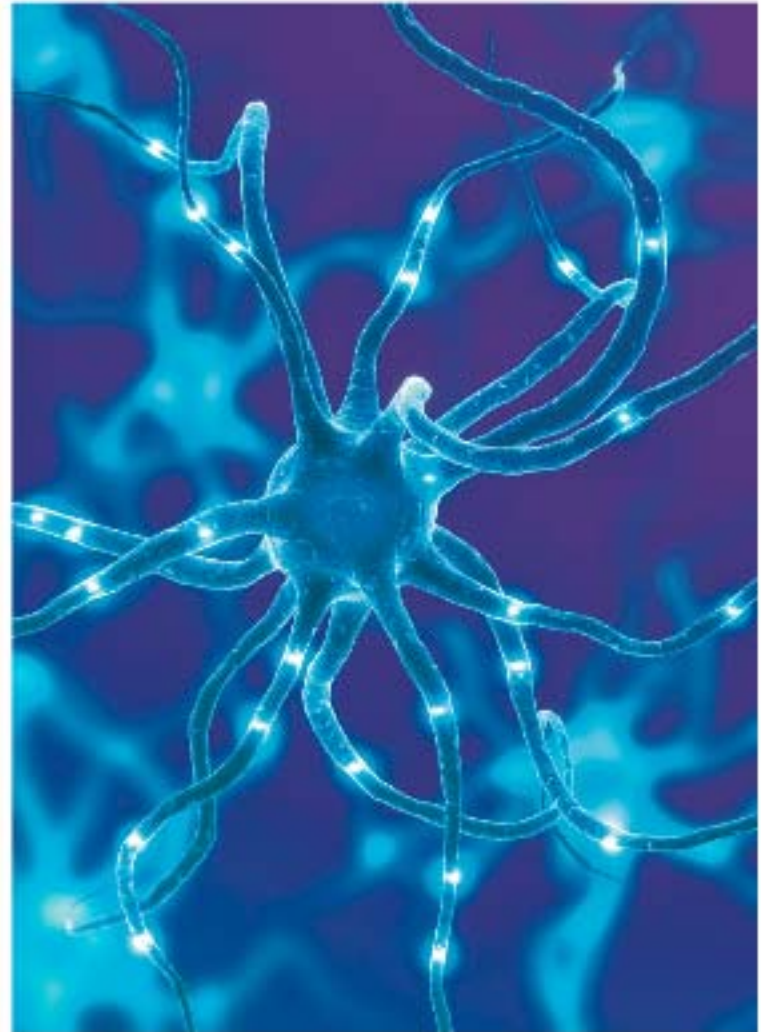


American Headache Society
Headache Curriculum

Robert Shapiro, MD, PhD
Associate Professor of
Neurology
University of Vermont
College of Medicine



Young Man with Headache and Sinusitis



Learning Objectives

- At the conclusion of this case, participants should :
 - Understand the relationship of sinus symptoms to migraine and chronic headaches
 - Know the differential diagnostic criteria for migraine vs. sinusitis



Medical History

- PR is a 33-year-old man who presents with daily headaches
- Headaches began when he was 20 years old
- His headaches increased from a few per month to “nearly daily”



Complaints at Clinical Presentation

- Dull, constant, non-throbbing pain and pressure distributed evenly across the frontal region
 - Sometimes across maxillary region
 - Occasional tightness at his occiput and posterior neck
- Twice each month he has sharp, severe stabbing pain
 - Bilateral, but worse on left side
 - Eyes burn, are watery and itchy
 - Nausea
 - Worsen with exercise
 - Photophobia



Medical History *cont.*

- Normal brain MRI/MRA
 - Thickened mucosa of ethmoid sinuses & right maxillary mucus retention cyst
- Sinus CT showed pansinusitis; frontal, ethmoid, & maxillary sinuses, narrowed ostiomeatal complexes bilaterally
- Skin allergy positive to dust mites; treated with antibiotics and steroid; educational instruction on dust mite removal
- Performed bilateral endoscopic maxillary antrostomy followed by sinus infection, treated successfully
- Daily frontal pain, nasal congestion, and postnasal mucus drainage have persisted



Medication History

Medical history

- Hypertension treated with valsartan in the past
- Chronic sinusitis, as noted above
- S/P cholecystectomy

Medications

- Fexofenadine 60 mg /pseudoephedrine 120 mg (2 tablets per day)
- Ibuprofen 200 mg (3 to 6 tablets per day) for “many years” with only transient relief of headache pain



Family/Social History

Family history

- Father with hypertension and diabetes
- Mother with hypertension and depression
- Brother with hypertension

Social history

- Married, 2 daughters
- Machinist, completed 12th grade, denies tobacco and alcohol use



Review of Systems

- Denies: vision problems, recent weight gain or loss, insomnia or daytime sleepiness, arthralgias or myalgias, fevers or chills, diarrhea or constipation, focal weakness or numbness, history of significant head trauma, dyspnea, or chest pain
- Vital signs: Ht = 70in, Wt = 176lb, BP = 120/70, P= 96, afebrile, current pain rating 3/10 headache.
- General: normal
- Head/neck: normal
- Neurological: normal



Question 1: Which of the following is/are correct diagnosis/es for this patient?

- Sinus headache
- Migraine without aura
- Tension-type headache
- Medication overuse headache



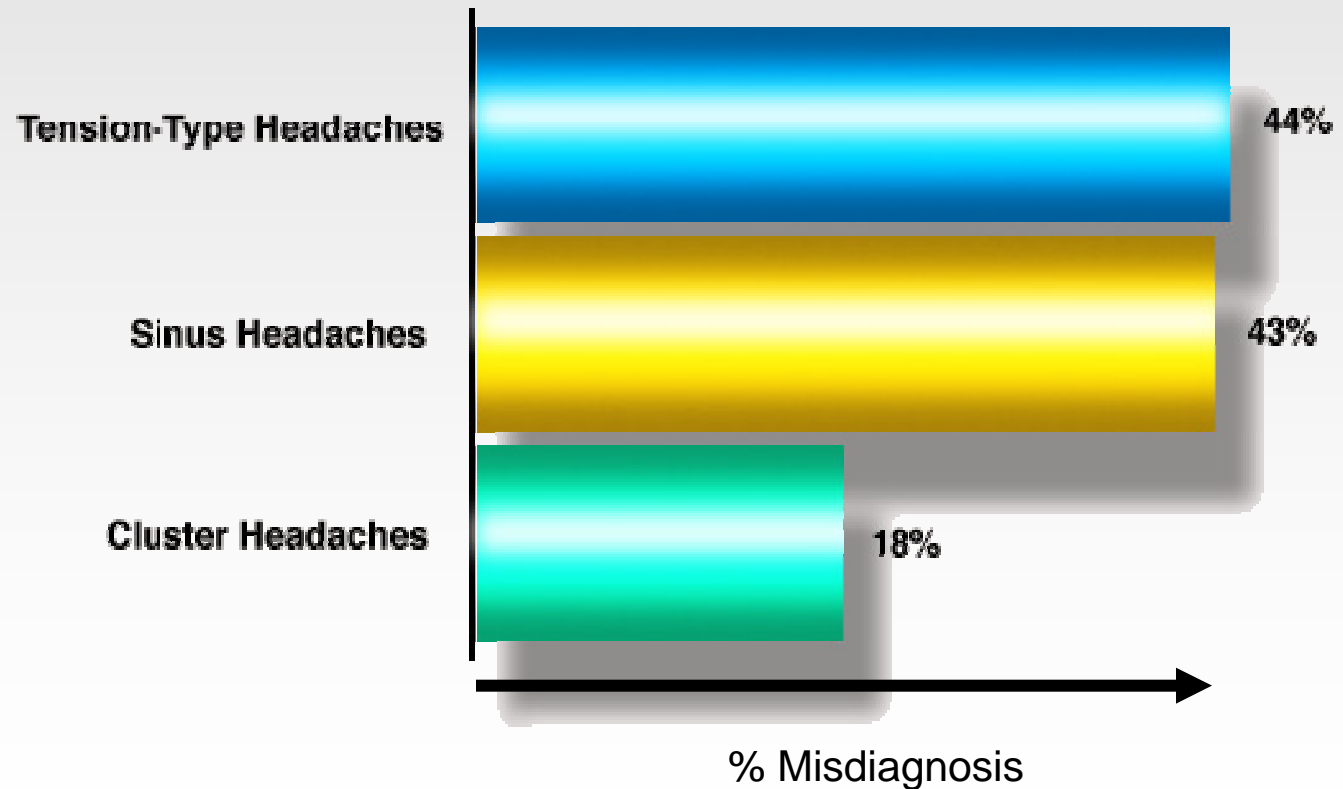
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Migraine Is Often Misdiagnosed

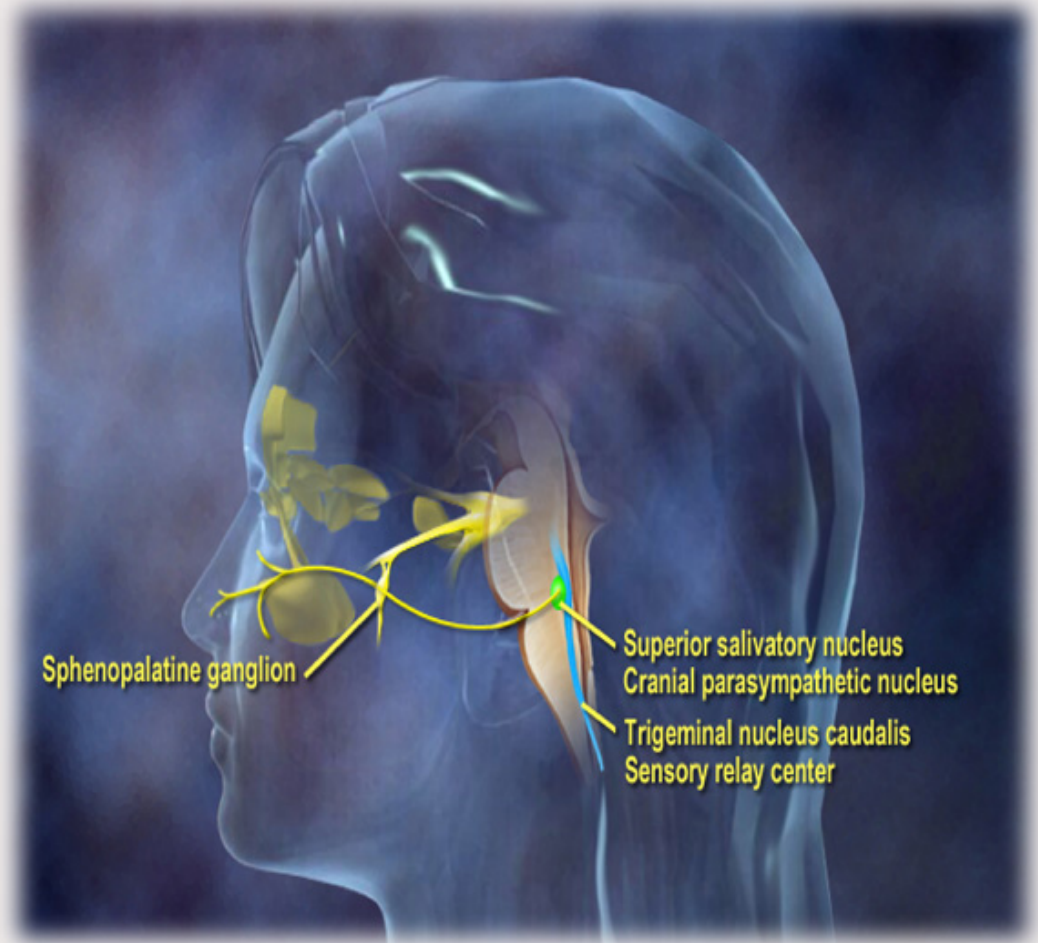
Inaccurate diagnoses received by migraine patients





Why Is Migraine Frequently Mistaken for Sinus Headache?

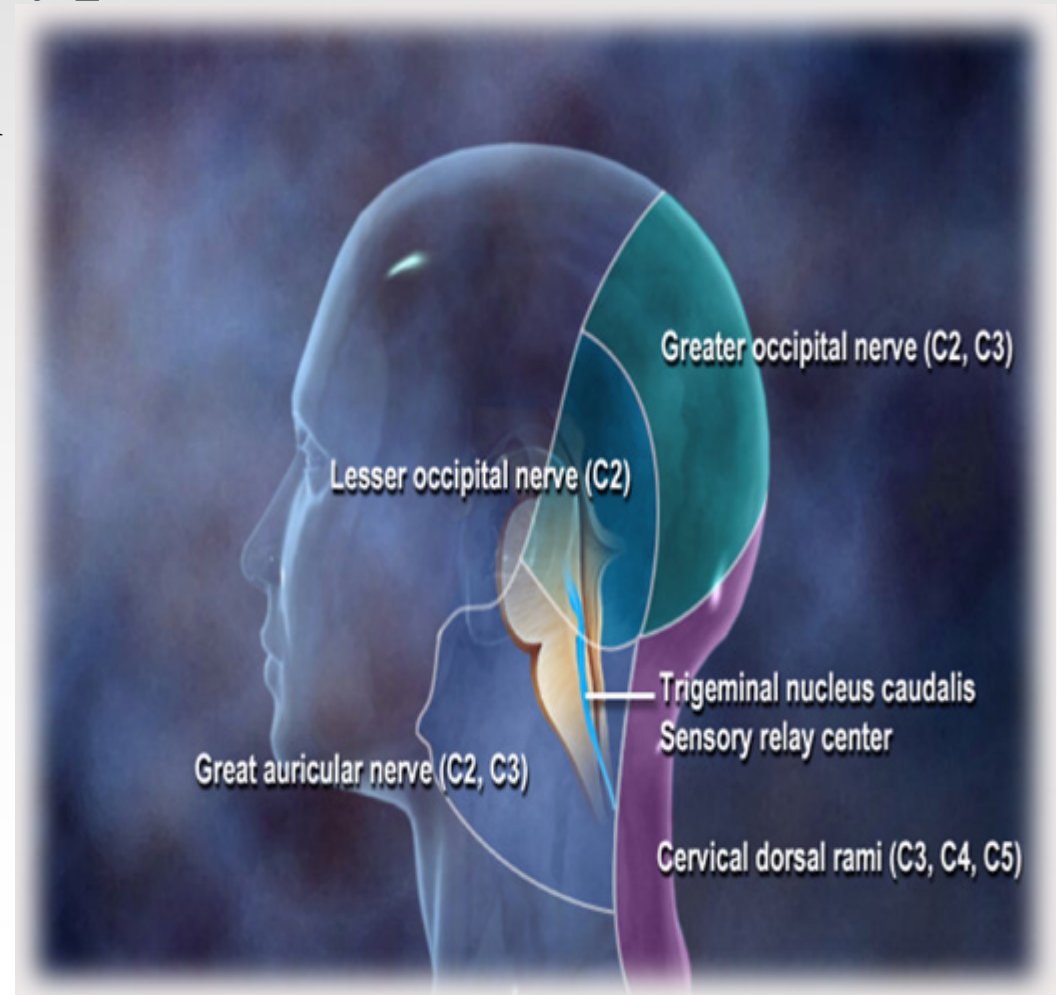
- Pain is often located over the sinuses
- Migraine is frequently triggered by weather changes
- Tearing and nasal congestion are common during attacks
- Sinus medication may help migraine





Why is Migraine Frequently Mistaken for Tension-Type Headache?

- Neck pain is very common during migraine (75%)
- Stress is a common migraine trigger
- Migraine headache is often bilateral (40%)





Diagnosing Rhinosinusitis

- Frontal headache accompanied by pain in one or more regions of the face, ears or teeth
- Clinical nasal endoscopic, CT and or MRI imaging and/or laboratory evidence of acute or acute-on-chronic rhinosinusitis
- Headache and facial pain develop simultaneously with onset of acute exacerbation of rhinosinusitis
- Headache and/or facial pain resolve within 7 days after remission of successful treatment of acute or acute-on-chronic rhinosinusitis



Question 2: Which of the following agents are associated with medication-overuse headache?

- Analgesics- NSAIDs
- Verapamil
- Caffeine
- Topiramate



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Question 3: What would be an appropriate treatment plan for this patient?

- Triptan for acute migraine medication
- Weaning off of daily analgesic medications
- Initiation of preventive medication
- Barbiturate combination for rebound headache
- Nasal decongestant



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Strategies for Medication Overuse Withdrawal

- Reduce total daily dosage 20% every 4 to 7 days
- If rapid taper or immediate elimination of the agent is contemplated, it should be done under medical supervision
- Rapid taper or immediate elimination of the agent if done should be under medical supervision
- Switching to a long-acting agent and tapering medication being overused
- Inpatient detoxification with or without behavioral support
- Behavioral therapy



Differentiating Migraine vs. Sinusitis

- Patient with previous history of sinusitis may also have migraine
- Differential diagnosis process necessary
 - Migraine vs. other headache types
 - Medication overuse headache (NSAID)
 - Clear signs and symptoms needed for diagnosis of acute rhinosinusitis
- Treatment is specific to diagnoses
 - Initiate migraine-specific medication
 - Wean/stop daily use of analgesics or other symptomatic medications if overused
 - Consider potential preventive migraine treatment