Sinus Headache or Migraine?

by Susan Hutchinson, MD

Facial pain and pressure, nasal congestion, watery eyes, clear nasal drainage—your sinuses are acting up again. You reach for your favorite decongestant/antihistamine, but it only gives partial relief. Perhaps you see your physician, who prescribes an antibiotic and diagnoses “sinus infection.” However, your “sinus pain” continues and soon you’re in bed, disabled again with one of your “sinus headaches.”

Think again—your “sinus headache” is probably a migraine. That’s right—sinus symptoms have been reported in as many as 45% of migraine headaches. It has to do with what goes on during a migraine. New research shows that the trigeminal nerve has a big part to play in activating a migraine attack. That nerve supplies sensation to the face and much of the head, and it has branches that go into the sinuses and nasal cavity. Activation of those branches can cause sinus symptoms.

In some recent studies, the most common “sinus” symptoms of a migraine included sinus/nasal congestion and stuffiness, nasal drainage (clear), and watery eyes. However, those same patients also experienced the following symptoms of a migraine: moderate-to-severe pain, sensitivity to light, pain worsened by activity, and nausea.

One does need to know the difference between acute sinus infection (sinusitis) and migraine headache with sinus symptoms. In acute sinusitis, fever and purulent (green/yellow) nasal discharge are often present. In these cases, a visit to your doctor’s office and an antibiotic are indicated. If the diagnosis is unclear, work-up may include x-ray, CT or MRI studies of the sinuses, cultures or blood work, or referral to an ear-nose-throat (ENT) specialist.

So, why don’t all migraine headaches have sinus symptoms? Migraine headaches can differ in symptoms and severity even in the same patient. Think of migraine as having many different “faces” or presentations but all caused by the same nerve pathway. Categorizing your headaches into rigid categories of migraine, sinus, or tension can cause you to underdiagnose and undertreat many of your headaches.

To illustrate: a female patient recently came to my office complaining of a severe sinus headache. She had already been given antibiotics and decongestants by another physician. Her symptoms included severe left-sided facial pain/pressure, marked left nasal congestion, and inability to breathe out of her left nostril. She had a history of migraines but felt this was one of her “sinus” headaches and not one of her migraines. She had no fever, no discolored nasal discharge, and no evidence of acute sinusitis. I gave her an injection of sumatriptan, a migraine-specific medication. Fifteen minutes later, when I returned to her exam room, she was 100% pain and headache free. She was also free of all congestion and thrilled she could now breathe out of her left nostril. That’s success!
If you already have been diagnosed as having migraine headaches, consider trying your migraine medication the next time you have a "sinus headache." You may be surprised at how well your "sinus" symptoms respond to the migraine medication, especially if your migraine medication is one of the triptan medications such as sumatriptan (Imitrex), rizatriptan (Maxalt), zolmitriptan (Zomig), naratriptan (Amerge), almotriptan (Axert), or frovatriptan (Frova). Usually you don't need to take a decongestant/antihistamine or antibiotic. In fact, studies indicate these are often unnecessarily prescribed.

A recent study involved 30 patients who complained of sinus headache and who had never been diagnosed as having migraine headaches. Almost all--29 out of 30--ended up meeting the diagnostic criteria for migraine or migraine-like headache. Most of them were very dissatisfied with what they were currently taking for their "sinus" headaches because it was not giving them relief. They were taking things like antihistamines, decongestants, antibiotics, nasal steroid sprays, and anti-inflammatory medications such as ibuprofen. When those patients were offered a triptan, their satisfaction went way up—the triptan, in many cases, was able to give them relief. Perhaps the most significant result of this study was the relief of the sinus symptoms with migraine-specific medication. In other words, patients do not necessarily need to take a separate medication to relieve their congestion and drainage.

Many well-meaning physicians don't yet understand the relationship of sinus symptoms to migraine. Therefore, you may be more educated than your physician. A very large study looking at 4,000 patients with "sinus" headache and treating their "sinus" headache with sumatriptan 50 mg will be published later this summer. The results of this study could help change the way both physicians and patients treat "sinus" headache. It is worth pointing out that most headache specialists do not even believe there is such a thing as chronic sinus headache.

In the meantime, look for the presence of symptoms that suggest your "sinus" headache could actually be a migraine:

- Moderate-to-severe pain
- Sensitivity to light
- Nausea
- Pain aggravated by physical activity

In summary, think migraine whenever you have a recurrent disabling headache, even if you have associated "sinus" symptoms.

—Susan Hutchinson, MD. Director, Headache Center, Women’s Medical Group of Irvine. Irvine, CA