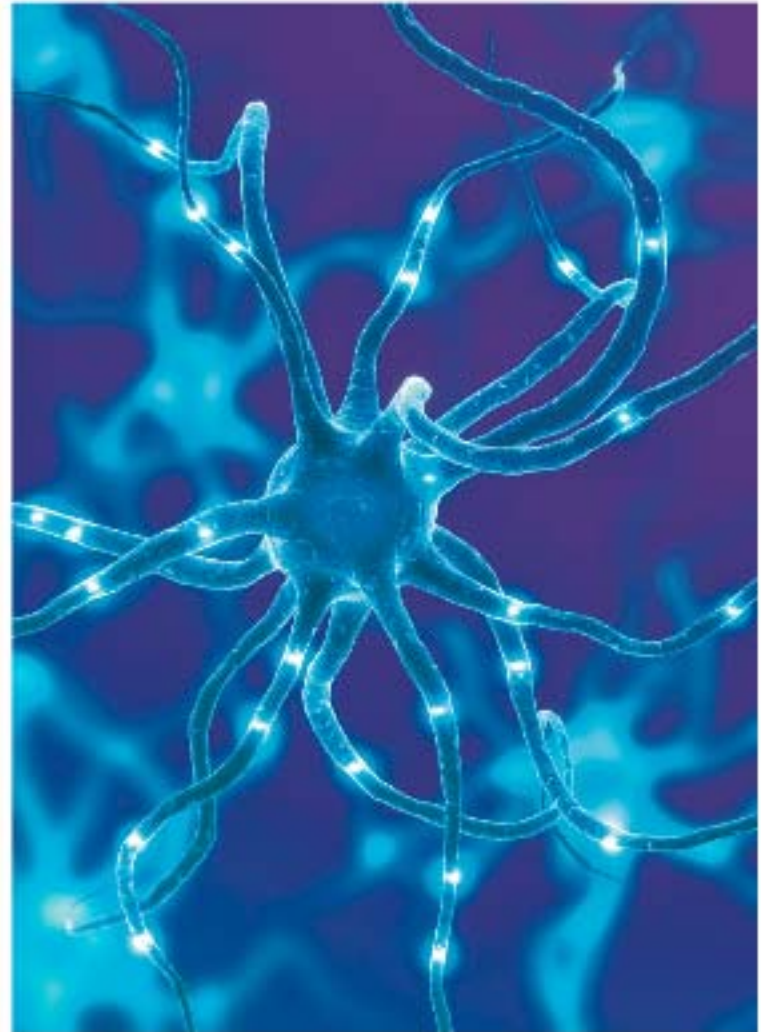


American Headache Society
Headache Curriculum

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Primary or Secondary Headache?



Learning Objectives

At the conclusion of this case, you should know:

- How to approach the headache patient and screen for the presence of red flags
- How to get an accurate diagnosis and determine if headache is primary or secondary in origin



Medical History

- JR is a 46-year-old left handed man
- Presented with headache among other symptoms
- 15-year history of headache
- 5-month history of metallic taste in his mouth for 20 minutes followed by visual disturbance
 - Visual disturbance– “looking through water”
 - Tingling of his left hand and left side of his tongue
 - Duration of 5-15 minutes
 - Followed by numbness in his left leg
 - Headache follows after numbness and taste episodes
- After 30 minutes all symptoms resolve; episodes occasionally associated with nausea
- About one year prior-- episodes of slurred speech and tingling in his left hand and tongue
 - No weakness; lasted minutes and have not recurred



Headache Description

- Headache is bitemporal, throbbing, and lasts for a few minutes to an hour in duration
- Not associated with photophobia, phonophobia, and nausea or vomiting
- Not worsened with movement— no apparent disability
- Episodes of visual and sensory disturbances
- Current headache frequency is 3 times/mo for 5 months
- Previous headache history
 - Couple/year
 - Triggered by excessive coffee or alcohol (beer)



Family/Social History

Family history

- Aunt & cousin with migraine
- Father died of heart disease at age 73
- Paternal aunt and mother positive history for cancer

Social history

- Inspector for a governmental agency
- Married and his wife is well
- Two children who are healthy



Review of Systems

- Appetite, weight and energy are normal
- Denies cardiac, respiratory, gastrointestinal symptoms
- Negative for diabetes, asthma, and hypertension or head trauma
- Denies visual loss; hearing loss on the left
- Denies focal motor weakness or persistent loss of sensation
- No history of depression or anxiety
 - Tobacco: None
 - ETOH: Occasional beer
 - Illicit Drugs: None
 - Allergies: None



Worrisome Headache Red Flags—“SNOOP”

- SYSTEMIC SYMPTOMS (fever, weight loss) or SECONDARY RISK FACTORS (HIV, systemic cancer)
- NEUROLOGIC SYMPTOMS or abnormal signs (confusion, impaired alertness or consciousness)
- ONSET: sudden, abrupt, or split-second
- OLDER: new onset and progressive headache, especially in middle age >50 yr (giant cell arteritis)
- PREVIOUS HEADACHE HISTORY: first headache or different (change in attack frequency, severity, or clinical features)



What are JR's Red Flags?

Neurologic symptoms unexpected for
migraine

Older in age

Pattern of headache has changed



Question 1: What laboratory testing would prove helpful in this patient?

- Electroencephalogram (EEG)
- Computed tomography (CT) head scan
- Laboratory testing
- Magnetic resonance (MR) head scan

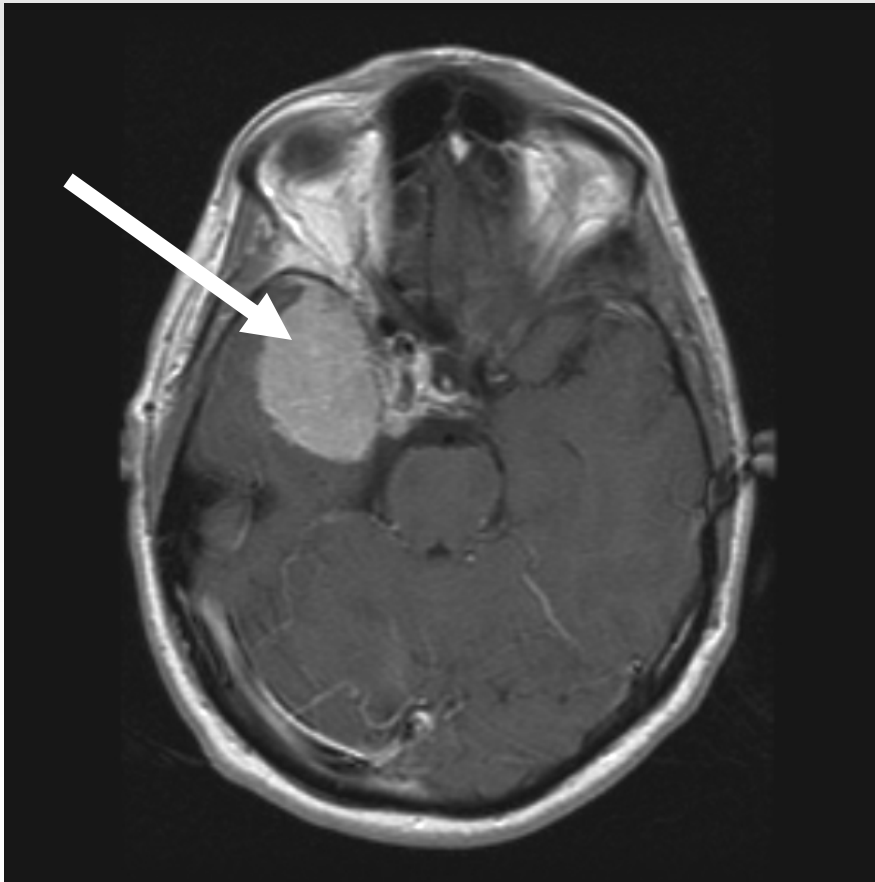


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CT Scan Results

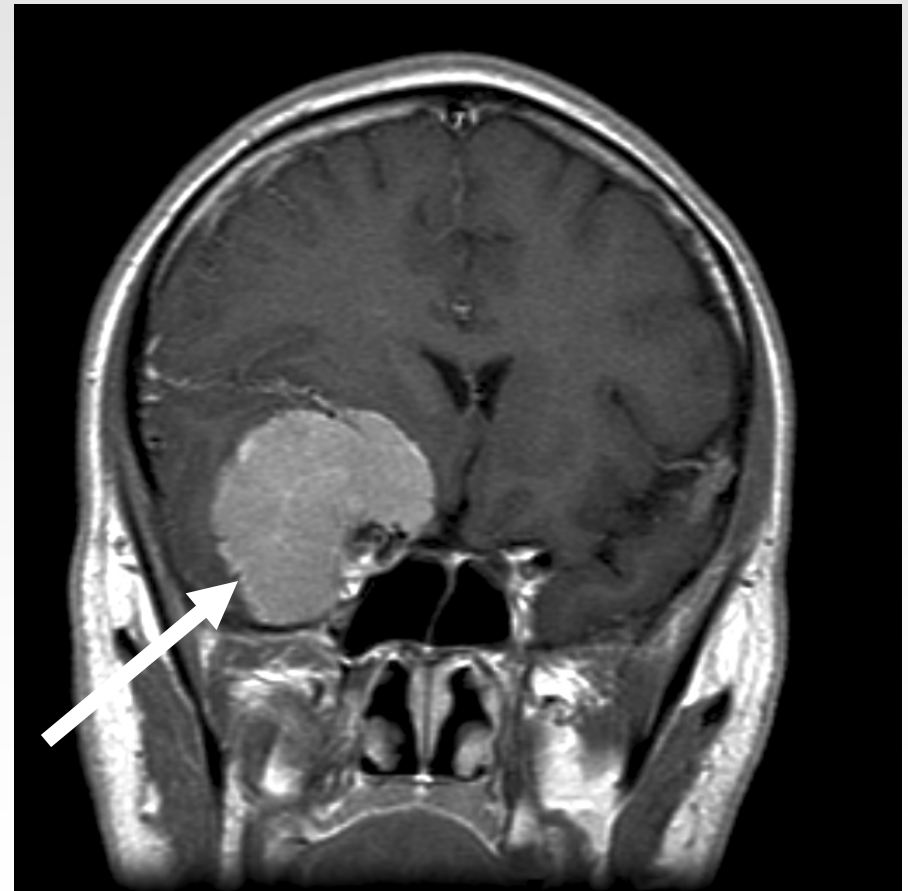


*CT scan showing
right sphenoid
ridge meningioma*



Gadolinium-enhanced MRI Results

*MRI scan
showing outer
limits of tumor*





Clinical Course I (short-term)

- Surgical removal of tumor
- Residual numbness of the maxillary division (V2) of trigeminal nerve on the right
- Some double vision
- Neurological symptoms -episodes of slurred speech
- Episodes of numbness in his tongue and cheek that also continued into his left thumb and hand, up his arm gradually but rarely traveled down his left leg
- Occasional twitching of his left hand- lasted minutes in duration and he did not lose consciousness
- Treated with medication for seizures
- 6-month follow-up: normal neurologic exam; anemia



Follow-up 12 months

- Severe headaches (9/10 pain intensity)
 - Throbbing and nausea
 - Worsened with movement
 - Sensitivity to light and sound
- Reduced sensation to pinprick over V2 on right cheek
- Normal neurological exam
- Aura symptoms: prior to severe headache and transient
 - Blurred vision (10-20 min duration)
 - Transient numbness in his left hand (5 min duration)



Question 2: What might be the correct diagnosis for JR at this point?

- Seizure
- Migraine with aura
- Migraine without aura
- Recurrent brain tumor



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Question 3: *Which of the following are accurate diagnostic criteria for migraine without aura?*

- Recurrent attacks: at least 10 attacks fulfilling criteria below
- Headache attacks lasting 2-24 hours (untreated or unsuccessfully treated)
- Headache has at least two of the following characteristics:
 1. generalized location
 2. pulsating quality
 3. moderate or severe pain intensity
 4. aggravation by or causing avoidance of routine physical activity (eg, walking or climbing stairs)
- During headache at least one of the following:
 1. nausea and/or vomiting
 2. photophobia and phonophobia



Question 3: *Which of the following are accurate diagnostic criteria for migraine without aura?*

- At least **5** attacks fulfilling criteria below
- Headache attacks lasting **4-72** hours (untreated or unsuccessfully treated)
- Headache has at least two of the following characteristics:
 1. **unilateral** location
 - ✓ pulsating quality
 - ✓ moderate or severe pain intensity
 - ✓ aggravation by or causing avoidance of routine physical activity (eg, walking or climbing stairs)
- ✓ During headache at least one of the following:
 1. nausea and/or vomiting
 2. photophobia and phonophobia
- ✓ Not attributed to another disorder