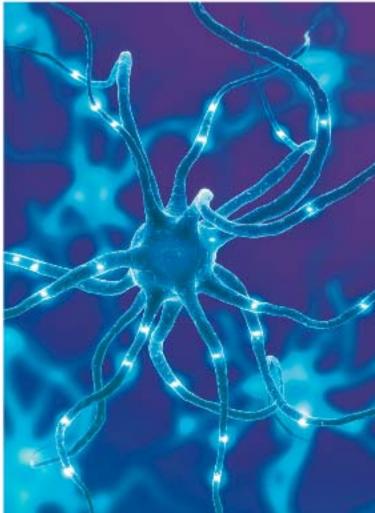
Steven Graff-Radford, DDS Co-Director, The Pain Center Cedars-Sinai Medical Center Clinical Professor USC School of Dentistry Los Angeles, CA





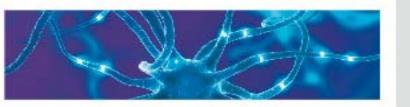




Learning Objectives

- 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

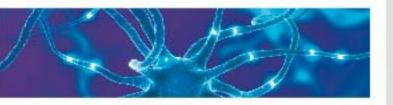
- Divorced with ongoing financial stress
- One child
- Works as office manager for insurance company
- Discloses episodes of anxiety, decreased ability to concentrate, sadness (no suicidal ideation)



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

Date																					
Day	М	т	W	ΤН	F	SA	SU	М	т	W	ΤН	F	SA	SU	М	Т	W	ΤН	F	SA	SU
morning																					
noon																					
afternoon																					
evening																					

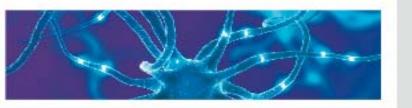




Follow-up

- 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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