

Kaplan USMLE Step 2 prep: Man awakened by headaches 5 days in row

OCT 16, 2018

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If you're preparing for the United States Medical Licensing Examination® (USMLE®) Step 2 exam, you might want to know which questions are most often missed by test-prep takers. Check out this example from Kaplan Medical, and read an expert explanation of the answer. Also check out all posts in this series.

This month's stumper

A 35-year-old man has had nocturnal attacks of severe periorbital headache for the past five days. Each episode awakens him at night within two hours of falling asleep, lasts for less than an hour and is associated with ipsilateral rhinorrhea and lacrimation.

There is no family history of similar headaches. Careful evaluation does not reveal any objective evidence of neurologic dysfunction. The pupils are equal and normally reactive to light. His temperature is 37° C (98.6° F), blood pressure is 125/75 mm Hg, and pulse is 72 beats per minute.

Which of the following is the most likely diagnosis?

- A. Cluster headache.
- B. Depression headache.
- C. Giant cell arteritis.
- D. Migraine.
- E. Tension headache.

F. Trigeminal neuralgia.

The correct answer is A.

Kaplan Medical explains why

The clinical presentation is characteristic of cluster headache. In its classic form, cluster headache manifests as nocturnal attacks that last between 30 minutes and two hours. These are often precipitated by alcohol consumption and recur daily for up to eight weeks. Each “cluster” is then followed by a pain-free interval lasting for one year on average. The pathogenesis is probably related to disturbances of the serotonergic pathways originating from the raphe nuclei.

Acute attacks may be shortened by oxygen, sumatriptan and ergotamine preparations; several prophylactic agents are available to prevent clusters.

Why the other answers are wrong

Choice B: Depression headache is often worse in the morning and is frequently associated with other manifestations of depression.

Choice C: The headache due to giant cell arteritis usually manifests in elderly patients and is associated with scalp tenderness over the affected superficial temporal artery. Systemic signs and symptoms can be present, including myalgia, weight loss and malaise. The erythrocyte sedimentation rate is elevated.

Choice D: Classic cases of migraine begin in early adulthood and manifest as episodic unilateral throbbing headache, often associated with nausea, photophobia, and visual symptoms.

Choice E: Tension headache has a diffuse, band-like character and feels worse in the back of the head. Pain slowly increases and may last for many hours or even days.

Choice F: Trigeminal neuralgia is a disorder of the sensory nucleus of CN V that produces episodic, severe, and lancinating pain in the distribution of one or more divisions of the trigeminal nerve. Pain is often precipitated by well-defined trigger zones (e.g., washing or shaving) and is not associated with Horner syndrome or rhinorrhea.

For more prep questions on USMLE Steps 1, 2 and 3, view other posts in this series.

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