

Neurology Clerkship Practice Final Exam Questions

Questions 1 and 2 pertain to the following patient:

A 27 year-old woman complains of tingling numbness in her feet, ascending halfway up her legs, for the past 3 months. She sometimes finds it difficult to “feel her way” when getting up in the dark at night. She had a normal baby boy 4 months ago, by uncomplicated vaginal delivery. BP 135/80, pulse 76/min and regular, T 36.5 °C. She walks normally, but has some trouble walking tandem. Her limb strength and tone are normal, with 2+ reflexes but 0 ankle jerks, and no Babinski sign. Light touch and pinprick are decreased below both ankles, with normal position sense. Vision and cranial nerves are normal.

1. What would you do next with this patient at your clinic visit?
 - A. order an MRI scan of brain and cervical spine without contrast
 - B. order an EMG
 - C. examine her twin sister to see if she has similar findings
 - D. perform a lumbar puncture, sending spinal fluid for oligoclonal bands and immunoglobulin levels
 - E. review her past medical history, family history, current medications and occupational history

2. For the patient above, your most likely clinical diagnosis is:
 - A. polyneuropathy
 - B. tarsal tunnel syndrome
 - C. bilateral S1 radiculopathy
 - D. multiple sclerosis
 - E. gluten hypersensitivity

3. A 52 year-old woman comes to see you for transient visual events. These occur monthly and consist of a flickering “neon sign” off to her left or right, fading away in 20 seconds or so. There are no associated symptoms, and she is able to talk on the phone or drive while this happens. She recalls having “sick headaches” when in 5th grade, which were accompanied by nausea and vomiting. Her neurological examination is normal. What is your most likely clinical diagnosis?
 - A. episodes of optic neuritis
 - B. acephalgic migraine (migraine equivalents of late-life)
 - C. transient ischemic attacks involving the visual cortex

- D. evolving papilledema
- E. anxiety attacks

Questions 4 and 5 pertain to the following patient:

An 80 year-old man sees you for slurred speech, which is evident on office examination. Notable findings include deviation of his tongue to the left, when asked to “stick your tongue out straight.” The left side of the tongue looks withered and “twitchy.” The rest of his neurological examination is normal.

4. Where is the most likely lesion here?

- A. left frontal motor cortex
- B. right frontal motor cortex
- C. left hypoglossal nerve
- D. right hypoglossal nerve
- E. left facial nerve

5. You order MRI scans of the brain and neck on the patient above (with and without contrast), but the results are normal. When you see him again a month later, his slurred speech remains, and he now has trouble swallowing, as well as a right foot drop. The right leg and foot appear atrophic. Reflexes are diffusely 3+ with bilateral ankle clonus. What is the most likely clinical diagnosis now?

- A. multiple mononeuropathy (mononeuritis multiplex)
- B. diffuse metastases to the central nervous system from an unknown primary cancer
- C. amyotrophic lateral sclerosis
- D. multiple sclerosis
- E. subacute combined degeneration of the spinal cord

6. A 64 year-old man comes to see you for diffuse headaches, exacerbated by coughing, for the past 2 weeks, sometimes accompanied by dizziness. His neurological examination is normal in the office. His primary care physician ordered a CT scan of the brain without contrast, and worried about the image shown below. What do you see?

- A. a tumor of the third ventricle
- B. a midline thalamic hemorrhage
- C. a normal CT scan
- D. bilateral isodense subdural hematomas

E. hydrocephalus

CT scan image for question 6, shown below:



Answers:

1. E, 2. A, 3. B, 4. C, 5. C, 6.C