



## Facts about migraines

### Three Little Known Facts About Migraines:

**1. Autonomic symptoms are common**

Migraines can be accompanied by other symptoms, such as sinus pain and pressure in the face or around the eyes, stuffy or runny nose, or watery eyes.

**2. Allergies and weather are migraine triggers**

Weather is a trigger for 46% of patients with migraines. Allergies are another common trigger.

**3. Migraine pain can be felt in many different locations**

Patients may feel pain in one or both sides of the head. In fact, 40% of migraine patients experience bilateral pain. Pain may also be felt in the back of the neck, on the face, around the eyes, or around the sinuses.

IHS (International Headache Society) Criteria for Migraine without Aura (1.1)

At least 5 attacks fulfilling:

- Episodic headache lasting 4-72 hours (Untreated or unsuccessfully treated)
- Any 2 of:
  - Moderate or severe pain
  - Worsened by movement or routine physical activity
  - Unilateral
  - Throbbing (pulsatile quality)
- Any 1 of:
  - Photophobia and phonophobia
  - Nausea or vomiting

### Key Conclusions

- Studies show that symptoms such as sinus pain and pressure, runny nose and congestion are common in migraines.
- For patients complaining of headache with sinus-type symptoms and in the absence of confirmed sinus disease, consider further evaluation for migraine.



**IS IT “SINUS HEADACHE” OR MIGRAINE?**

Migraine prevalence

- 28 million people in the U.S. suffer from migraine.
  - 12% of the total population
  - 25% of women aged 18-49
- Nearly half of migraine sufferers remain undiagnosed or are misdiagnosed
  - 42% have received a diagnosis of “sinus headache”

Acute sinus headache, despite its high rate of diagnosis, is actually a rare disorder

- In a recent study of patients with self or physician diagnosed “sinus headache”, nearly 90% met International Headache Society (IHS) criteria for migraine or probable migraine

**Headache: A Minor Criteria In AAO-HNS Sinusitis**

Major Factors

- Purulence in nasal cavity on exam
- Facial pain/ pressure/ congestion
- Nasal obstruction/ blockage/ discharge
- Fever (in acute only)
- Hyposmia/ anosmia

Minor Factors

- Headache
- Fever
- Halitosis
- Fatigue
- Dental pain
- Cough
- Ear pain/ pressure/ fullness

According to established HIS criteria

- Patients must have an acute sinus infection to be diagnosed with sinus headache

**Why a migraine is often mistaken for “sinus headache”:**

During migraine, activation of the trigeminal nucleus caudalis (TNC) can lead to reflex activation of the cranial parasympathetic nervous system resulting in sinus symptoms such as rhinorrhea, congestion, and lacrimation. Activation of the TNC can also lead to referred pain perceived in the sinus region.

Reference: Otolaryngology–Head and Neck Surgery (2006) 134, 516-523