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NATIONAL HEADACHE FOUNDATION

Volume 2, Issue 3 • 2012

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FEATURES

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Mission
The National Headache Foundation exists to enhance the healthcare of individuals with headache. It is a source of help to their families, physicians and allied healthcare professionals who treat them, and to the public. The NHF accomplishes its mission by providing educational and informational resources, supporting headache research, and advocating for the understanding of headache as a legitimate neurobiological disease.

Vision
The National Headache Foundation is the premier educational and informational resource for individuals with headache, their families, physicians, allied healthcare professionals, and health policy decision makers. The NHF advocates for those experiencing headache. The organization employs the most effective means to disseminate information and knowledge about headache.

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NATIONAL HEADACHE FOUNDATION

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Letters, manuscripts, stories, materials or photographs are welcomed but will not be returned. Submission of letters implies the right to edit and publish all or in part. Submissions may be sent to: mfranklin@headaches.org. Please indicate your name, address and phone number.

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Head Wise is sent to members of the National Headache Foundation. For information on membership, call 888-NHF-5552.

Check out additional *Head Wise* and NHF content at www.headaches.org.

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DEPARTMENTS

IN EVERY ISSUE

COVER PHOTOGRAPHY BY MORGAN ANDERSON

DID YOU KNOW?
Princess Diana wore a family heirloom diamond tiara during her wedding to Prince Charles in 1981. In 2010, her brother, Charles, the 9th Earl Spencer, reflected on Di's wedding day and told *Entertainment Tonight* that the tiara had left his sister with a "cracking headache."

Religious Vision or Migraine Aura?

In my lectures and articles on migraine aura, I frequently cite Hildegard of Bingen, the abbess (1098-1179). She founded several Benedictine monasteries in Germany and was authorized to preach in public by the pope of the time, Eugenius III. Not limited by her religious life, Hildegard was a talented writer, composer, philosopher and artist. She was the first woman recognized by the Catholic Church as a "prophetess." Because of her prolific work in theology, botany, music and medicine, she developed a cult following; because of her unprecedented influence on the medieval Church, she is highly regarded in the feminist movement.

Hildegard von Bingen: *Liber Divinorum Operum.*

Hildegard's illuminated manuscripts and tapestries depict her spiritual visions—images that she believed were divinely inspired. During her tenure at Bingen, ergotism (or ergo poisoning) was rampant and attributed to spoiled rye in the lands bordering the Rhine River. It was suggested that Hildegard's visions were a result of the hallucinations associated with ergotism.

Most headache researchers and historians believe that the jagged lines and bright lights, so prominent in her art, were associated with the aura of migraine. Although she was often considered a candidate for sainthood, many believe Hildegard was never canonized due to the association of her visions with migraine auras.

On May 10, 2012, Pope Benedict XVI canonized the Abbess, who is now known as Saint Hildegard. He further honored the 12th century nun by announcing that on October 7, 2012, she will be declared the 35th Doctor of the Church—only the fourth woman to be so honored. In the future, I will modify my presentations and manuscripts to note that the Church has disputed us doctors of headache medicine, since those beautiful illuminations are now recognized as "divine inspirations."

—Seymour Diamond, MD
Executive Chairman and Founder

Chat with a Headache Specialist

NHF is hosting several live chats in 2012, offering you a chance to interact with headache specialists online. Each chat is assigned a topic and a headache specialist who answers questions in real time. To see a list of upcoming chats and to register, visit the NHF website at www.headaches.org/content/nhf-chat-room. While you are on the website, you can access a variety of past chats, which are now available as podcasts on YouTube. Topics include post-concussion headache, fibromyalgia and headache, depression and headache, etc. Have an idea for a new chat topic? Send an e-mail to info@headaches.org.

Patient Education Events

1. The NHF will be hosting "Why Does My Head Hurt?" on October 27, 2012, from 9 am-Noon (CST) at Northern Illinois University, Naperville Conference Center 1120 E. Diehl Road, Naperville, Ill. To register, call 312-274-2650 or e-mail info@headaches.org.

2. Centura Health-Porter Adventist Hospital is sponsoring, with the NHF, a patient education event on November 3, 2012, from 8 am-1 pm (MST) at the Davis Auditorium, Sturm Hall, at Denver University, Denver, Colo. For registration information, e-mail info@headaches.org.

NHF Hosts Chicago Awareness Event

In celebration of Migraine Awareness Month, the National Headache Foundation (NHF) held a free educational event in Chicago on June 21, titled, "Why Does My Head Hurt?" The event featured an expert panel including headache specialists Alexander Feoktistov, MD, PhD; James Banks, III, MD; and Merle L. Diamond, MD, as well as workplace attorney Carol G. Silverman, Esq.

About 75 people attended, receiving free copies of *Head Wise* and other educational materials. The panel captured the audience's attention with scientific explanations and fun facts including:

- The differences between the various chronic headaches including hemicrania continua, New Daily Persistent Headache, cluster headache and chronic migraine
- Risk factors for chronification of headache including obesity, smoking, stress and snoring
- Information on migraine and pregnancy
- Details of the Americans with Disabilities Act and the Family and Medical Leave Act, which provide certain work-related protections for people with disabling headaches

Above: James Banks, III, MD

For information on upcoming offerings from the NHF, visit www.headaches.org.

In Memoriam Lee F. Benton, Esq.

It is with deep sadness that we report that NHF Treasurer Lee F. Benton, Esq., passed away August 24, 2012, in Palo Alto, Calif. Lee was senior counsel and retired partner in the Palo Alto office of Cooley, LLP, a large national law firm where he had practiced business law for over 40 years. He was managing partner of the firm from 1996 to 2001. Lee played a significant role in establishing Cooley as one of Silicon Valley's most respected and important law firms. In a memoriam statement from Cooley, Lee was described as a "brilliant practitioner and a highly regarded speaker on the topics of securities law, venture capital, mergers and acquisitions, and strategic partnering."

Lee brought his business and legal acumen, and his dedication, to the National Headache Foundation Board of Directors, which he joined in 2006. In his role as treasurer and chair of the Operations Committee, he devoted a substantial amount of time each year to his responsibilities at the NHF. On April 14, 2012, Lee was awarded the Elaine Diamond Service Award at the NHF Annual Gala in Chicago, in recognition of his excellent and enduring service to the NHF. When presenting the award, NHF President Arthur Elkind, MD, said, "Although Lee is located on the west coast, and is intensely involved in other health-related organizations, he has been intimately involved with the NHF and unselfishly has given his time and effort. He will often travel to Chicago to the Foundation office, at his own expense, as his role has expanded beyond expectations in handling the operations of our organization."

Lee attended Oberlin College, receiving a BA in government, magna cum laude. He received his JD at the University of Chicago Law School, and was a member of the Order of the Coif. He was executive editor of The University of Chicago Law Review from 1968 to 1969, and a teaching fellow at Stanford Law School from 1969 to 1970.

In addition to his service with the NHF, Lee served as a volunteer strategic advisor to the California Institute for Quantitative Biosciences (QB3) and on the Board of Directors of Sonim Technologies, Inc. He donated substantial services to the University of California San Francisco School of Medicine, primarily to the Comprehensive Cancer Center where he was a member of the Protocol Review Committee for genitourinary cancers.

At the time of his death, Lee resided in Palo Alto with his wife, Susan. They have two sons, Timothy and Matthew (who is director of alliances and partnerships at the NHF). Our deepest condolences are sent to the Benton Family. Lee's loss will be profoundly felt at the Foundation for many years. I treasured Lee as my good friend and advisor. Personally, I will miss him greatly.

—Seymour Diamond, MD
Executive Chairman and Founder

reader mail

You ask. We answer.

Tired of searching the Internet for answers? It's time to learn from those in the know. In every issue of *Head Wise,* our experts respond to reader-submitted questions about migraine and headache disorders.

ADOLESCENT AMNESIA

I have a 12-year-old son, and one month ago he started to see colored lights; then he couldn't look at me easily. Then, when I would ask questions, he couldn't answer me; he couldn't remember my name or his school name. This lasted for about 10 minutes, and then he had a big headache. The doctors told me it was just a migraine, but I want to know if losing memory is normal. Six months ago he saw lights and lost consciousness for about two minutes, but then he didn't have a headache. I'm a little confused. Can migraine cause all of this?

—Alina Z.

Yes, migraine can cause this. Your son needs a medical work-up to be sure he isn't experiencing seizure-like activity. If the work-up is normal, he likely has what we call "acute confusional migraine," a rare migraine event that can manifest with speech difficulties, amnesia and agitation. To help prevent further attacks, he should drink plenty of fluids, exercise regularly, get regular sleep and take care of his stress. A headache specialist can discuss the appropriate medications to treat the headache.

—Jack Gladstein, MD, Pediatric Headache Clinic, University of Maryland, Baltimore, MD

FROZEN FIX

The information on brain freeze in the NHF e-newsletter was interesting, since my situation is just the opposite. When I have a migraine, I can help myself somewhat by packing ice cream in the roof of my mouth. I've always loved ice, but I don't know if that works quite as well. Unfortunately, I can't afford the calories of ice cream every time I have a headache; but if I could, I would be using it all the time. I have also experienced brain freeze when I don't have a migraine, but it doesn't leave me with a lasting headache. Why do you think ice cream would help a headache already under way? Why don't I react as others do to brain freeze?

—Ruth F.

This is a very interesting observation on your part. So-called "ice cream headaches" have been long described in the headache literature (see page 11), and they do not seem to directly relate to migraine. Brain freezes can occur for migraineurs and non-migraineurs. One study showed that they were slightly less common in migraineurs. The mechanism of pain is not entirely clear in this type of headache so it is very difficult to understand why you seem to have relief of what you are calling migraine headaches. One can only speculate that you are applying a stimulus that is countering the underlying process of the migraine, but this would be hard to prove.

In any event, packing your mouth with ice cream or ice as a treatment for migraine is potentially dangerous because prolonged cooling of the oropharynx (the back of the throat) with ice or ice cream could interfere with your normal coughing reflex—and there is always a danger of choking on the ice. My advice would be to discuss your headaches with a headache specialist and come up with a more conventional strategy to manage migraines.

—Edmund Messina, MD, Michigan Headache Clinic, East Lansing, Mich.

The National Headache Foundation has a list of headache specialists who may be of help. See www.headaches.org or call 888-NHF-5552.

THE OXYGEN DEBATE

I suffered for years and years from migraine and chronic daily headache and had two concussions previously in my life. I tried every medication and treatment regimen under the sun without relief, until I underwent hyperbaric oxygen therapy for my brain injury. I've gone more than three months now without a full-blown migraine. What is your opinion of hyperbaric oxygen treatment for headache?

—Mary M.

Hyperbaric oxygen is a treatment in which an individual is placed in a chamber where they are exposed to pure oxygen at three times the normal pressure of oxygen experienced at sea level. It has been used for the treatment of both migraine and cluster headache, but there has not been any convincing evidence that it is useful. Furthermore, the high cost and lack of availability of such chambers would severely limit its usefulness for most migraineurs, even if it were an effective treatment for attacks.

—Mark Green, MD, Mount Sinai School of Medicine, New York City

STRUGGLING TO BREATHE

I am 71 years old and have suffered with migraines since I was 19. I was recently diagnosed with asthma. Is there a connection between migraine and asthma?

—Carol D.

Yes, studies have shown that patients with asthma have a higher likelihood of experiencing migraine. We don't exactly know why. It could relate to what is causing the asthma, whether it is allergies or the neurologic component of asthma.

Further, rhinitis (inflammation of the mucous membrane in the nose) and migraine are highly related to one another. It's possible that even if asthma was associated with migraine, we wouldn't know if it was the asthma or the rhinitis. Just like rhinitis, there is an allergic and a non-allergic asthma, and it seems to be the non-allergic rhinitis that is associated with migraine. That suggests there is some sort of neurologic component to asthma that is likely to be the same component contributing to migraine in the brain; they are just different parts of the nervous system contributing to both disorders.

It's also possible for the treatment of asthma to cause headaches as well.

—Vincent Martin, MD, University of Cincinnati College of Medicine, Cincinnati

PRESSURE COOKER

I occasionally get pressure around my eyes and forehead that causes sleepiness with only mild migraine. I have non-allergic rhinitis. Are these symptoms common, and do I treat with nasal steroids or just the usual ibuprofen? At other times I have regular migraines. I also have a deviated septum. Would repairing that help with my migraines?

—Colleen B.

The way I look at migraine is that there are three main components: There is the migraine pain, which is really severe; then there's the tension pain where the headaches don't reach migraine proportion and there isn't any sensitivity to light or noise; and at the lowest level, there is the pressure sensation you get. What we have found in some studies is that if you have migraine or tension-type headache and you have pressure, your headaches tend to be more frequent and more disabling. It looks like the pressure sensation is a predictor for more severe migraine. About 80 percent of migraineurs report pressure over their sinuses.

What may be causing this? A migraineur has a

hypersensitive nervous system that probably picks up all sorts of changes in your head, since nerves go to your sinuses. Anytime the sinuses get clogged or you have nasal congestion, the brain perceives that as pressure. I would suspect that pressure sensations are occurring from this phenomenon where the sinus gets blocked, causing negative pressure on the membranes in the sinuses.

I believe that sinus pressure is going to be best treated with some sort of decongestant or a nasal steroid; the steroid would work over days, whereas the nasal decongestant would work much quicker, particularly if it is in a nasal spray. However, you don't want to use a nasal spray decongestant for more than two or three days at a time because you can form a dependence on the medication, and every time you don't use it, your nose just swells completely shut. If you want long-term improvement from the pressure, you could use nasal steroids or a nasal antihistamine. Anti-inflammatories are very effective for treating pain originating from the sinuses. It's very possible that you could treat the after-effects of the sinus problem on the nerves by treating with the anti-inflammatories.
—Vincent Martin, MD, University of Cincinnati College of Medicine, Cincinnati

TOO MUCH OF A GOOD THING

How do you recommend treating tension-type headache without causing rebound headaches?
—Lwellen H.

Rebound headaches, or medication overuse headaches, are the result of taking a medication that makes problems worse. The analogy I use for patients is over-fertilizing your plants. At a certain level, fertilizer is good. For example, for a certain amount of tension-type headache, ibuprofen is good; but remember the old rule of thumb that too much of a good thing becomes a bad thing. For people with headache, that

translates to a situation where pain relievers feed or perpetuate headache, escalating the problem and increasing the frequency of headache episodes. This often presents as a gradual increase in headache frequency over weeks or months.

To avoid this situation, first use medications that work effectively for tension-type headache. Such options might include NSAIDs, aspirin and acetaminophen. Then limit use of those medications strictly to 10 to 12 days per month. Medications that contain caffeine likely carry a higher rebound potential, so I recommend limiting use of medications combined with caffeine to eight days per month. If you require more frequent treatment (e.g., if you are having 15 or more headaches per month), then it's time to do more to prevent the headaches. This might include taking a daily medication such as amitriptyline. At a certain point, you need to stop treating the symptoms and start addressing the core condition.

Rebound headache is a tremendous problem with opioid or narcotic agents (see page 35) because the ceiling can be as low as three days a month before the medication-overuse effect appears. I strongly recommend avoiding narcotics. Not only are they not indicated for the treatment of tension-type headache, but they also carry a high risk of rebound headache.
—Robert G. Kaniecki, MD, University of Pittsburgh, Pittsburgh

Do you have a question for the NHF experts? Send it to info@headaches.org, and it could appear in our next issue.

The Sick Headache

"I recently discovered a copy of your magazine, and I am moved to write about my own experiences regarding migraines. I am a 74-year-old man, born in a small market town into a working class family in England, and have suffered with migraine as long as I can remember. When I was a child, such attacks were known as "sick headaches." They would start with an odd odor in the nose, and then I would start to see vibrating semi-circles that completely blurred my vision. Then one side of my face, usually the right side, would start to tingle and go numb. This feeling would move into the mouth and tongue, at which point I would invariably vomit, hence the "sick" part of the diagnosis. The numbness would then move into my arm and leg, by which time I would be lying down in a dark room, and my head would start to ache. The only treatment considered at that time was aspirin, which did no good. The symptoms would persist for up to three days, and I had very little sympathy from my family, siblings or parents, and certainly never a visit to a doctor. Even if my parents had known the word "migraine," which they clearly didn't, it would have been associated at that time with upper-class ladies, who in the romantic novels of the time were always retiring to their bedchambers with a migraine.

"As I grew up, I learned to cope with these attacks, which happened at least once a month, and I would go and lie down in a dark room until it passed. As I got older, I realized what it was I suffered from and tried all the suggested remedies I read about. Finally I found the only one that worked, an over-the-counter tablet called Migraleve™. Taken at the start of the symptoms, the attack would be reduced to only two to three hours, after which I would be able to return to work, though still feeling fairly groggy for maybe a day or two.

"When I was in my early 20s, I started keeping a food diary. I soon realized that a meal containing cheese would invariably be followed within 24 hours by a severe migraine, which was unfortunate as cheese had always been a big part of my diet. I gave up eating cheese, and sure enough the frequency of attacks diminished to only three to four a year. These I could often trace to exposure to the smell of cheese. Also, sometimes an attack would be triggered after drinking red wine, and I discovered that a severe headache would follow a meal or snack containing chocolate. I later discovered that it was only cheese made from cows' milk that caused the problem, so I could substitute goat cheese or cheese made from sheep's milk. Unfortunately, having recently moved to South Carolina, I find it quite difficult to source those cheeses, and they tend to be very expensive. It is also difficult, when eating out, to find food on menus that don't include cheese. Now at 74, when I do get a migraine attack it is very mild and usually over in less than an hour."
—TERENCE A.

HW: Thank you for sharing your story with us! We're glad to hear your migraines have waned. Readers, if you would like to share your headache story, visit www.headwisemag.org/WiseWords.

If you have comments or suggestions about *Head Wise,* send them to info@headaches.org or post them on the NHF Facebook page.

Debate Over Detox for Medication Overuse Headaches

Should preventive therapy continue during detox?

MEDICATION DETOXIFICATION—completely clearing the body of medication—has traditionally been the first step in treating medication overuse headaches, which are unfortunately common among people with migraine. New research is calling the practice of detox into question.

Medication overuse headaches result from use of headache medications too frequently. The National Headache Foundation (NHF) defines overuse as the use of analgesics (e.g., triptans, opioids and barbiturates) more than 10 days per month or using simple analgesics (e.g., ibuprofen) more than 15 days per month. "What typically happens is that you see a transformation from episodic headaches to chronic headache," says Mark Green, MD, director of the Center for Headache and Pain Medicine at the Mount Sinai School of Medicine in New York City.

Physicians have long recommended abstaining from all medication for a period of time if overuse seems to be contributing to headaches. Understandably, though, many patients are less than thrilled with the idea of going medication-free. The latest debate focuses on the use of preventive medications during detox.

PREVENTIVE THERAPY DURING OR AFTER DETOX?

Several recently published medical studies have examined the use of preventive migraine medication in patients with medication overuse headaches. Although none of the studies were specifically designed to test whether medication detox is necessary before starting preventive migraine medication, the studies all included patients who overused medication (most often, triptans) for migraine attacks.

In each case, patients started taking preventive medications (either topiramate or onabotulinumtoxin A injections) before discontinuing their current medication regimen. Both topiramate and onabotulinumtoxin A (better known by the brand name Botox®) were found to be effective preventive medications, even in patients who were overusing acute medication. The preventive medication seemed to help patients lessen their use of acute medication, too. In one European trial, 63 percent of patients were overusing medication at the beginning of the trial. After 16 weeks on topiramate, only 17 percent of patients were overusing medication.

Some experts, though, say the studies did not include enough patients or were not long enough to warrant changing current practice. They argue that larger studies and at least two years of follow-up will be necessary to see if administering preventive medication should be considered when treating medication overuse headaches.

THE BOTTOM LINE

Headache experts agree that decreasing the use of acute medication is an essential part of treating medication overuse headaches. But physicians disagree about whether preventive medications should be used while a patient is decreasing his or her intake of acute medication. In an article in the Apr. 2012 issue of the journal *Cephalalgia*, Hans-Cristoph Diener, MD, PhD, chairman of the Department of Neurology at the University of Essen in Germany, wrote that using preventive therapy has allowed his clinic to "reduce the percentage of patients who need detoxification to 25 percent."

Seymour Diamond, MD, executive chairman of the National Headache Foundation and founder and director emeritus of the Diamond Headache Clinic, says, "In my 50 years of practicing headache medicine (treatment and detox), I have found that adding a preventive medication during detox is highly beneficial."

In other cases, physicians recommend total detox from all medications before starting a preventive medication. "If you're taking a lot of medication for headache, our best chance by far, and sometimes our only chance of getting you better, is to give you a period of washout where you're not on the overused medication or a related medication," Dr. Green says. "Otherwise, we can't tell if medications are contributing to the problem." HW

—Jennifer L.W. Fink

Brain Freeze to Lead to Migraine Breakthrough?

Brain freeze (or "sphenopalatine ganglioneuralgia") is the kind of head pain that people joke about over a double fudge sundae. But the ice cream headache is real enough to have its own code in the International Classification of Headache Disorders as "headache attributed to ingestion or inhalation of a cold stimulus." Researchers are studying brain freeze as a way to gain a better understanding of other headache disorders such as migraine and post-traumatic headache.

STUDYING BLOOD FLOW

Lead researcher, Jorge Serrador, PhD, of Harvard Medical School, along with a team of researchers from the Department of Veterans Affairs and the National University of Ireland in Galway, Ireland, recently studied the effects of brain freeze on 27 adults in a laboratory. Researchers say brain freeze is an ideal way to learn about headaches because it is easy to induce. In Serrador's study, volunteer subjects drank ice water from straws pressed against the roof of their mouths and raised a hand when they felt pain. Researchers monitored the velocity of blood flow to the subjects' brains using a transcranial Doppler test. They found that once a brain freeze was induced, blood flow to the brain's frontal lobe through the anterior cerebral artery increased, enlarging the size of the artery and raising pressure inside the skull. As the pain subsided, the artery constricted.

The researchers, who presented their data at the Experimental Biology 2012 Conference in San Diego in April, are unsure what causes the pain itself. It could result from the change in the pressure within the skull when the artery dilates, or from the trigeminal nerve in the roof of the mouth delivering pain signals. It may also simply be that the brain is sensitive to temperature changes. However it happens, the researchers believe it is possible that similar blood flow issues could contribute to other types of headache, including migraine and post-traumatic headache. If that is the case, new treatments could be developed to control the blood flow and ease the pain.

"This is important from a science perspective because we are still unsure what role that changes in brain blood flow play in headache," Serrador told *Head Wise* via e-mail in June.

Serrador says that his work does show that brain blood flow increases prior to the development of pain, which suggests it may play a role in headache development. If researchers are able to

find a definite connection, Serrador is hopeful that this could lead to new treatments for headache.

NO BREAKTHROUGHS HERE

Some headache specialists aren't overly excited by the study of brain freeze. Seymour Diamond, MD, told CNN that he is wary of the results.

"I don't think this is going to be a breakthrough for migraine or post-concussion headaches," he told CNN.

Dr. Diamond, who is executive chairman of the National Headache Foundation and founder and director emeritus of the Diamond Headache Clinic, refers to a work by John Graham and Harold G. Wolff, published in a 1938 issue of the *Archives of Neurology and Psychiatry*. At that time, those researchers had already indicated that dilatation of the blood vessels was a contributing factor to migraine and that the dilatation caused the surrounding nerves to produce pain.
—Jackie Walker Gibson

NHF GRANTS

The following research studies are supported by The Libby Fund, a project of the National Headache Foundation:

Sensory Network Plasticity in Migraine with Aura
Department of Neurology
University of Utah Medical Center
Salt Lake City, Utah

CSD-Induced Cortical Metabolic Perturbations and the Genesis of Migraine Headache
Harvard Medical School/Department of Anesthesia and Critical Care
Beth Israel Deaconess Medical Center
Boston, Mass.

For information on the Libby Fund, see page 38.

RESEARCHERS EXPLORE AIRPLANE HEADACHE

With the strain of squeezing into a small seat, changes in barometric pressure and other stresses associated with air travel, it doesn't seem surprising that flying could trigger headaches. But the number of actual reports of headache as a result of flying is slim. The first case of "airplane headache" was reported in 2004. As of 2012, only 37 cases have been published in the literature.

Among the few cases of documented "airplane headache" was the first Italian case, reported by researcher Federico Mainardi in a 2007 issue of the *Journal of Headache Pain*. Mainardi's paper seemed to open the proverbial can of worms; upon its publication, more people (81 in all) came forward claiming they too had experienced "airplane headache." The researcher replied to each of them with a questionnaire, seeking more details about their experiences; 75 people agreed to complete the form.

The results of the questionnaire were published in the April 2012 issue of the journal *Cephalalgia* and revealed:

- 61.3 percent of people with airplane headache are men
- 30.3 years was the mean age for the onset of airplane headache
- 32 percent of people with airplane headache had a history of allergies
- 23 percent of people with airplane headache were smokers
- 18.6 percent of people with airplane headache had a past history of sinus infections
- 86.6 percent of people with airplane headache experienced the attack during descent of the plane
- More than 50 percent of people with airplane headache suffer from at least one other form of primary headache

As for the headache itself, respondents noted it generally did not last longer than 30 minutes and the pain was severe and stabbing, primarily located above one eye. Researchers have proposed a classification for this type of headache, which would require:

- At least two severe headaches related to air travel
- Headaches occurring exclusively during airplane travel, together with headache with a sudden and severe onset and spontaneous decrease in the severe pain when the ascent and/or descent of the airplane are complete
- Headache that cannot be attributed to any other disorder

For now, the reason for these headaches is unclear. Researchers speculate it could be related to anatomic factors (e.g., sinuses) or environmental factors (e.g., cabin pressure, altitude). "Even the best pressurized aircraft, when they are flying at high altitudes, are only 70 percent oxygen efficient," says Seymour Diamond, MD. "Passengers may experience a headache similar to altitude headache."

Given the many stressors previously listed, headaches could appear for any number of reasons and may not be directly related to the flight itself.

To overcome the pain, 30 percent of respondents tried nonsteroidal anti-inflammatory drugs (NSAIDs). But in an interview with MSNBC, Dr. Diamond said, "I would not recommend taking anything unless the individual had a repeated occurrence of this type of headache. I don't think we should alarm the general public about taking something to prevent a headache that may not be that prevalent."
—Jackie Walker Gibson

Communicating with Co-workers

Proactive communication is the key to improving work relations.

By Kelly Caldwell

KELLIE MCDONALD, 25, misses a noticeable amount of work for her headaches—anywhere from two days a month to two days a week. When she's in attendance, she may be experiencing a migraine or tension-type headache. During meetings, she wears menthol-medicated patches (which numb muscle pain) on her forehead. Her co-workers at the University of California-Riverside see the patch and ask if she's OK, some of them giving her sad looks. McDonald says she wishes they would ignore the patch and reports feeling a "tremendous amount of guilt" about missing work.

"I feel like I have to say I have car trouble because it's like I'm crying wolf," says McDonald of Redlands, Calif., an assistant coordinator for the Student Success Programs unit of the Academic Resource Center.

For people with headache whose bosses and co-workers are less than sympathetic, a proactive conversation about accommodations may be beneficial.

PRODUCTIVITY PROBLEMS

Employee health problems lead to approximately 41 minutes of absence and 2 hours and 29 minutes of lost productivity each week, according to a study in the March 2006 issue of the *Journal of Occupational and Environmental Medicine*. For migraine, productivity loss is often higher, given that migraineurs average two to four attacks per month (which can last anywhere from four to 72 hours) and chronic migraineurs experience 15 or more migraines in a month. The combination of medical expenses related to migraine, productivity loss and absenteeism costs U.S. industries an estimated $31 billion per year.

Proactively addressing productivity issues related to a headache condition can help to create a healthy environment for the employee and foster understanding among co-workers and supervisors/managers. Unfortunately, when an employee first reveals that he or she has a condition, or when the employee starts to miss several days of work, co-workers may become suspicious.

"Someone who has never had a migraine might think it's just a bad headache, that you should take an aspirin and get over it," says Kathleen Farmer, PsyD, a headache psychologist with the Headache Care Center in Springfield, Mo.

ASKING FOR ACCOMMODATIONS

Still, don't let the fear of your colleagues' reactions prevent you from initiating an important dialogue. Dawn A. Marcus, MD, a professor specializing in fibromyalgia and migraine at the University of Pittsburgh Medical Center and author of *The Woman's Migraine Toolkit* and *The Woman's Fibromyalgia Toolkit*, says that employees should discuss their needs with their employers, but in a concise and constructive manner.

"What the boss wants to hear is that you have strategies," Dr. Marcus says. "Your boss may be able to provide reasonable accommodations to help you stay more productive."

For example, if you are a receptionist, you may want to request a headset for your phone to avoid neck pain. You might also request the ability to go to a dark room, take an hour lunch break or break up time throughout the day to rest your eyes. Staying focused on practical needs puts the focus on what is tangible, instead of intangible feelings that might be misinterpreted.

As for when this conversation should happen, Dr. Farmer says, "When an employer hires someone, they can't ask about their health because that would be discriminatory." Dr. Farmer suggests waiting to have the discussion until employment begins and when a condition becomes unmanageable.

By proactively addressing any special needs, employees can demonstrate to their bosses and co-workers that they want to be valuable members of the team. Further, bringing awareness to the condition could lead to staff-wide understanding of a condition that might otherwise be invisible. HW

By Kelly Rehan

Treatment Options for Rural Veterans

Veterans who live far from urban centers can access over-the-counter treatments and rural clinics for relief closer to home.

RETURNING SOLDIERS AND VETERANS often experience significant mental and physical ailments, including chronic headache and post-traumatic headache. Because these conditions require a professional diagnosis and treatment plan, veterans—regardless of where they live—need to see a headache specialist or neurologist. A medical evaluation will also help rule out more serious conditions that could be exacerbating pain.

"There is no substitute for a thorough medical evaluation as a starting point," says Anne Calhoun, MD, CAPT/MC/USNR-Ret, partner and co-founder of the Carolina Headache Institute in Chapel Hill, N.C.

That's easier said than done for the 6.1 million veterans who live in rural areas of the United States. Medical care for veterans is directed by the Veterans Health Administration (VHA), which runs 152 medical centers and roughly 1,400 community-based outpatient clinics, community living centers and Veteran Centers. But in rural areas, defined by the U.S. Census Bureau as areas with fewer than 1,000 people per square mile, the distance from the nearest VHA health facility can make it tough to gain access to VHA medical professionals. As a result, populations in rural areas tend to have poorer health than their urban counterparts.

Veterans with headache can look to over-the-counter treatments and rural clinics for relief in rural areas.

MEDICATION, AWAY FROM THE PHARMACY

For veterans who don't have access to a pharmacy, over-the-counter medications can be beneficial for those who need to treat one or two migraines or tension-type headaches a month, Dr. Calhoun says. Effective over-the-counter medications include non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen (e.g., Advil®, Motrin®) or naproxen (e.g., Aleve®), which are widely available in grocery and general stores.

Some combination products that add caffeine to a mixture of acetaminophen and aspirin (e.g., Excedrin®) may also help—but remember that too much can exacerbate the problem, Dr. Calhoun says. "These drugs are a double-edged sword: Overuse of them, defined as treatment more than two days per week, can actually lead to increased frequency of headaches and development of a condition called medication overuse headache," Dr. Calhoun says. "Once medication overuse headache is established, the condition is much more resistant to treatment."

Dr. Calhoun also notes that caffeine use and withdrawal can trigger headaches and actually worsen a condition over time.

"My best advice is that if a single dose of an over-the-counter medication takes care of the problem, and you're treating no more than twice a week, it's fine to use these agents," Dr. Calhoun says. "When the frequency of headache days escalates and/or the effectiveness of the agents wanes, it's time to seek professional help."

ACCESSING CARE

The 28 percent of veterans who live in rural areas are at a major disadvantage when it comes to seeking professional help for their headaches. But VHA facilities are working to change this dynamic by partnering with community groups, such as:

- Community health clinics and hospitals that can deliver care via telemedicine
- Mobile VHA clinics and community-based outpatient clinics that can deliver care in more remote areas
- Veterans service organizations (such as the American Legion) that can help link veterans to health facilities

To access a list of available rural clinics and specialists, visit www.headaches.org/warveterans/resources/rural-assistance.html.

The VHA is also implementing a pilot program called Project ARCH (Access Received Closer to Home), intended to connect rural veterans with health care closer to home. Pilot programs will be offered in northern Maine; Farmville, Va.; Pratt, Kan.; Flagstaff, Ariz.; and Billings, Mont. Veterans interested in participating can contact their care coordinator at their local VA medical center to determine if they are eligible. Details and locations are available at www.ruralhealth.va.gov/arch/index.asp.

Although rural veterans may not have easy access to world-renowned headache specialists, other options are available. By learning more about the benefits and services offered by the VHA system (see sidebar), using over-the-counter medications sparingly and making lifestyle changes to address triggers, America's heroes can improve their quality of life and better enjoy life after discharge. HW

Resources for Rural Veterans

THE NATIONAL HEADACHE FOUNDATION
www.headaches.org/warveterans/index.html

The NHF's War Veterans Health Resource Initiative consists of an online guide with the top resources available to help military men and women cope with neurological trauma, as well as the latest information about governmental assistance programs.

RURAL ASSISTANCE CENTER
www.raconline.org/topics/veterans

The Rural Assistance Center is an all-purpose resource for rural veterans and features a useful and easy-to-navigate FAQ section.

VETERANS HEALTH ADMINISTRATION OFFICE OF RURAL HEALTH
www.ruralhealth.va.gov

This site provides information and support to rural veterans. It also includes an extensive resource page so veterans can connect to more information.

WOUNDED WARRIOR PROJECT
www.woundedwarriorproject.org

The Wounded Warrior Project provides unique, direct programs and services to meet the needs of injured service members.

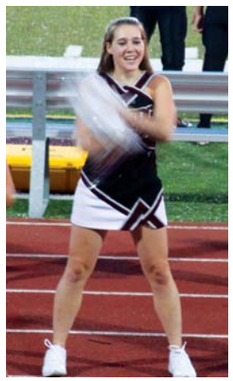
If you are a soldier looking for help with your headaches, visit www.headaches.org/warveterans.

By A. David Rothner, MD

Post-Concussion Headache in Sports

When a child migraineur suffers a concussion, the resulting headaches could be debilitating.

FOR HALEY MANKIN of Newtown Square, Penn., cheerleading was life. She had migraine and New Daily Persistent Headache that appeared at age 13, but that didn't stop her from participating in activities and going to school. That is, until a cheerleading competition at age 15. Mankin was at the bottom of a human pyramid when it collapsed; she was hit in the head three times, resulting in a concussion. She doesn't remember the moments that followed, although her friends tell her she seemed confused.



Haley Mankin cheerleading, prior to her concussion.

"We weren't that panicked," says her mother, Lisa Goldstein, MD, a child psychiatrist. "We'd seen other kids with concussions. We thought she'd be back to her normal self quickly. It wasn't until we started to realize she wasn't recovering like other kids that the gravity of the situation began to set in."

Six weeks after the concussion, Haley's migraines increased from her usual two times a month to three times a week. Ten weeks after the trauma, she was hospitalized for nine days with intractable daily migraine and vomiting. Now 17, Haley continues to experience daily headaches and has been diagnosed with post-concussion headache in the form of chronic migraine. She is home-schooled and typically unable to complete more than three non-consecutive hours of schoolwork a day or go to noisy or busy places like the grocery store, movie theater or mall.

Up to 3.8 million recreation- and sport-related concussions occur annually in the United States, according to the Centers for Disease Control and Prevention. Elementary and middle school concussions are less researched and receive less publicity because younger children do not play as many organized sports, do not hit as hard and weigh less. By high school, concussions represent an estimated 8.9 percent of all athletic injuries, according to research published in the Sept. 2010 issue of the journal *Pediatrics*. Some would suggest girls have a higher rate of concussion, with researchers suggesting a smaller head mass in females may be to blame. However, boys tend to have a higher number of concussions, due to participation in more sports and in contact sports (namely, football).

To avoid post-concussion headaches, concussion prevention in children's sports is essential; that includes teaching children how to tackle properly and having the right protective gear. Those who experience post-concussion headaches must seek treatment early to attempt to return to function and a full life.

LINGERING HEADACHES AFTER TRAUMA

Sport-related concussion is an alteration in the functioning of the brain caused by a blow to the athlete's head (or body with force transmitted to the head). In most cases, symptoms resolve in seven to 10 days, according to the journal *Pediatrics*. But sometimes headaches, the most common symptom of concussion, could linger for months.

Post-concussion headache (PCH), a type of post-traumatic headache, is a secondary headache that develops as the result of a concussion. The headaches can present in many forms: tension-type headache, episodic migraine, chronic daily headache or a combination. Those who already had headaches or a family history of headaches prior to the trauma are more likely to experience some form of PCH, and PCH is thought to be more severe in girls with a history of headache.

According to the *International Classification of Headache Disorders*, post-traumatic headaches develop within seven days of the traumatic event. However, most headache specialists agree that if headaches start even within several weeks of the concussion, those headaches can still be considered post-traumatic headaches.

Once diagnosed—generally via a thorough history (including a review of symptoms) followed by a neurological exam—a treatment path is designed based on the specific type of headache that the child is experiencing.

BOUNCING BACK, SLOWLY

Successful treatment isn't easy for many PCH sufferers. Excessive use of over-the-counter medications (defined as use more than twice a week), excessive school absences and pain can make it more difficult for children and their parents to reach out to a physician. Yet such complications also point to a need for children with PCH to find treatment.

To improve PCH, headache specialists advise adequate sleep, adequate hydration, educational support and counseling. Exercise is recommended, though physicians will generally advise exercise that starts slowly, increasing over time.

It may also be important to adjust to a new lifestyle, modifying schooling and activities that can exacerbate symptoms. With that in mind, it would be prudent to enlist the help of an educational counselor who can modify the child's schedule and an emotional counselor who can help them work through their feelings about their pain and adjusted lifestyle.

Eventually, treatment should help PCH to resolve on its own, although that resolution may occur at a different point in time for every patient. The majority of individuals with PCH improve within a couple of weeks of the trauma. Haley Mankin represents a smaller proportion of adolescents whose PCH persists. For patients with persistent PCH, it is even more important to see an expert and follow a treatment plan.

"There's always a balance between looking for the next treatment, cure or doctor, versus accepting that for right now this is how she is going to be," Dr. Goldstein says, of Haley. "But I never give up hope that she'll get better." HW

A. DAVID ROTHNER, MD, is director of the Pediatric/Adolescent Headache Program, chairman emeritus of Child Neurology at the Cleveland Clinic in Cleveland, and a member of the *Head Wise* editorial board.

Tips for Parents and Children

Dr. Goldstein and her daughter, Haley, offer these tips for children and parents of children who are involved in sports:

TAKE RESPONSIBILITY FOR EDUCATION. Make sure you, your coaches and your school administrators understand the risks for concussion, recurrent concussions, return-to-play guidelines, and evaluation and treatment options.

BE AWARE OF PREDISPOSING FACTORS. Adolescents who have a previous history of headache or a strong family history of headache seem to have more problems with headaches after concussion.

BE OPEN WITH EACH OTHER AND TAKE ACTION. Haley admits that the concussion from the pyramid was likely not the first concussion she'd had. She had been hit in the head in cheerleading before but says, "I wasn't telling anyone because I didn't want my mom to worry or make me quit cheerleading." It's important for children to be honest because they symptoms can worsen if there are recurrent concussions.

STAY OPTIMISTIC. "Know that it will get better eventually," Haley says. "Until then, try to find things that make you happy and find ways to enjoy the life you have." Haley learned to play guitar, listens to audiobooks and watches the show Glee, which she says has helped her through the hardest days.

By Avery Hurt

Smoking and Headache

Why smokers can blame their headaches on the components of cigarettes

GARY DENELSKY, PHD, STARTED SMOKING WHEN HE WAS 16 YEARS OLD. By college, he was burning through a pack a day, and in graduate school he began to experience severe headaches. Concerned, he consulted a neurologist who did a thorough neurological exam but could not establish a cause for his headaches.

DeNelsky, a psychologist emeritus at the Cleveland Clinic in Cleveland, Ohio, finally stopped smoking at age 40 after many failed attempts. Several months after he quit, he noticed that his headaches were both less frequent and less intense. He became convinced that cigarette smoke was to blame for the years of head pain and went on to found a smoking cessation program at the Cleveland Clinic, which he directed until 2001. Today at age 73, DeNelsky still experiences headaches that he believes are triggered by second-hand smoke.

"I was recently in Las Vegas in one of the smoky casinos and couldn't stay in the room more than 20 minutes without getting a headache," DeNelsky says.

Many people who suffer from headaches are equally convinced of the role of cigarette smoke in their headaches. In a Nov. 2005 survey by the National Headache Foundation (NHF), 34 percent of respondents reported that smoke triggered their headaches, and 38 percent of respondents said that they avoid smoky environments (see page 23).

The components of cigarettes and their side effects can trigger several activities in the body that result in headaches. To avoid new headaches, it is important to decrease smoking or quit completely.

IDENTIFYING THE TRIGGER

Research has shown that some sort of connection exists between cluster headache and smoking, and age and smoking. A study published in the Jan. 2012 issue of the journal *Headache* found that 73 percent of individuals with cluster headaches report a history of smoking. Further, smokers under the age of 40 with headaches occurring more than 14 days a month have a higher association between smoking and headache, according to an article published in the Nov. 2006 issue of the *European Journal of Neurology (EJN)*.

Unfortunately, it is unclear at this point whether there is a direct link between cluster headache and smoking. People with cluster headache also tend to drink alcohol, which further clouds the issue. Frederick G. Freitag, DO, medical director and director of headache medicine research for the Comprehensive Headache Center at Baylor Health Care System in Dallas and a member of the NHF Board of Directors, refers to a study in the Apr. 1992 issue of the journal *Headache*. In this study, cluster patients reported that alcohol, not tobacco intake, was the trigger for cluster attacks.

What researchers do know is that certain components of cigarettes cause side effects—and it is these side effects that can induce headaches. According to the *EJN* article:

- Carbon monoxide, a component of cigarette smoke, provokes a lack of oxygen that can trigger headaches.
- Smoking can decrease the efficacy of headache medications.
- Smoking can decrease monoamine oxidase (MAO) activity; low MAO activity is thought to be linked to an increase in headaches.

Further, according to research published in a 1994 issue of the journal *Stroke*, nitric oxide (released when nicotine enters the bloodstream) promotes dilation of arteries that typically accompanies cortical spreading depression, the activity that triggers a migraine.

TIME TO QUIT

If you experience headaches, particularly cluster headaches, specialists advise that you make every effort to stop smoking. This precaution can be easier said than done, so keep these two tips in mind:

1. **Be careful about which smoking cessation tools you use.** Some medications that serve as cessation aids, including Champix® (varenicline) and Zyban® (bupropion), list headache as a possible side effect. If medications are a trigger, consider alternatives such as hypnosis, biofeedback and acupuncture. "The vast majority of people who quit do it on their own with virtually no pharmaceutical assistance," DeNelsky says.
2. **Withdraw slowly.** Going cold turkey can create nicotine-withdrawal headaches. "You may feel worse before you feel better," says Robert A. Nicholson, PhD, clinical psychologist at Mercy Clinic Headache Center in St. Louis, Mo. But remember that side effects will diminish with time.

It is important to start the process and to quit completely in order to relieve headaches and other smoking-related maladies. "There is no way to quit smoking without effort," DeNelsky says. "It is a journey and you have to commit yourself to that journey." HW

Need more information about your headaches? Try the NHF's headache topic sheets at www.headaches.org/education/Headache_Topic_Sheets.

NHF's Smoking Survey

The National Headache Foundation (NHF) conducted a survey in 2005 to learn more about the correlation between smoking and headache. The results showed that:

Of those who reported smoking, **98 percent smoked cigarettes** (as opposed to cigars or pipes) and **54 percent smoked 11 or more cigarettes per day**.

Of respondents, **34 percent said smoke was a headache trigger**.

Of former smokers, **53 percent reported quitting due to concerns about cancer**.

Of former smokers, **82 percent reported their headaches did not increase in severity while quitting**.

When Headaches Mask Eye Conditions

BY SARAH FISTER GALE

YOUR EYES MAY LOOK NORMAL, BUT AN EYE-RELATED CONDITION COULD STILL BE RESPONSIBLE FOR YOUR HEADACHES.

IN 1984, Jeanette Simpson-Edwards was diagnosed with glaucoma at age 31. An ophthalmologist told Simpson that prescription eye drops should help resolve the condition without causing any damage to her vision. Not noticing any vision problems, Simpson says she often neglected using the drops.

Thirteen years later in 1997, still symptom-free, she saw an optometrist for eyeglasses. The optometrist noticed that the untreated glaucoma had caused Simpson's optic nerve to deteriorate. Simpson began to use the eye drops again, but symptoms of the glaucoma still didn't appear until 2008—a full 24 years after her initial diagnosis. "Suddenly I wondered why I was bumping into things and running into curbs," Simpson recalls.

Today, Simpson, who lives in Noblesville, Ind., has lost parts of her peripheral vision and has undergone laser treatments to reduce swelling and pain in her eyes. She has regular headaches because her eyes tire quickly as she struggles to focus beyond the blurring.

Though many people experience both headache and eye pain, it is often unclear whether the two conditions are directly linked. Following are three conditions that can cause vision problems and head pain: glaucoma, pituitary apoplexy and giant cell arteritis. Evaluation by a medical specialist can reveal these conditions early, before headaches worsen and vision deteriorates.

GLAUCOMA

In a normal eye, the fluid behind the iris is able to enter and exit as it needs. With glaucoma, that fluid can be blocked, creating a build-up of pressure in the eye that damages the optic nerve and causes pain. If left unchecked, it can cause vision loss, blindness and headaches.

There are four types of glaucoma:

1. CHRONIC OPEN-ANGLE GLAUCOMA: This type of glaucoma is the most common and involves a slow build-up of pressure over time. That slow increase, combined with a lack of symptoms, often means that the patient doesn't notice a problem until the damage has already been done, notes the National Institutes of Health (NIH) in *PubMed Health*.

Despite a lack of symptoms, a routine eye exam could reveal the condition, as was the case for Simpson. By dilating the pupils and using a gonioscopy (a mirrored prism used to view the inner workings of the eye, not generally used unless the physician suspects glaucoma),

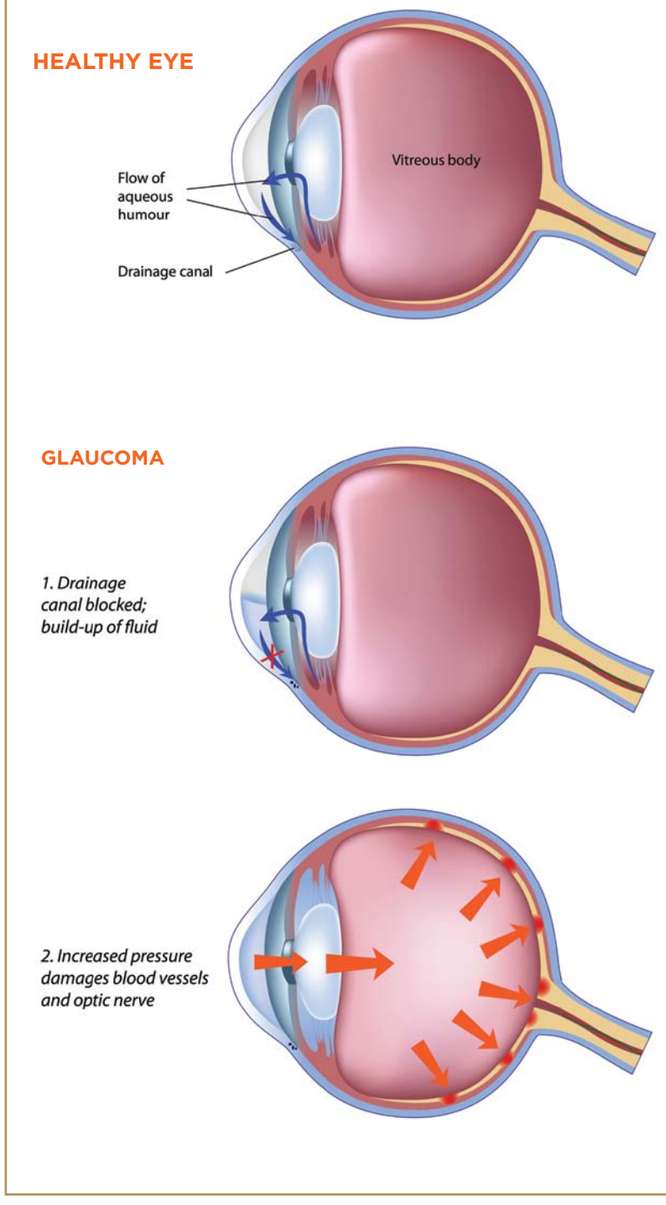
or through laser scanning images, an ophthalmologist should be able to make the diagnosis. While it can't be cured, open-angle glaucoma can be managed through the use of eye drops and medication to lower eye pressure.

If medication cannot be tolerated or is ineffective, laser therapy or surgery may be an option, says Joel S. Schuman, MD, FACS, Eye & Ear Foundation professor and chairman at the University of Pittsburgh Department of Ophthalmology.

2. ACUTE ANGLE-CLOSURE GLAUCOMA: This type of glaucoma comes on quickly and severely and signals a medical emergency, says Brian Samuels, MD, PhD, assistant professor of ophthalmology and a glaucoma specialist at the Eugene and Marilyn Glick Eye Institute at the Indiana University School of Medicine in Indianapolis, Ind. The drainage angle in the eye suddenly becomes blocked. In this case, symptoms do appear and often worsen over time. These may include nausea, severe pain in or around one eye, cloudy vision and red eye.

This last symptom may or may not have to be present for glaucoma to be diagnosed. Researchers wrote in the Oct. 1998 issue of the journal *Headache* that it is possible to have glaucoma without redness. They cited three cases in which patients were diagnosed with headaches and migraines that lasted for at least a year. All three patients had "white eye," or a normal look to the eye without any redness. With the use of a gonioscopy, glaucoma was discovered in all three instances.

Development of Glaucoma



To make diagnosis more complicated, acute angle-closure glaucoma can be confused with cluster headache, which also involves head pain (usually at night) and redness. In one case mentioned in a 1991 issue of the *Indian Journal of Ophthalmology*, a 47-year-old man experienced severe pain around the left eye, watering of the eye and redness. He was misdiagnosed with acute angle-closure glaucoma but later learned he had really been experiencing cluster headaches.

To establish a proper diagnosis quickly, ophthalmologists typically measure the actual intraocular pressure of the eye and continue to measure the pressure until it has dropped, according to The Glaucoma Foundation.

Once diagnosed, treatment usually involves medication to prepare the eye for surgery. Typically surgery can be performed with laser therapy (called iridotomy). In angle-closure glaucoma, the laser creates a hole in the iris so the iris can fall back to its normal position and relieve the blockage of the drain of the eye, Dr. Schuman says. That allows the fluid to drain more easily from the eye into the blood stream. Once the block is released, the glaucoma and headaches should go away.

3. CONGENITAL GLAUCOMA: This form of glaucoma involves abnormal eye development. As such, it is usually seen in babies and is inherited. As with acute angle-closure glaucoma, redness and cloudiness of the eye itself can signal a problem, as can sensitivity to light and tearing.

Eye drops generally aren't advised here. Instead, congenital glaucoma is treated with eye surgery. According to the NIH, babies "do well" when surgery is done early.

4. SECONDARY GLAUCOMA: This type of glaucoma is the result of some other condition, which might include eye disease or trauma. That means an event could cause glaucoma, which then could cause head pain. To stop the domino effect, it is necessary to start by treating the underlying condition.

PITUITARY APOPLEXY

While some headaches are caused directly by an eye condition, other headaches appear alongside vision problems. This is the case for pituitary apoplexy (also known as a pituitary infarction), which involves the death of tissue in the pituitary gland. In most cases, this condition is the result of a noncancerous tumor in the pituitary gland that spontaneously bleeds out or hemorrhages, Dr. Samuels says.

People with this condition may experience paralysis of the eye muscles, which can lead to double vision. Researchers wrote in the March 2007 issue of the journal *Headache* that pituitary apoplexy can be accompanied by a sudden, sharp "thunderclap headache," named for its impact and severity. Unfortunately, researchers add, diagnosis based on the thunderclap headache alone is tough because that type of headache can be symptomatic of any number of conditions, including brain aneurysm.

Not All Eye Conditions Are Emergencies

Inflammation, dryness, bleeding and straining aren't always emergencies. But if they aren't addressed, they could trigger painful headaches.

INFLAMMATION: Uveitis, or inflammation of the eye, is frequently mysterious in origin. It may be the result of a virus, bacteria, parasite or inflammatory disease. This leads to swelling and irritation of the uvea, the middle layer of the eye. The inflammation can cause blurred vision, light sensitivity, redness and headaches.

Treatment for uveitis typically includes eye drops or the topical steroid prednisolone acetate (e.g., Pred Forte® or Omnipred®), which is applied four times a day or more. Treating the inflammation can relieve the headache, says Joel S. Schuman, MD, FACS, Eye & Ear Foundation professor and chairman at the University of Pittsburgh Department of Ophthalmology. Even with treatment, he warns that the pain and inflammation may take weeks to resolve, depending on the cause. Still, it is important to stick with treatment; untreated uveitis could lead to glaucoma, cataracts (clouding of the lens) and vision loss.

DRY EYE: "When people complain about pain in both eyes, a common cause is dry eye," says Deborah I. Friedman, MD, MPH, professor of neurology, neurotherapeutics and ophthalmology and director of the Headache and Facial Pain program at the University of Texas Southwestern Medical Center in Dallas. Symptoms of dry eye include eye pain, burning, itching, redness, blurred vision and the feeling of having sand in your eyes. Such symptoms could be the result of tear deficiency, low humidity in the surrounding environment, contact lens use, medication side effects, or a more serious medical condition such as lupus (a chronic inflammatory disease) or thyroid disease.

When it comes to relief for dry eye, Dr. Friedman says "you need lubrication, not ibuprofen." An ophthalmologist will typically recommend using artificial tears frequently throughout the day. Dr. Friedman says to avoid over-the-counter eye drops containing naphazoline (e.g., Clear Eyes®). "Naphazoline gets the red out, but it can cause rebound redness once the product wears off, leading users to become dependent on the medication over time," she says. "That's just counterproductive."

For more severe cases, cyclosporine ophthalmic drops (e.g., Restasis®) are prescribed. In extreme cases, the physician may opt to plug the tear duct in order to reduce drainage of tears and keep the eye lubricated. Once the eye is properly lubricated, the pain should be relieved.

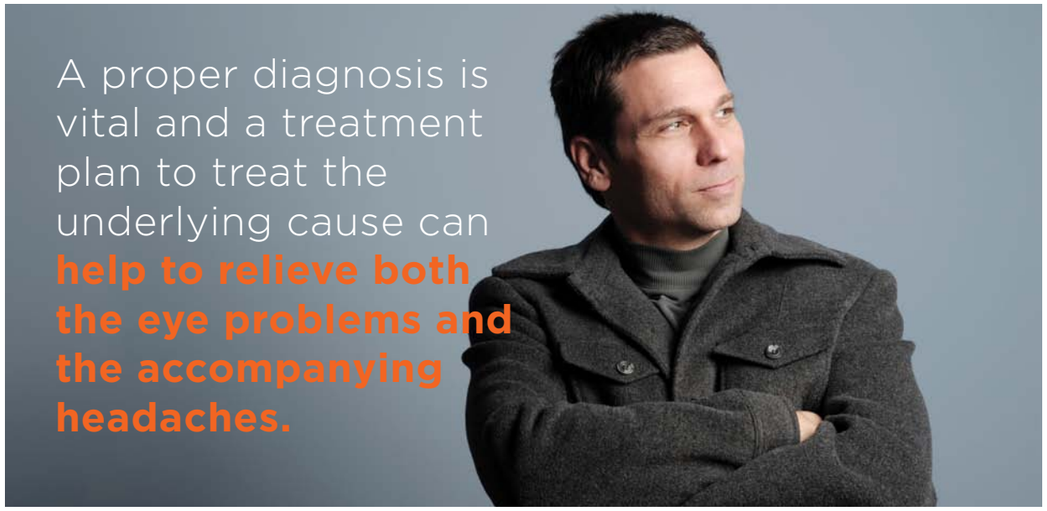
BLEEDING: Bleeding in the eye can be caused by blunt trauma to the eye, penetration of the eye or, rarely, cancer or inflammation. Bleeding can raise the level of pressure in the eye that can lead to eye pain, blurred vision and headaches.

"The best course of action is to wait it out," Dr. Schuman says. "Unless it's a massive hemorrhage, the eye pressure is high or the blood is staining the tissues of the eye, the eye tissue will usually absorb the blood on its own."

If the hemorrhage is severe, the physician may opt to drain the blood surgically. In the meantime, drops of atropine (e.g., Isopto Atropine®) and/or steroids can be used to treat the pain and inflammation. Patients should not take aspirin or nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen to treat this condition, as these medications can promote bleeding.

EYESTRAIN: Often eye pain and headaches are simply the result of eyestrain, a sign that a patient may need glasses or a stronger eyeglass prescription. Eyestrain headaches usually occur after periods of reading or at the end of a workday spent focusing on a computer screen.

"When a patient is suffering from eyestrain, a change in eyeglass prescription will often solve the problem," Dr. Schuman says. "If a new prescription doesn't fix it, this may indicate the presence of some other eye problem; for example, difficulty reading and eyestrain can be symptoms of a cataract, which could be cured with surgery."



To make things more complicated, researchers in the Jan. 2004 issue of the journal *Headache* revealed that pituitary apoplexy is often misdiagnosed as meningitis. For this reason, the researchers say it is important for anyone who presents with these symptoms to get a magnetic resonance imaging (MRI) scan of the brain to determine the true cause.

Researchers in the meningitis study wrote that pituitary apoplexy is rare but life threatening, adding that rapid treatment is necessary and usually involves administration of high-dose corticosteroid (e.g., cortisone, prednisone) and surgery to remove the tumor.

GIANT CELL ARTERITIS

Similar to pituitary apoplexy, giant cell arteritis (GCA) is an emergency condition that, if left untreated, can cause headache, vision problems or even stroke, Dr. Samuels warns. Specifically, the condition involves an inflammation of the lining of the blood vessels in the brain. While the cause of this inflammation is unknown, it is suspected that it may be the result of an immune response gone wrong, notes the NIH.

People with GCA are usually older than 50. They may experience a new onset headache that is throbbing in nature, pain in the jaw and visual symptoms including blurred or double vision. Unfortunately, these symptoms also mimic tension-type headaches, migraine and cluster headaches. A blood test or biopsy can help a physician make a proper diagnosis. Administration of oral or intravenous corticosteroids can treat the problem as well as relieve the headaches caused by this condition, Dr. Schuman says.

In each of the eye-related conditions noted here, a proper diagnosis is vital and a plan to treat the underlying cause can help to relieve both the eye problems and the accompanying headaches. Simpson now recognizes that if she had followed her treatment plan, she likely wouldn't be facing her current vision and headache issues. "My advice to people is to stay on your treatment and don't miss appointments with your doctor," she says. "If you don't follow your treatment plan, it will only get worse." HW

A special thank you to FREDERICK SCELZO, MD, Evanston, Ill., for his contributions to this piece.

The National Headache Foundation has a list of headache specialists who may be of help. See www.headaches.org or call 888-NHF-5552.

Plastic Surgery Intrigues Media, but Carries Risks

A 2009 study drew the public's attention when it claimed plastic surgery could relieve migraine. But headache specialists are concerned about the invasive, risky procedure.

BY LAURA PUTRE

LEECHES, FUNGUS, EXORCISM. Headache specialists have seen it all when it comes to migraine treatments. The most invasive therapies, such as boring a hole into one's head, have gone by the wayside, making way for more traditional therapies such as medications. But a recent invasive procedure is making waves among migraineurs and has headache specialists concerned.

In 2009, Bahman Guyuron, MD, chair of the plastic surgery department at University Hospitals Case Medical Center in Cleveland, Ohio, set out to determine whether plastic surgery could provide relief for migraineurs. The results of his study were published in the Aug. 2009 journal *Plastic and Reconstructive Surgery* and received extensive media coverage from outlets such as *The New York Times, ABC News* and *The Wall Street Journal*. The idea that a cosmetic procedure could relieve pain intrigued readers and seemed easy enough.

Still, headache specialists say any invasive surgery comes with risks; without more data, it would be safer for migraineurs to try traditional therapies first.

THE STUDY THAT DREW THE NATION'S ATTENTION

Dr. Guyuron's study was not the first to explore the use of a cosmetic procedure for migraine relief. Researchers have been looking into onabotulinumtoxinA injections

Would you try plastic surgery to relieve your migraines? Leave your thoughts on the National Headache Foundation's Facebook page.

(Botox®) as a migraine treatment for several years. An extensively modified protocol of the kind used in cosmetics was approved by the FDA for treatment of chronic migraine in 2010. Patients who undergo the treatment generally receive injections every 12 weeks around the head and neck to dull the symptoms of the migraine, according to the FDA's 2010 press release.

To qualify for Dr. Guyuron's plastic surgery study, patients had to first respond well to Botox for migraine relief; he found 76 patients who met the requirements. Dr. Guyuron theorized that those who responded well to Botox would find more permanent relief through surgery. It should be noted that, when used for migraine treatment, neither procedure is used to change the patient's looks; instead, the techniques are applied to migraine trigger points in an attempt to relieve pain.

In the case of Dr. Guyuron's outpatient procedure, a surgeon incises through the skin into the areas of fibrous tissue through which nerves run. Specifically, the surgeon looks for either scarring of nerves or nerves trapped in muscle in three trigger sites (the forehead, temples or back of the head). If the nerves or muscles seem to be to blame for the migraine pain, the surgeon surgically deactivates the trigger site in question by removing any excess muscle and injecting fat to cushion the nerves and fill any pockets left from the removal of the muscle. The whole thing takes less than an hour.

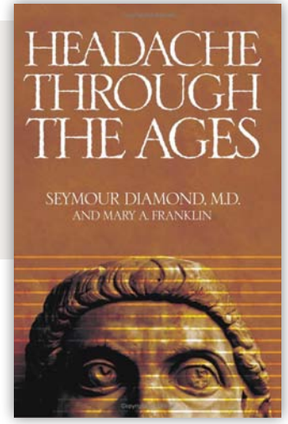
The 76 patients in Dr. Guyuron's study were divided into three groups (based on the trigger sites). In each group, two-thirds of the patients underwent surgery to deactivate muscles. The other one-third of patients in each group underwent "sham surgery" in which the surgeon made incisions to expose the muscles but did not deactivate them. The results were positive: 15 of the 26 in the sham surgery group and 41 of the 49 people in the actual surgery group reported at least a 50 percent reduction in migraines for one year after the surgery. Of the 41 in the actual surgery group who reported a reduction, 28 said their migraines had been completely eliminated.

DOWNFALLS OF THE STUDY

Positive results aside, headache specialists have reservations about recommending plastic surgery based on Dr. Guyuron's study alone. For one thing, the way the study was devised might lead to a false assumption, says Mark Green, MD, director of the Center for Headache and Pain Medicine at the Mount Sinai School of Medicine in New York City, and an NHF Board member. It is unclear whether Botox affects migraine by paralyzing muscles or inhibiting nerves that transmit pain signals to the brain. If researchers don't believe that Botox works by paralyzing muscles, "then why are we operating and cutting muscles through plastic surgery?" Dr. Green wonders, adding that the assumption that Botox and plastic surgery could have similar effects needs further investigation.

Even though the plastic surgery did have a positive impact on patients in Dr. Guyuron's study, data that show the effects of the surgery over time do not yet exist. Without long-term data, "you end up with a lot of anecdotal information, and that's where problems can occur," says Roger Cady, MD, associate executive chairman of the National Headache Foundation

To learn about the history of migraine treatments, read *Headache Through the Ages* by Seymour Diamond, MD, and Mary A. Franklin (Professional Communications, Inc., 2005), available on Amazon.com.



Discarded Migraine Treatments

By Seymour Diamond, MD, Executive Chairman and Founder of the National Headache Foundation (NHF)

Migraine has been a recognized disorder for 2.5 millennia. Yet it was not until 1938, when John Graham and Harold Wolff discovered that the use of ergot (a fungus that grows on rye) could successfully treat acute migraine attacks, that a recognized effective therapy was identified. Since that discovery, we have seen a proliferation of effective prophylactic and acute agents. In 1987, in his text, *Headache*, my late friend J.N. Blau noted that "only charlatans claim a cure for migraine, and the majority of patients appreciate [that] a cure is unattainable with our present knowledge."

From the earliest times, focal treatment to the head or neck during a migraine attack was advised. John Fordyce (who published *De Hemicrania* in 1758) noted that during an acute headache, he plunged his head into cold water. Thomas Willis (1621-1675) recommended applying a plaster consisting of leeches to the head. In a treatise published posthumously in 1684 titled *Willis' Practice of Physick, Being the Whole Works of that Renowned and Famous Physician*, blood-letting was suggested as an acute headache treatment.

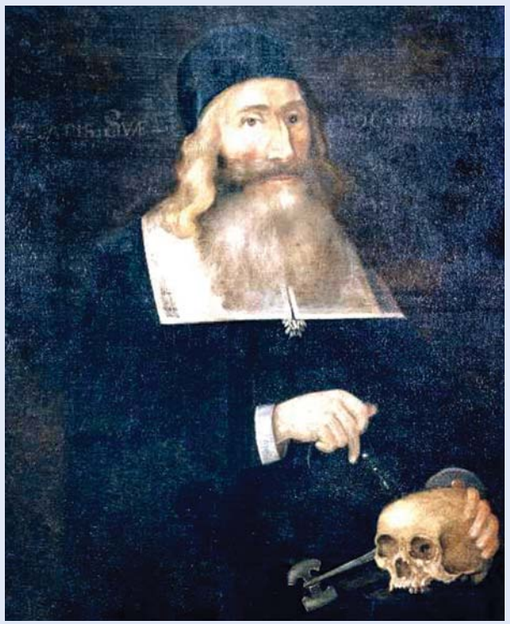
During the 17th century, the application of a tight bandage around the head became common practice. Shakespeare noted this treatment in two plays:

- In *King John*, Act IV, Scene 1, Prince Arthur remarks to Huber, his executioner:
  When your head did but ache,
  I knit my handercher about your brows

- In *Othello*, Act III, Scene 2, in a dialogue between Othello and Desdemona:
  Desdemona: Why do you speak so faintly? Are you not well?
  Othello: I have a pain upon my forehead here.
  Desdemona: 'Faith, that's with watching; 'twill away again: Let me but bind it hard, within this hour.' It will be well.

Going back further in history, Abulcasis (936-1013) advised that if hot applications to the head failed, the tender blood vessels in the temple should be severed and the wound dressed with garlic. Trephining, which involved making a burr hole in the skull, was still employed frequently until the 20th century. I continued to see recommendations for its use, and publicity about its curative value, until the 1970s.

In many cases, both prophylactic and acute treatments have not been subject to rigid scrutiny. Whatever studies were done, they were not replicated and merely afforded the opportunity for expensive and minimally effective help. As an example, I would cite repairs of the patent foramen ovale (a congenital hole between the chambers of the heart) and its alleged relationship to migraine. This condition may be persistent throughout life. Some studies, reportedly demonstrating these interventions to be effective, have been associated with a grandiose public relations campaign. With such a long history of discarded therapies, migraineurs should be wary of any pronouncement of a treatment that claims to be a cure-all for their headaches.



Right: Portrait of Dr. John Clarke ca. 1664, annonymous. A physician in New England, Clarke was allegedly the first physician to perform the Trephining operation in the U.S. It was donated to Boston Medical Library at Harvard University in 1901.

Headache specialists say any invasive surgery comes with risks; without more data, it would be safer for migraineurs to try traditional therapies first.

(NHF) and founder and director of the Headache Care Center and Primary Care Network, Inc., in Springfield, Mo. Dr. Cady would like to see more clinical trials related to plastic surgery for migraine treatment so that physicians can make scientifically based decisions involving a larger pool of information.

Dr. Cady says four of his patients have undergone plastic surgery for migraine treatment and several more are in the evaluation stage for possible plastic surgery. While he did not encourage the treatment, he says he also did not stand in their way. "These are patients with extensive histories of medication failures and long-standing, disabling chronic migraine," he says. "We're as curious and hopeful as anyone to see how they do." Dr. Cady says he doesn't have any patients who are beyond the six-month mark, post-surgery. He and their surgeon are following their progress closely.

RESERVATIONS AND RISKS

All medical treatments for chronic migraine involve a degree of risk—but the risk associated with surgery is more permanent, Dr. Cady says. Plastic surgery for migraine relief involves a multi-week recovery period as well as the potential for rare side effects such as hair loss, itching and asymmetric eyebrow movement.

"The concern is that people will try this procedure before they've gone through appropriate diagnosis, evaluation and more traditional treatments," he says.

Experts say the best approach to migraine treatment is to work with a headache specialist who has a deeper knowledge of the pathophysiology of migraines and who has access to information on what treatments are FDA approved and have consensus in the field. Permanent procedures would likely be met with a physician's skepticism if simpler, temporary relief can be obtained through medication.

In their own statements, the NHF and the American Headache Society have also noted reservations about the surgery. "I think both of those organizations presently see this procedure as a last resort," Dr. Cady says. HW

ask the pharmacist

By Richard Wenzel, PharmD

Painkiller Problem

Q Are opioids safe for migraine treatment?

MIGRAINE HAS BEEN VIEWED as a pain problem by many patients and health professionals in the past. Yet most migraineurs will acknowledge that pain is only one piece of the puzzle. Symptoms that accompany a migraine attack are just as intolerable as the head pain.

Viewing migraine merely as a pain problem leads to unintended consequences, namely promoting the use of painkiller medications as treatment—particularly narcotic drugs (such as opioids). While narcotics can be effective at relieving pain, their ability to eliminate associated symptoms and return patients to normal function is not well proven. Further, narcotics commonly cause drowsiness, which diminishes a person's capacity to perform daily work or household activities. Thus, these medications may not be the ideal migraine treatment option.

Other research concludes that overuse of narcotics can cause episodic migraine to transform into a pattern of daily or near-daily headache. The American Academy of Neurology 2012 "Guidelines on Treating Migraine" state that opioids "may play a significant role in headache progression and patterns."

Additionally, clinicians and patients often have concerns that the use of narcotic drugs could result in patterns of medication consumption best described as dependence or abuse. As a result, the use of narcotics for migraine remains controversial—yet, these drugs continue to be used widely.

Recent information from the American Migraine Prevalence and Prevention Study explored how narcotic medications are prescribed and consumed. Researchers sent questionnaires to 120,000 households across the United States. Information from a group of about 6,000 migraine respondents was analyzed. The results showed:

- About 30 percent of migraineurs had been prescribed a narcotic drug in the past four years, and 16 percent of those had been prescribed a narcotic medication at the time of the survey.
- Among individuals currently taking narcotics, about 67 percent used one narcotic agent, 20 percent used two agents, and roughly 10 percent used three narcotics.
- Nearly 20 percent of patients currently taking opioids could meet the clinical definition of dependence.
- Patients using narcotics were more likely to be unemployed, unmarried and have a lower household income when compared to individuals not using narcotics.
- Narcotic use was higher among women than men, and the average woman was approximately 50 years old.

Patterns of non-narcotic medication use were explored. In comparison to individuals not using narcotics, the annual rate of visiting a doctor's office was three times higher for people currently or previously prescribed narcotics. The number of headache days per month was lowest among those not using narcotics (three days) and highest among narcotic dependent patients (nine days). Further, the emergency room visitation rate was four times higher for prior narcotic users, five times higher for current users and 24 times higher among dependent patients.

Whether narcotic use is a sign or cause of increased migraine severity remains an unanswered question. Until research is conclusive, narcotics should be reserved for situations when migraine-specific drugs or non-narcotic pain medications are ineffective, cause significant adverse effects or are contraindicated. In situations where prescribing a narcotic may be appropriate, patients' overall ability to function should be regularly monitored as should their use of other medications and worsening of other illnesses. HW

RICHARD WENZEL, PharmD, is the staff pharmacologist at the Diamond Inpatient Headache Unit, Saint Joseph Hospital, Chicago, Ill.

Have a medication-related question? Send an e-mail to info@headaches.org and we may answer it in the magazine!

Former *Brady Bunch* actress **Susan Olsen** has experienced migraines since her days on the set. She moved on to take new roles as an artist, radio show host and migraine advocate.

Photo by Andreas Larsson

a different role

BY JACKIE WALKER GIBSON

She had pigtails, an adorable smile and a square at the bottom left of *The Brady Bunch* family grid. But even then, in the early 1970s, Susan Olsen ("Cindy Brady") was living with nauseating let-down migraines. Still, the young actress didn't let that stop her. After acting in 117 episodes of the iconic show, Olsen went on to work as a graphic artist, painter, radio show host and advocate for animal welfare. But it was her work as a migraine advocate that Olsen, now 51, identifies as good karma.

From 1998 to 2000, Olsen served as a migraine spokesperson for "Take Charge: Follow the Steps to a Treatment Program that Defends Your Lifestyle," a campaign sponsored by GlaxoSmithKline (called GlaxoWellcome at the time). By speaking about migraine disease over the years and encouraging migraineurs to take charge of their health, Olsen has helped raise awareness about the disease and empathy for those who were hiding their pain. Olsen recently spoke with *Head Wise* about her experiences with migraine and how television catchphrases may have contributed to the stigma surrounding the condition.

Head Wise (HW): When was your first migraine?

OLSEN: I experienced my first migraine when I was 11. I was at a wrap party at the end of the fourth season of *The Brady Bunch*. I felt ill and wanted to leave the party early. I thought I had the flu and complained that my head was pounding, and I was really nauseated and was vomiting. My mother said, "Oh, sweetie, I'm so concerned." I'm like, "Do I have a disease?" And she said, "I think, from your symptoms, you're having a migraine. I think you're getting what your daddy gets." Sure enough, I didn't have the flu. Back then my migraines didn't last long, and I was fine by morning.

My mother took me to the pediatrician, and I remember very clearly him kissing me on my forehead and saying, "Oh, honey you're just too conscientious."

HW: Did your migraines change over the years?

OLSEN: As most people with headaches experience, your relationship with your disorder evolves. When I became a teenager, the migraines increased because of hormones. And then in my

Know Your Headache: Hemiplegic Migraine

The hemiplegic migraines that Susan Olsen experiences are among the rarest forms of migraine. Hemiplegic migraine is characterized by a migraine headache associated with weakness on one side of the body; these symptoms may last for days. The migraineur may also experience a disturbance in speech and various visual problems.

Headache specialists generally recommend preventive agents. As Olsen mentions in her interview, triptans are avoided for hemiplegic migraine because of a potential risk for narrowing of the blood vessels.

Headache specialists may also do a blood test to determine whether the migraineur has three genes associated with hemiplegic migraine. The test would tell the physician whether the patient has familial hemiplegic migraine, associated with a genetic component, or sporadic hemiplegic migraine, associated with a gene defect. The results would not change the method of treatment. However, "if the test came back positive, then the migraineur would know that he or she is at risk for many more migraines and potentially at risk for passing the gene onto his or her offspring," says A. David Rothner, MD, director of the Pediatric/Adolescent Headache Clinic, chairman emeritus of Child Neurology at the Cleveland Clinic Foundation in Cleveland, and a member of the *Head Wise* editorial board.

The National Headache Foundation (NHF) supports The Libby Fund, which was created by Libby Kandel (a 16-year-old with hemiplegic migraine) to increase public awareness and funding for research into causes and cures for hemiplegic migraine. To learn more about the Libby Fund and donate to the cause, visit www.headaches.org/content/libby-fund.

Susan Olsen as Cindy Brady on The Brady Bunch

early- to mid-20s, they got really bad—to the point where it was pretty much every weekend that I was experiencing let-down headaches. Rather than missing work or missing something important, my stress would carry me through and then the minute the job was over, I'd miss every wrap party because the headache would begin.

What made everything very concerning was in my late 20s, I began to get hemiplegic migraine, which involves a very unusual form of aura in which the symptoms emulate a stroke. That was really scary, so I got more involved with trying to determine what the heck was going on with my head. Today, things have gotten much better. I don't have near the amount of problems I used to have. I couldn't be any happier or feel more grateful and blessed. It's like the migraine fairy came along and said, "Well, you've suffered enough."

HW: You've worn a lot of hats over the years. How have you managed your work-life balance to prevent migraines?

OLSEN: As much as my pediatrician meant it as a compliment when he said I'm too conscientious, I've learned to be less conscientious. I've learned to care a lot less; I don't stress. I make a very clear distinction between what is my fault or responsibility. Everything else can just go bye-bye.

HW: How do you treat your migraines?

OLSEN: I was helped by traditional triptans like Imitrex® (sumatriptan); that was useful for typical migraines. When I get hemiplegic migraines, that's not an indication for using that drug. Now I'm on aspirin therapy, and I stay pretty laid back. If I got anymore laid back, I'd probably flip into a coma.

HW: What made you want to be a migraine advocate? Was it about bringing legitimacy to the disease?

OLSEN: Absolutely, I would say that was the number one reason. For years my first husband would talk about that first hemiplegic migraine that I had, and he'd joke about it: "Oh yeah, back when Susan had her 'stroke.'" It was a joke, like I was a hypochondriac who overreacted. I knew all too well how it can affect your self-esteem, and I think that was the reason I jumped on the bandwagon.

HW: You appeared on *Larry King Live* with NHF's founder, Seymour Diamond, MD, in 2005. Why do you think migraine was given that forum on national television?

OLSEN: Actually that was the second time I'd been on *Larry King* talking about migraine. I think part of the reason is that Larry's wife suffered from migraine and, as a matter of fact, she began to have one during the panel. So when we were done shooting she had to go lie down. I'm sure it was the personal effect migraine had on his life and her life that urged them to explore it more.

HW: You mentioned your husband didn't believe you were having a migraine. Why do you think migraine is stigmatized by society?

OLSEN: I grew up with shows like *Bewitched* and Darrin's mother Phyllis would yell, "Frank, I'm getting one of my sick headaches!" It became a catchphrase for someone who is a complainer and a whiner. We began to identify headaches with being a whiney person.

When somebody gets a lot of headaches, after a while people just don't believe you anymore. Because I was getting mine on weekends, people stopped inviting me to things. It was like, "She's always got a headache. We get it Susan. You don't like us

anymore." And I said, "You don't get it. I really do have headaches." The best thing you can do is try to educate people that if you or your friend is having a headache, something is really wrong. Have compassion!

HW: What do you want migraine awareness to achieve in the next 10 years?

OLSEN: There are far more vehicles for getting information out there, and I think awareness is improving. When I was a child, it was nowhere near as understood as it is now. Today people say, "I work with somebody who has that" or "That must be terrible."

The message needs to get out there that this disorder usually hits people who do care a lot, who do put a little more effort into things, and because of that, rather than being looked down upon for the disorder, maybe they should be admired. This is part of the price they pay for being so cool.

HW: What would you want to say to the person who is sitting at home right now with a migraine?

OLSEN: Well, we would have to whisper it because sounds hurt so bad!

I would say the same thing I said when I was an advocate: Take charge. Don't put it off. I used to sit there in horrible pain. And then once it was over, it's like having a baby: You forget about it and say, "I'm fine now, I don't want to take the time to go to the doctor." No. Do it. Force yourself. Make a promise to yourself when you're throbbing in pain that you'll go to the doctor. You never know what new treatment might be available that could help. HW

Learn more about your headaches and interact with specialists in the NHF Chat Room: www.headaches.org/content/nhf-chat-room

wise words

NAME: Jim Staulcup, Jr., Esq.
RESIDENCE: Geneva, Ill.
CONDITION: Cluster headaches
FIRST DIAGNOSED: 1978

Photography by Morgan Anderson

What's the most frustrating thing about your life?
I never know when a cycle of headache clusters will start up. I typically can go three to five years without having a cluster cycle. When the symptoms occur, I experience a burning pain in the eye and a series of headaches that leave me incapacitated.

How do you manage your condition?
I try to stay physically and mentally active. I'm involved in community projects and activities. I'm engaged in support work for organizations such as the National Headache Foundation. I also enjoy walking, dining out, reading and staying social.

What are you most thankful for?
I'm thankful for days when I'm able to function with little distraction from headaches. This is primarily thanks to inpatient treatment by the Diamond Headache Clinic in Chicago. The clinic was successful in helping me identify what kinds of foods trigger the cycles of my headache clusters. The clinic also introduced me to the use of oxygen treatments when I feel an oncoming cycle, and oxygen aborts it. Oxygen may not stop the headache from reoccurring shortly after that, but it eases the initial pain.

What's your greatest achievement?
Professionally, I've had the opportunity to handle significant legal matters that had great results for my clients, when I was in-house counsel for major corporations and when I was in private practice. Personally, I'm very fortunate to have a great family and six grandchildren.

What's your favorite thing to read?
I like to read historical books and biographies, books about the Revolutionary War and the Civil War. My favorite biography is of John Adams. I also enjoy mystery and action books. They allow me to daydream and not have to read as carefully.

Where do you get the greatest support?
My family is very positive in their support. My wife is very understanding, and our three daughters help by staying out of the way when my symptoms occur.

Jim Staulcup, Jr., Esq., is a retired attorney who enjoys spending time with his family and doing charitable work. He enjoys genealogy and has successfully traced his paternal roots back to the 1500s. He plans on compiling his genealogy to give to his daughters.

Submit your own story at www.headwisemag.org/WiseWords.

Your Contributions to the National Headache Foundation Help Fund Projects

What's being done to help your headache problem? There is an unprecedented amount of research being done regarding migraine and other headache pain. The National Headache Foundation is involved in this effort with the help of funding from you. Contributions are a key part of the financial support of important headache research. Your gift provides funds for (a) NHF-financed research projects, (b) education for health care providers, and (c) patient-education initiatives. You can help! The National Headache Foundation, the #1 source for headache help, provides these services and many others through the generosity of people like you.

Please select one of the following giving categories:

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The following general forms are suggested:

> Specific Bequest in your will or trust – "I give to the National Headache Foundation, whose national office is presently located at 820 N. Orleans, Suite 411, Chicago, IL 60610-3132, [the sum of _____($_____) or describe property] to be used for _____ [describe purpose] or for general purposes."
>
> Residual Bequest in your will or trust: "I give to the National Headache Foundation, whose national office is presently located at 820 N. Orleans, Suite 411, Chicago, IL 60610-3132, [all or _____percent (____%) of the rest, residue and remainder of [my or the trust] estate to be used for _____[describe purpose] or for general purposes."

This information is not intended as legal advice, but is merely suggestions as to content. The specific language should be written or adapted by your legal counsel.