Man with Daily Headache
Learning Objectives

• At the conclusion of this case, participants should:
  – Know how to diagnose medication overuse headache
  – Be aware of effective therapeutic options for providing appropriate care to sufferers with medication overuse headache
Question 1: Which of the following medications are implicated in causing medication overuse headache?

- Analgesics
- Caffeine
- Antiepileptics
- Triptans
- Opiates/narcotics/barbiturates
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Medical History

- Ms. S.E. is a 45 yo female with debilitating headache 2-6/mo
- Pain described as an achy pressure sensation including the occiput, neck and forehead.
- Moderate to severe in intensity, throbbing, causing vomiting
- Teenage onset of headache
- Ms. S.E. reports headache pain since she was in her teens
- History of 11 health care providers; 1 MR-normal
- Medication history
  - Butalbital combination agent 4-6 tablets daily- partially effective
  - Ibuprofen 200 mg, two tablets 3 times per week- partially effective
  - Triptans 2-3 times per week – partially effective
Headache Work-up Details

• **Aggravating factors**
  – Foods - soy sauce, Chinese food, ice cream, chocolate, alcohol
  – Menses and ovulation

• **Alleviating factors**
  – Butalbital combination drugs, ibuprofen, triptans, narcotics, and sleep

• **Medical history**
  – Positive for a chronic back pain, headache
  – History measles, chickenpox
Physical Exam

General
- Patient Ht 62”; weight 125 lbs; BP 120/80; afebrile
- Current pain level 6 /10

Head/Neck
- Cervical spine examination – good range of motion
- Myofascial palpation – tenderness in trapezius, splenius capitis, temporalis
- Temporomandibular joint examination – within normal limits

Heart: Regular rhythm
Lungs: Clear
Abdomen: Nontender, good bowel sounds, no organomegaly, bladder nonpalpable
Neuro: Cranial nerve examination II – XII within normal limits; normal reflexes, gait, sensory and motor tests
Family/Social History

Family history
- Mother had headaches
  - Deceased– committed suicide
- Father no reported headaches
  - Deceased– history of diabetes

Social history
- Divorced with ongoing financial stress
- One child
- Works as office manager for insurance company
- Discloses episodes of anxiety, decreased ability to concentrate, sadness (no suicidal ideation)
Review of Systems

- General: positive for fatigue
- Skin: denies rashes, lesions
- Head and neck: normal
- Hematologic: denies bruising, bleeding, BRBPR, melena
- Cardiopulmonary: denies SOB, CP, DOE
- Gastrointestinal: denies abdominal pain, n/v/d, denies constipation
- Genitourinary: denies dysuria, hematuria, increased frequency
- Musculoskeletal: denies myalgias, arthralgias
- Neurologic: denies dizziness, presyncope, syncope, motor weakness or loss of sensation
- Infectious: denies f/c, recent infections; history of measles, chickenpox
- Psychiatric: discloses feeling of depression, sadness
- Vision: denies vision changes
Question 2: Which of the following is a likely headache diagnosis for this patient?

- Migraine
- Tension-type headache
- Medication-overuse headache
- Headache due to substance withdrawal
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Question 3: Which of the following laboratory or other tests should you obtain?

- Beck Depression Inventory (BDI)
- Rectal for hemoccult (if on ASA 4-6 per day)
- TSH for hypothyroidism
- MRI or CT
- CBC, electrolytes, EKG
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Clinical Course
Pharmacological

• **Withdrawal:** A butalbital combination agent was given 4 times daily, time contingently, and decreased by 1 tablet every 4 days, to zero
  – Warned the patient that headaches may worsen during withdrawal phase

• **Prevention:** Topiramate was started at 25 mg at bedtime and increased by 25 mg per week to 50 mg twice daily
  – Define level of improvement: goal is to achieve at least a 50% reduction in attack frequency over the course of a 3-month treatment period

• **Acute:** A triptan was provided as an acute agent to be used a maximum of 2 out of 7 days
  – Address the likelihood of break-through migraine even while on prevention

• **Rescue:** Prochlorperazine 25 mg by suppository if she exceeded her quota of triptan
  – Discuss side effect of sedation, which may prove helpful
Clinical Course
Educational and Behavioral

Cognitive behavioral therapy
- Increase awareness of anxiety as a trigger to headache
- Learn relaxation and cognitive techniques to reduce headache
  • 6 weeks– 1 visit/week

Education & lifestyle changes
- Limit use of caffeine to 1 cup/serving per day
- Track hormone fluctuations menses/ovulation
- Maintain routine sleep and eating schedules
- Restrict use of all analgesics
- Use diary to identify exacerbating factors/triggers
- Exercise three times weekly for 45 minutes each time
## Sample Headache Diary

### DIARY FLOW SHEET

<table>
<thead>
<tr>
<th>Date</th>
<th>Morning</th>
<th>Noon</th>
<th>Afternoon</th>
<th>Evening</th>
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Follow-up

• Call the office at 6 weeks to check in regarding treatment and headache patterns
• Return to office at 12 weeks
• Attack frequency was reduced to 2-3 attacks per month
• Migraine responding well to triptan
  – Reviewed side effects- flushing, tingling
  – Maintain attack and medication diary
• Ongoing episodes of anxiety and fatigue
  – Referred to counseling for anxiety management
Question 4: Which of the following are true regarding the epidemiology of medication overuse headache?

- Prevalence of medication overuse headache is between 1 and 5%.
- The most common cause of migraine-like and tension-type headache symptoms that occur on 15 days per month or more is medication overuse.
- Medication overuse headache is defined on the total monthly use of all types of pain or headache medications.
- Medication overuse headache does not occur in children or adolescents.
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