Chapter 31. Epilepsy, Self-Assessment Questions

1. BW is a 28-year-old man recently diagnosed with partial seizures. He works as a certified public accountant, and has begun treatment with lamotrigine. In which of the following activities is he most likely to experience difficulties due to his seizure diagnosis?
   A. Performing mathematical calculations
   B. Keeping his driver license
   C. Renewing his accountant license
   D. Applying for graduate school

2. Which of the following neurotransmitters appears to be depleted in some patients with epilepsy?
   A. GABA
   B. Glutamate
   C. Serotonin
   D. Acetylcholine

3. A 19-year-old woman is experiencing repeated episodes of uncontrolled twitches and jerks of her right hand. She is alert throughout these episodes. Her neurological examination and laboratory tests are normal. An EEG reveals left temporal spikes consistent with seizures. What type of seizure is she most likely experiencing?
   A. Complex partial
   B. Myoclonic
   C. Infantile spasms
   D. Simple partial
4. A 17-year-old woman was just diagnosed with juvenile myoclonic epilepsy (JME). Which of the following antiepileptic drugs should be started?
   A. Valproate
   B. Levetiracetam
   C. Oxcarbazepine
   D. Pregabalin

5. In which of the following groups of patients is increased monitoring of AED serum concentrations advisable?
   A. Nonpregnant women
   B. Men starting gabapentin
   C. Children
   D. Patients with nonepileptic events

6. Three months ago, lamotrigine was added to the therapeutic regimen of a 45-year-old man taking carbamazepine for partial seizures. The physician decides to taper and discontinue the carbamazepine. He is currently taking lamotrigine 600 mg daily. Which of the following lamotrigine doses will most likely be required after the carbamazepine is discontinued?
   A. 400 mg twice daily
   B. 300 mg three times a day
   C. 200 mg twice daily
   D. 50 mg twice daily

7. A 28-year-old woman is started on oxcarbazepine for partial seizures. Which of the following should she take in addition to the oxcarbazepine?
   A. Vitamin C
B. Riboflavin
C. Vitamin A
D. Folic acid

8. A 75-year-old man was recently diagnosed with new onset seizures. Which of the following would be the best drug to initiate in this patient?
A. Lamotrigine
B. Phenytoin
C. Valproate
D. Carbamazepine

9. A 35-year-old woman is being started on lamotrigine for newly diagnosed epilepsy. She is otherwise healthy and is not taking any medications except for acetaminophen for an occasional headache. Which of the following will be most important to monitor as she starts lamotrigine?
A. Vision
B. Blood count
C. Rash
D. Heart rhythm

10. A 25-year-old woman presents a new prescription for levetiracetam in your pharmacy. She explains that she was recently diagnosed with epilepsy. Upon reviewing her medication profile, you find that she is taking a low estrogen birth control product and occasionally takes ibuprofen for headaches. Which of the following options would be best to tell her?
A. Talk to your physician about taking a high estrogen birth control product
B. Use alternate forms of birth control
C. Talk with your physician about taking a progesterone-only birth control product
D. You should not experience problems with your current birth control

11. A 30-year-old patient is treated with oxcarbazepine for partial seizures. She has been seizure-free on this treatment for 1 year. Her most recent EEG, from a year ago, was read as occasional left temporal sharp waves. She would like to stop oxcarbazepine due to being seizure-free for a year. Which of the following treatment options would be best?
A. Discontinue oxcarbazepine immediately
B. Taper and discontinue oxcarbazepine over 3 months
C. Increase her oxcarbazepine dose
D. Continue oxcarbazepine at the current dose

12. A 32-year-old man is taking phenytoin 300 mg daily for seizures. His phenytoin serum concentration is 8 mg/L, and he has experienced a 50% increase in seizures over the last month. He does not report any increase in dose-related adverse effects. The physician would like to increase the phenytoin dose. Which of the following doses would be the best new dose for this patient?
A. 350 mg
B. 600 mg
C. 550 mg
D. 330 mg

13. A 72-year-old man has taken carbamazepine for 20 years with excellent control of his seizures. He was recently diagnosed with atrial fibrillation and his physician started amiodarone. Which of the following would be best to monitor as the amiodarone is started?
A. Increased seizures
B. Diplopia
C. Renal function  
D. Hepatic function  

14. A 28-year-old woman is taking levetiracetam for seizures. She comes to clinic today and is 3 months pregnant. Which of the following would be of greatest concern over the remainder of her pregnancy?  
A. Increased levetiracetam adverse effects  
B. Birth defects  
C. Increased seizures  
D. Premature labor  

15. A 46-year-old man is taking tramadol 100 mg every 4 to 6 hours for back pain. Yesterday he experienced a generalized tonic-clonic seizure. He has never had seizures previously, and his neurological exam is completely normal. His pain is affecting his mood, and he feels depressed. Which of the following would be the best management of this patient?  
A. Start an antiepileptic drug  
B. Make no changes in medications and carefully monitor  
C. Start bupropion for depression  
D. Discontinue tramadol
Answers

1. B
2. A
3. D
4. B
5. C
6. C
7. D
8. A
9. C
10. D
11. D
12. A
13. B
14. C
15. D