

Structured Board Review 1411 Questions –Proced.6-10; Non-spec. 1-5; Neuro 1-20;

Procedures

6. You suspect an intracranial bleed in a patient with severe headache. Which of the following is the imaging test of choice?
- A. Noncontrast computed tomography scan.
 - B. Contrast-enhanced computed tomography scan.
 - C. Noncontrast magnetic resonance imaging study.
 - D. Contrast-enhanced magnetic resonance imaging study.
 - E. Positron emission tomography scan.
7. A 69-year-old woman is brought to your office by her husband who is concerned about her progressive memory difficulty. There are no focal neurologic signs and her gait is normal. According to the American College of Radiology, which of the following is the imaging test of choice?
- A. Noncontrast computed tomography scan.
 - B. Computed tomography scan with contrast.
 - C. Magnetic resonance imaging study.
 - D. Positron emission tomography scan.
8. You are evaluating a 29-year-old with shortness of breath but a low probability for pulmonary embolism based on the Geneva and Wells criteria. Which of the following is indicated?
- A. Nuclear scan.
 - B. Magnetic resonance imaging study.
 - C. Helical computed tomography scan.
 - D. D-dimer.
 - E. Leg ultrasound.
9. You are evaluating a patient with prior colorectal cancer for the presence of recurrent disease. The patient's previous treatment included surgery, chemotherapy, and radiation therapy. The patient's carcinoembryonic antigen levels are rising. Which of the following tests would be most useful?
- A. Fluorodeoxyglucose positron emission tomography scan.
 - B. Magnetic resonance imaging study with gadolinium.

- C. Magnetic resonance imaging study without gadolinium.
 - D. Computed tomography scan.
 - E. Ultrasound.
10. A woman at 14 weeks' gestation is involved in a motor vehicle crash and sustains major trauma. Which of the following statements is true?
- A. Radiation directed at the extremities, head, or chest of the pregnant woman exposes the fetus to radiation even if aggressive shielding techniques are used.
 - B. Radiation does not increase risk at this gestational age.
 - C. The risk of fetal anomalies does not increase with radiation dose.
 - D. The developing fetus absorbs 90% of the radiation dose directed at the abdomen or pelvis of a pregnant woman.
 - E. A computed tomography scan is the procedure of choice.

Non-Specific

1. A patient presents with a puzzling physical symptom and the physician thinks a definable medical condition has been excluded by evaluation. The physician should:
- A. Tell the patient directly there is no medical basis for the symptom.
 - B. Tell the patient nothing can be done to alleviate the symptom.
 - C. Explore the symptom as a partner with the patient, sharing the patient's frustration.
 - D. Ignore the patient's symptom.
 - E. Reassure the patient that the symptom will improve within a few months.
2. Which of the following statements regarding chronic pain is true?
- A. Spinal levels of substance P are decreased in fibromyalgia.
 - B. Enkephalin levels are increased.
 - C. Minor stimuli may provoke pain.
 - D. Mast cells are stabilized.
3. In the patient with chronic fatigue syndrome, the physician should:

- A. Conduct a comprehensive physical examination at the first visit.
 - B. Avoid touching or examining the patient at most office visits.
 - C. Ask the patient to keep a diary of activities and symptoms because this is the most important intervention.
 - D. Encourage the patient to research the disease on the Web.
 - E. Search continually for other biomedical etiologies.
4. You think a patient meets the diagnostic criteria for chronic fatigue syndrome. Which of the following laboratory tests is not indicated?
- A. Complete blood count.
 - B. Epstein-Barr titer.
 - C. Erythrocyte sedimentation rate.
 - D. Thyroid-stimulating hormone.
 - E. Urinalysis.
5. Which of the following is a tender point site important for the diagnosis of fibromyalgia?
- A. Lateral knee distal to the joint line.
 - B. Anterior aspect of the intertransverse spaces at C5-C7.
 - C. Lower medial quadrants of the buttocks.
 - D. 2 cm proximal to the epicondyles.
 - E. Third rib at the third costochondral junction.

Neurologic

1. A woman is diagnosed with migraine headache with visual aura. Which one of the following statements is true about the risk of stroke?
- A. It is greater than in a woman without a history of migraine headache.
 - B. It is only greater if she smokes.
 - C. It is only greater if she uses oral contraceptive pills.

D. It is greater with the number of years she experiences migraine headache.

2. A patient with a history of depression who is taking fluoxetine presents with severe migraine headache and requests sumatriptan. You should counsel him about an increased risk of which one of the following with this combination?

A. Seizure.

B. Hypotension.

C. Metabolic syndrome.

D. Serotonin syndrome.

E. Bradycardia.

3. A patient presents with a constant throbbing unilateral headache that began suddenly a few hours ago. She reports never having a headache like this in her life. The results of the physical examination are unremarkable. Which one of the following diagnoses must be excluded?

A. Meningitis.

B. Brain tumor.

C. Subarachnoid hemorrhage.

D. Subdural hematoma.

E. Acute open-angle glaucoma.

4. Which of the following is one of the diagnostic criteria for temporal arteritis?

A. Diminished pulse of the temporal artery.

B. Vague diffuse headache.

C. Thrombocytopenia.

D. Erythrocyte sedimentation rate of 35 mm/hour.

E. White blood cell count $>12,000$ cells/mm³.

5. You suspect a patient is experiencing chronic daily headache due to drug overuse. Which one of the following drugs should you prescribe to bridge the time between analgesic discontinuation and time required to clear the effects of the causative drug?

A. Indomethacin.

- B. Prednisone.
- C. Bromocriptine.
- D. Nifedipine.
- E. Gabapentin.

6. Which one of the following is recommended in the palliative management of acute cluster headache in a 54-year-old patient who smokes?

- A. Oral sumatriptan.
- B. Ipsilateral intranasal 4% and 10% lidocaine drops.
- C. Inhalation of oxygen.
- D. Ketorolac.
- E. Botulinum toxin type A.

7. Botulinum toxin type A injections have been found to be effective in treating patients with chronic tension-type headache.

- A. True.
- B. False.

8. A 4-year-old patient presents to your office with headache, fever, and stiff neck. Cerebrospinal fluid test results reveal lymphocytic predominance. The Gram stain is negative and the blood glucose level is normal. Which one of the following should you do?

- A. Diagnose viral meningitis, reassure the parents, and send the patient home.
- B. Initiate treatment for bacterial meningitis while awaiting culture results.
- C. Hospitalize the patient pending culture results. Do not start antibiotics unless culture results are positive.
- D. Treat with oral amoxicillin for 14 days.
- E. Have the patient return tomorrow and repeat the lumbar puncture for lymphocytic predominance testing.

9. The family of a 9-year-old child with tension-type headache is averse to the use of long-term drugs. Which one of the following is recommended?

- A. Electromyographic biofeedback.
- B. Thermal biofeedback.

- C. Acupuncture.
- D. Acupressure.
- E. Massage.

10. Which one of the following statements about the role of electroencephalography (EEG) after a first seizure is true?

- A. Guidelines do not recommend routine EEG in patients with clinical histories and physical examination findings that show evidence of seizure occurrence.
- B. On average, significant EEG abnormalities are detected in approximately 75% of patients after first seizure.
- C. A normal EEG result excludes the diagnosis of seizure disorder.
- D. The EEG results cannot help distinguish between different types of seizure.
- E. The EEG results might identify patients experiencing status epilepticus that is not clinically apparent.

11. Which one of the following statements about neuroimaging of patients presenting after first seizure is correct?

- A. Current guidelines recommend all patients presenting to the emergency department after a first seizure undergo emergent neuroimaging.
- B. Patients with new focal-onset seizures should undergo emergent neuroimaging.
- C. Emergent magnetic resonance imaging study should be obtained if patients present within 1 hour of a first seizure.
- D. Computed tomography scan results detect abnormalities in approximately 25% of patients who present to emergency departments after first seizures.
- E. Imaging studies contribute to a change in treatment in more than 25% of patients who present to the emergency department after a first seizure.

12. Which one of the following features in the witness report of a first seizure is most useful in determining whether the event was a true seizure?

- A. Myoclonic jerking.
- B. Confusion after the event.
- C. Abnormal movements.
- D. Eyes closed during the entire event.
- E. Eyes open at the onset of the event.

13. Which one of the following statements about laboratory testing of patients after first seizure is true?

- A. Hypoglycemia is one of the most common abnormalities found on laboratory testing of patients after a first seizure.
- B. Hypermnatremia is one of the most common abnormalities found on laboratory testing of patients after a first seizure.
- C. Toxicology results are positive for illicit substances in about 10% of patients presenting to emergency departments after first seizures.
- D. Serum prolactin level obtained within 1 hour of an event reliably confirms a seizure.
- E. Information from laboratory testing changes treatment in approximately 10% of cases.

14. Which one of the following findings on physical examination is most indicative of a seizure event?

- A. Bite injury on the lateral surface of the tongue.
- B. Bruising on the shoulders and arms.
- C. Unilateral motor paralysis.
- D. Bradycardia.
- E. Fever.

15. Which one of the following is a component of the Rule of Two to predict psychogenic nonepileptic seizures?

- A. Average of two seizure events per month.
- B. Two or more abnormalities on a single electroencephalogram.
- C. Ineffectiveness of two or more antiepileptic drugs.
- D. A history of seizures in two or more family members.
- E. Clinical symptoms (including postictal symptoms) lasting 2 hours or more.

16. Which one of the following is a major risk factor for seizure recurrence?

- A. Age at first seizure.
- B. Initial seizure duration.
- C. Seizure during sleep.
- D. Family history of seizure.

- E. Personal history of febrile seizure.
- 17.** In a patient with renal insufficiency, which of the following antiepileptic drugs is the best choice to prevent significant metabolism impairment?
- A. Valproic acid.
- B. Gabapentin.
- C. Phenobarbital.
- D. Levetiracetam.
- E. Topiramate.
- 18.** In a patient with advanced alcoholic cirrhosis of the liver, which one of the following drugs is most likely to accumulate to toxic levels in the body because of hepatic metabolism impairment?
- A. Phenobarbital.
- B. Topiramate.
- C. Gabapentin.
- D. Ethosuximide.
- E. Lamotrigine.
- 19.** Which of the following antiepileptic drugs may have decreased effectiveness for seizure prevention when a woman is also taking oral contraceptives?
- A. Phenytoin.
- B. Lamotrigine.
- C. Carbamazepine.
- D. Phenobarbital.
- E. Oxcarbazepine.
- 20.** Which one of the following factors is thought to be most significant in patient nonadherence to antiepileptic drug (AED) therapy?
- A. Age older than 65 years.

- B. Use of two or more AEDs.
- C. Use of cannabis.
- D. Participation in self-management programs.
- E. Therapy duration.