EVIDENCE-BASED APPROACHES: IMC Case on Headache

Steph Algia is a 25 year old white female who presents to the IMC with a chief complaint of headache. She states she has been suffering with recurrent, episodic headaches since age 22 (shortly after graduating college and entering an accounting job). The headaches typically last about 6 to 18 hours, are mostly on the right side of her head, are pounding ("feels like a heart beating in my head"), and are associated with a "sore stomach". The headache seems to be aggravated by bright lights and loud noises, and if she can do it, feels best if able to lie down and rest in a dark area. She reports no symptoms prior to the onset of the headache. She has noticed that since her recent promotion to accounting firm manager the headaches seem to be getting more frequent and severe. They used to only occur once a month or so. They also used to respond nicely to Excedrin Migraine, but now she is having to use the medication four times a week, and is not getting quite the response she used to. She admits to sleeping less and skipping breakfast frequently since her promotion. She denies snoring and feels well rested when she can get a good night's sleep. She states when not having a headache, she really enjoys life. She has been on Depo Provera for birth control for 2 years and did not notice any change in her headaches with this medication. She has not menstruated for over 18 months and states she had a normal Pap and pelvic (and negative urine HCG) last month at Women's Health Center. She states she is now seeking your advice because last week a headache was so severe that she had to leave work early and missed an important meeting.

Past Medical Hx: Headaches (since age 22); Keratosis Pilaris
Past Surgical Hx: Appendectomy (age 19)
Allergies: NKDA
Medications: Depo-Provera 150 mg IM every 3 months; Excedrin Migraine (acetaminophen 250 mg/aspirin 250 mg/caffeine 65 mg) 2 tablets three or four times per week; LacHydrin 12% cream Applied BID to affected areas
Social Hx: Tobacco socially (1 or 2 cigarettes while out with friends on weekends); Alcohol socially (1 or 2 beers while out with friends on weekends); experimented with marijuana and "magic mushrooms" in college, no other illicit drug use; Married, no children, lives in apartment with husband, works as an accountant; 1 small cup of decaf coffee daily; exercises on treadmill and lifts weights 2 or 3 times per week
Family Hx: Mother-alive, age 60, HTN; Father-alive, age 65, no known health problems; She states, "No one else has headaches."

ROS: Denies weight loss, fever, chills, epistaxis, sinus pain, teeth problems, chest pain, palpitations, cough, wheeze, dyspnea, abdominal pain, changes in bowels, dysuria, hematuria, weakness or numbness in arms or legs, dizziness, visual problems, history of seizure, and history of trauma to head

Vitals: Temp 98 HR 80 BP 126/80 Resp 14 Pulse Ox 98% RA Ht 65" Wt 170# BMI 28.3
Gen: A&Ox3, NAD, Nontoxic, Pleasant
HEENT: PERRL, EOMI, no scleral icterus, no conjunctival injection, limited fundoscopic exam with no papilledema, cup to disc < 0.5, TM's clear, oral mucosa moist
Neck: Supple, no carotid bruit, no lymphadenopathy; normal range of motion, no tenderness to cervical muscle palpation
CV: RRR with no murmur, gallop or rub; no edema; peripheral pulses palpable
Lungs: CTA bilaterally, no wheeze, rhonchi or rales

Abdomen: Soft, normal bowel sounds, NT/ND, no mass, hernia or organomegaly
Neuro: Cranial nerves 2 thru 12 intact; muscle strength symmetric and 5/5 upper and lower extremities, sensation to sharp and dull intact all extremities
Skin: small, follicular horny spines over posterolateral aspect of upper arms and anterior thighs (consistent with keratosis pilaris)
Plato review: 1 ER visit in 2009 for diarrhea, nausea and vomiting- per ER dictation, she was diagnosed with acute gastroenteritis, given IV fluids, and sent home with prn Phenergan; CBC and BMP were within normal limits
Old records: Seen by dermatologist and Women's Health Center in the past (PAP x 3 all normal)

Please utilize the below link to the British Association for the Study of Headache guidelines to answer the following questions:

http://217.174.249.183/upload/NS_BASH/2010_BASH_Guidelines.pdf

Use table 1, pg. 6 and pg. 3 for help answering the following:

1. Please name the three primary headache disorders.

2. What percent of people will suffer from each primary headache subtype?

3. Is migraine more common in men or women?

4. What percent of adults may be affected by medication overuse headache?

5. True or False. There are no diagnostic tests for any of the primary headache disorders, or for medication overuse headache. (pg. 7)

6. What are the 6 key types of questions that should be asked to a patient presenting with headaches? (table 2, page 8)

Use pages 13-18 to answer the following:

7. What are some warning features in the history that could suggest a serious secondary headache disorder?

8. What are some of the serious causes of headaches?

9. What piece of the exam should always be attempted in patients presenting with headache?

10. Is elevated blood pressure a common cause of headache?

11. What percent of headache patients without neurologic signs had significant pathology in a recent outpatient study?

12. Does Mrs. Algia have any warning features in her history?

13. What are the expected clinical findings of the common headache disorders? (pg 9-13)
    a. Migraine without aura
    b. Migraine with aura
    c. Tension-type headache
    d. Cluster headache
    e. Medication overuse headache
14. What type of headache is Mrs. Algia suffering from?

You tell Steph Algia that she meets the diagnostic criteria for migraine without aura. She asks if you will be checking a CT or MRI of her brain (she read about them on the internet).

15. When are labs or imaging indicated in a headache patient?(table 4.9, pg. 14-15)
16. Are they indicated in Mrs. Algia?
17. What are some predisposing factors for migraine? (pg. 21)
18. Which does Steph Algia have?
19. What are some trigger factors for migraine? (pg. 21-23)
20. Which does Steph Algia's history reveal and what would you advise her? (pg. 21-23)

You advise Mrs. Algia to try to avoid stress as much as possible, eat regular meals and try to keep a consistent regular sleep pattern. She asks medications she could utilize to help her migraine pain.

21. What are the names, dose, and frequency of NSAIDs that can be utilized?(pg. 24)
22. When should metoclopramide be considered? (pg. 24)
23. Supposing Mrs. Algia had limited relief with the above NSAID-metoclopramide combo, what starting dose of sumatriptan tablet would be reasonable? (pg. 26)
    a. Sumatriptan nasal spray?
    b. Sumatriptan autoinject device?
24. If sumatriptan 50 mg tablet is prescribed, when should it be taken, and can metoclopramide be of additional benefit? (pg. 26)
25. Is it ever beneficial to use both NSAIDs and triptans? (pg. 28)

26. What are some contraindications to the triptans?(pg. 28)

27. What drugs should be avoided in the acute treatment of migraine? (pg. 30-31)

28. What are the frequency limits of the acute treatments of migraine? (pg. 31)

29. Devise an acute treatment regimen for Mrs. Algia.

Steph Algia follows all your advice, and her acute treatment regimen is found to be very helpful. Unfortunately, despite regular meals and improved sleep habits, she is still having 2 or 3 bothersome migraines per week.

30. When is prophylactic migraine treatment indicated? (pg. 31)

31. What are the first and second line prophylactic medications and their doses? (pg. 32-33)

32. What is a reasonable prophylactic medicine trial length (in the absence of unacceptable side effects following dose titration)? (pg. 31)

33. How long should a prophylactic medication be continued prior to considering tapering the medication? (pg. 31)

34. Choose an appropriate prophylactic migraine regimen for Mrs. Algia.

Steph Algia is thrilled with your excellent advice and care. She now only has 1 migraine every one to two months, and it is quickly controlled with your acute treatment regimen. She tells several people what an excellent "headache specialist" you are. Several of her friends come to see you!

35. What are some management recommendations for her friend with tension-type headache?(pg. 39-41)

36. What are some management recommendations for her husband's best friend who has cluster headaches? (pg. 42-46)

37. You have correctly diagnosed her mother-in-law with medication overuse headache (she has been taking Fioricet daily for almost 10 years). What are your management recommendations? (pg. 47-49)

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