crud and murkiness around, it still manages to bloom," a metaphor for finding the positive in migraine.

"Abby and I got the same tattoo," Ziegler says. "I have it on the back of my shoulder with the words 'I am not alone.' Because from the first day I met Abby and the others, I knew I was not alone." ■

GENEVIEVE WETTERHUS

Q&A

My treatment for preventing migraine attacks has stopped working. Why might that be?

Dr. Ailani: The migraines may have become more difficult to treat because of other factors in your life, such as an increase in stress; worsening medical conditions such as depression, anxiety, and hypertension; or allergies or hormonal fluctuations, especially those related to perimenopause. Other times, migraines could be worse because your preventive medication is no longer effective. In rare cases, older preventive medications—such as topiramate or amitriptyline—have the potential to cause the body to adapt to them, and they no longer work as well as they used to. In that case, changing the preventive regimen can make a difference. Anytime you feel your migraine treatment is no longer working, it is a good idea to have an honest conversation with your provider to see what you should do.

Dr. Rajneesh: There are two major concepts here: You could be getting worsening migraines because something has changed biologically in you. We would look at other serious causes, such as a viral infection or a new disease entity. If the changes are accompanied by fever, chills, or night sweats, reach out to your healthcare provider promptly. The second concept is less sinister, and more patients will fall into this category: It may be that something changed in your lifestyle—maybe you're not sleeping as much, or you stopped exercising or using a CPAP [continuous positive airway pressure] machine [for obstructive sleep apnea]. You may have changed your eating habits or caffeine intake, or started a new job with shift work. Something has happened that altered how these medicines act on your body. That's why keeping a headache diary is so important—so we can see these changes.

At what point should I go to the emergency room or an urgent care facility for the pain?

Dr. Ailani: If your migraine medications aren't working—and it's after routine office hours and you're really suffering—consider seeking care at an urgent care center. Most centers can provide basic treatments for migraine, though what is provided can vary from center to center. Often treatments are given as pills or as an injection, but most urgent care centers do not give intravenous treatment, so if you are vomiting, skip the urgent care center and go directly to the emergency room. There, you can get intravenous fluids and medicine to help improve migraine symptoms.

If you are experiencing the worst head pain of your life, it is important that you go to the ER—this is a possible sign that the headache may be something other than a migraine and needs further evaluation.

Dr. Rajneesh: If you have red-flag symptoms like chills, fever, night sweats, vision loss, or projectile vomiting, or you're unable to move your hands or legs, or if it's the worst headache of your life, go to the ER. If it's a change in the severity of the pain or the quality of the pain—if it's a stabbing pain instead of a dull ache like you usually get—that would necessitate a visit to urgent care or a phone call to your doctor.

What should I do if I start to get more headaches from taking too much pain reliever for migraine?

Dr. Ailani: This is a good time to see a healthcare provider. Reports show that 15% of people in the U.S. get medication overuse headaches; we're seeing double that in clinical practice. If you're using pain relievers more often than not, talk to your healthcare provider at length.

ISTOCK

FROM TOP: MEDSTAR GEORGETOWN; OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER

Dr. Rajneesh: Sleep, hydration, and moderate exercise may help, and so can acupuncture, biofeedback, or yoga. Otherwise, seek help from your healthcare provider. We have other abortive oral medicines that may help and IV-infusion medications we can give to reset the headache.

It can often be hard for others to understand how disabling migraines are. Explaining that a migraine is not just a headache and focusing on the symptoms that come with your migraine attacks can help them better understand your condition.
—Dr. Jessica Ailani

It's hard to explain to people how disabling my migraines can be. What's a good way to do this?

Dr. Ailani: It can often be hard for others to understand how disabling migraines are. This is because most people think a migraine is just a headache. Explaining that a migraine is not just a headache and focusing on the symptoms that come with your migraine attacks can help them better understand your condition. Describe how the symptoms—such as light-sensitivity, crippling nausea, and vomiting—affect your ability to function. Tell them that you're unable to get out of bed because everything makes you feel sick, or that getting ready is too much work and the idea of putting one foot in front of the other may be too much. Tell them about the things you have missed because of migraines, and all the things you would do if you didn't have them.

Dr. Rajneesh: Tell them that your facial expression—including smiling—doesn't mean you're not in discomfort. Besides describing the terrible pain and its persistence, it can help to point out that you're doing the bare minimum because it takes so much effort to do things you normally do.

During the pandemic, my migraine attacks have become more frequent. Why is that?

Dr. Ailani: For some people, the frequency of migraine attacks has gone up because of stress. Everybody's home, the computer never stops dinging, people are unable to shut off from work, and they're not getting the social support they need. I have watched my patients go through enormous stress, at times seemingly unbearable. It is not a surprise to me that for these patients, their migraines peaked. When the pandemic eased, migraine improved for these individuals.

Dr. Rajneesh: It may stem from changes in your sleep, activity level, exercise, when and how you work, and how much caffeine and snacks you consume. The pandemic has been a disruption in our lifestyle. As human beings, we don't like being held captive: The pandemic has minimized our social activities, for the right reasons, but they were still taken away, which increases stress and anxiety. All of these factors are contributing to migraine attacks.

I often have neck pain when I have a migraine attack. Could the neck pain be causing the attack or vice versa?

Dr. Ailani: Migraine and neck pain are interrelated. Migraine pain can start in the neck and travel into the head. For most people who have chronic migraine, that signal is going all the time so they might start to have chronic neck pain.

Dr. Rajneesh: During a migraine attack, there is increased sensitivity to pain. Even touch can be interpreted as pain. Headaches amplify pain elsewhere in the body because the brain is more sensitized to pain. Sometimes, patients notice neck pain or worsening neck pain during acute migraine attacks because of this phenomenon. Also, neck pain can trigger a migraine attack. It's a bidirectional issue. ■

JESSICA AILANI, M.D., is director of the MedStar Georgetown University Hospital Headache Center in Washington, DC.

KIRAN RAJNEESH, M.D., is director of the neurological pain division at the Ohio State University Wexner Medical Center in Columbus.

All sorts of things can set off a migraine attack. Here are ways to deal with them.

Let's Talk Triggers

Stress

Up to 70% of people report a link between their daily stress levels and migraine attacks. "Migraine can also be caused by stress letdown," says Julia L. Jones, M.D., a neurologist in the Stanley H. Appel Department of Neurology at the Houston Methodist Neurological Institute. "This can happen, for example, when your final exams end or, if you're a trial lawyer, when your case is over."

▶ **Try this:** "Doing cardio for at least 30 minutes, three times a week, can be really helpful," says Dr. Jones. "Exercise is a good de-stressor, so you feel better and sleep better." Relaxation therapy, biofeedback, and meditation are beneficial, too, reports the American Migraine Foundation.

Poor Sleep Habits

Lack of sleep or variations in your sleep can set off a migraine attack. "Maintain a normal sleep pattern. So if you wake up at 6 a.m. on weekdays, do the same on weekends," says Dr. Jones. "Sleeping in can trigger migraine; so can traveling to a different time zone."

▶ **Try this:** Practice good sleep hygiene by going to bed at the same time every night. Aim for seven or eight hours of sleep, and don't text, watch TV, listen to music, or read in bed. Avoid daytime napping.

Weather

More than half of people with migraine report that weather changes precede an attack, says Schenley Que, M.D., a neurologist at St. Catherine of Siena Hospital in Smithtown, New York, and St. Charles Hospital in Port Jefferson, New York. "When there's a storm coming in, or any change in the barometric pressure, this can trigger a migraine," he says. "Excessive heat is another problem and can cause dehydration," also a common trigger.

▶ **Try this:** Avoid going outdoors in extreme temperatures, says Dr. Que, and drink plenty of water. Keep a headache diary so you can identify specific weather patterns—like storms, wind, or lightning—that may be triggers.

Certain Foods

About 25% of people living with migraine report food-related attacks, says Dr. Jones. Some culprits are processed meats containing nitrites and foods rich in tyramine, a natural compound found in fruits, vegetables, aged cheeses, and meats, especially those that are pickled, marinated, smoked, or aged. Food additives like aspartame, an artificial sweetener, and monosodium glutamate (MSG), a preservative, are also migraine triggers, as are irregular eating patterns.

▶ **Try this:** Schedule meals at the same time every day, and stick with it, Dr. Jones says. "Or at least have a snack to keep on schedule," says Dr. Que. Other advice? "Avoid aged cheeses, salty processed meats, and excessive caffeine," he adds. ■

For more info, go to **HealthCentral.com/ChronicMigraineGuide.**

ISTOCK