Not every headache is the result of sinus and nasal passage problems. For example, many patients visit an ENT (ear, nose, and throat) specialist, or otolaryngologist, to seek treatment for what they think is a sinus headache, only to learn they actually have a migraine or tension headache. The confusion is common, as a migraine can cause irritation of the “trigeminal” or fifth cranial nerve, a nerve with branches in the forehead, cheeks, and jaw. This may produce pain and nasal symptoms in or near the sinus cavity.

Pain in the sinus area does not automatically mean that you have a sinus disorder. Sinus headache is a common term used by patients and some healthcare providers to describe pain or pressure in the face, over the cheeks or forehead, or between or behind the eyes (where the sinuses are located). Sinus headache, however, is not a medical diagnosis, but rather a description of symptoms of headaches.

**WHAT ARE THE SYMPTOMS OF SINUS HEADACHES?**

Patients with migraines or tension headaches commonly have sinus and nasal symptoms during their headaches, including sinus pressure, sinus pain, nasal congestion or runny nose. Studies of patients who have self-diagnosed or been diagnosed with sinus headaches were found to have migraines or tension headaches in more than 80 percent of cases; only three to five percent of these patients had sinusitis.

Symptoms of sinusitis and migraine headaches can be similar, which can be confusing about what is causing sinus pain and pressure. Migraines and headaches can cause the following nasal symptoms:

- Pain and pressure around the eyes, across the cheeks, and the forehead
- Nasal congestion
- Runny nose
- Eye redness, tearing, or eyelid swelling
- Symptoms on one or both sides of the face

Sinusitis is associated with nasal congestion or obstruction and a thick nasal discharge, sometimes with facial pain, pressure, or a feeling of fullness. However, facial pain or pressure or fullness without cloudy or colored nasal discharge is most likely not a sinus infection.

**HOW DO YOU DIAGNOSE SINUS HEADACHES CAUSED BY MIGRAINES?**

Sinus headaches are most likely due to migraines or tension headaches. Migraines are diagnosed by symptoms, including the frequency and severity of symptoms, family history, and by physical exam. Migraines can also include nausea and vomiting. These episodes may be triggered by hormonal changes, lack of sleep, certain foods or alcohol or caffeine, stress, or environmental changes like weather, altitude changes, or allergens. Many patients with migraines have family members who also experience migraine headaches.

If you have unusual or severe symptoms, additional tests such as an MRI of the brain may be ordered to rule out more serious conditions that can cause headache pain, such as tumors or bleeding around the brain. If you have repeated episodes of sinus pain and pressure, a nasal endoscopy (a pencil-sized scope used to see inside the nose and sinuses) or imaging such as an MRI or CT scan can determine if sinus pain or pressure is due to a sinus infection or other sinus pathology. A normal sinus CT scan while you have symptoms could help rule out sinusitis, and determine if migraines, headaches, or other causes of facial pain and pressure are causing the sinus symptoms.

Other causes of facial pain and pressure can include temporomandibular joint (TMJ) syndrome, clenching...
or grinding your teeth, trigeminal nerve pain, temporal arteritis (associated with scalp pain, pain in the temple, jaw pain, and vision changes on one side), dental infection, or other neurologic causes of facial pain.

WHAT ARE THE TREATMENT OPTIONS?

Your primary care provider, or a neurologist, can provide recommendations for treating your headaches based on their severity and frequency, and can rule out more serious causes of your headache. Treatment for migraines includes both over-the-counter and prescription medications (also known as acute or abortive therapies) and preventative medications for patients with severe or frequent headaches, or if headaches are present for more than 15 days per month.

Over-the-counter pain medications such as ibuprofen or acetaminophen can also be associated with rebound headaches or medication-overuse headaches if taken too often. Tell your doctor how often you take pain medications for headaches. Avoid triggers, and talk to your doctor about your sleep habits. Keep a headache diary to record your headache symptoms, triggers, and treatments.

Sinus headaches caused by migraines or tension headaches should not be treated with antibiotics. Because there are similar symptoms between acute sinusitis and migraine headaches with nasal and sinus symptoms, it can be difficult to tell if your symptoms are truly a sinus infection. Sinus pain and pressure without discolored nasal discharge is most likely not a sinus infection. If you have been diagnosed with frequent sinus infections and have been treated with repeated episodes of antibiotics without improvement, migraines or tension headaches could be causing your sinus pain and pressure.

WHAT QUESTIONS SHOULD I ASK MY DOCTOR?

1. I get frequent sinus headaches. Is this the same thing as having a migraine or tension headache?

2. If I also have trouble breathing and have a heavy discharge from my nose, what does that mean?

3. Are migraines a symptom of a potentially bigger problem? Should I get an MRI or see a neurologist?

4. I've tried over-the-counter pain medications like ibuprofen and acetaminophen, but they don't always work. Are there other prescription medications I could use instead?