

Chapter 32. Status Epilepticus, Self-Assessment Questions

1. A 46-year-old man is brought into the emergency department after having convulsions for approximately 10 minutes. What is the best choice for an initial medication for this patient?
 - A. propofol
 - B. phenytoin
 - C. diazepam
 - D. phenobarbital
 - E. topiramate

2. A patient is admitted to the emergency department and diagnosed with status epilepticus. He has a blood pressure of 90/65 and a heart rate of 120 beats/min. Which of the following combinations of agents will have the *least* effects on this patient's cardiorespiratory system?
 - A. lorazepam and phenytoin
 - B. midazolam and valproate sodium
 - C. diazepam and fosphenytoin
 - D. midazolam and phenobarbital
 - E. lorazepam and propofol

3. Which of the following is a sign of prolonged generalized convulsive status epilepticus?
 - A. hypertension
 - B. incontinence
 - C. sweating

- D. fever
 - E. rhabdomyolysis
4. Which of the following receptor activity changes may occur during status epilepticus?
- A. A decrease in GABA receptor activity and an increase in NMDA receptor activity
 - B. An increase GABA receptor activity and an increase in NMDA receptor activity
 - C. A decrease in GABA receptor activity and a decrease in NMDA receptor activity
 - D. An increase in GABA receptor activity and a decrease in NMDA receptor activity
 - E. None of the above
5. All of the following drugs used in the treatment of status epilepticus contain considerable amounts of propylene glycol *except*?
- A. diazepam
 - B. fosphenytoin
 - C. lorazepam
 - D. phenytoin
 - E. Both B and D
6. A patient is receiving an intravenous loading dose of phenytoin 1000 mg as therapy for status epilepticus. Over what minimal time period should this dose be infused?
- A. 5 minutes
 - B. 10 minutes
 - C. 15 minutes

- D. 20 minutes
- E. 30 minutes

7. A 7-year-old boy is admitted to the emergency department in status epilepticus. The nurses and physicians are unable to obtain IV access in him. Which of the following could be an appropriate *initial* treatment recommendation?

- A. fosphenytoin IM
- B. diazepam PR
- C. lorazepam IM
- D. topiramate IM
- E. midazolam PR

8. A patient is seen in the emergency department for ongoing seizure activity. He has been seizing for at least 10 minutes. A family member provides a history of hypertension, diabetes, and hyperlipidemia. Which of the following should be performed next?

- A. Obtain EEG
- B. Give diazepam
- C. Check blood glucose
- D. Give IV dextrose
- E. Load with phenytoin

9. Which of the following pairs is a correct sequence for a 75 kg patient in status epilepticus?

- A. Lorazepam 2 mg IV push followed by phenytoin 1500 mg IV bolus

- B. Lorazepam 8 mg IV push followed by phenytoin 1000 mg IV bolus
- C. Diazepam 15 mg IV push followed by fosphenytoin 1500 mg PE IV bolus
- D. Diazepam 5 mg IV push followed by valproic acid 1000 mg IV bolus
- E. Midazolam 4 mg/hour infusion followed by fosphenytoin 1500 mg PE IV bolus

10. A 57-year-old man is being treated for status epilepticus. He has already received one dose of IV lorazepam 5 minutes ago and continues to have convulsions. His breathing is now slow and shallow, and his oxygen saturation is 87% (0.87) on room air. His blood pressure is 109/67, and his heart rate is 93 beats/min. What would be the next appropriate step?

- A. Give a second dose of lorazepam
- B. Switch to intravenous diazepam
- C. Give a loading dose of fosphenytoin
- D. Consider obtaining an EEG
- E. Consider endotracheal intubation

11. When treating status epilepticus in older adults, which of the following is *true*?

- A. Hepatic and renal clearance are usually higher.
- B. The infusion rates used are typically faster.
- C. They are less prone to the side effects of drugs.
- D. They display a decreased protein binding.
- E. They are at lower risk for drug and disease state interactions.

12. A 24-year-old woman who is 7 months pregnant develops status epilepticus while being seen in clinic. Which of the following is *true*?

- A. Phenytoin is not considered since it is teratogenic.
- B. Levetiracetam is the agent of choice for status epilepticus in pregnant females.
- C. The fetus is at risk of hypoxia if the status epilepticus is not treated quickly.
- D. Lorazepam is administered intravenously at a dose of 0.4 mg/kg.
- E. The volume of distribution is considerably lower in pregnant females.

13. A 42-year-old mechanically ventilated woman is being treated for status epilepticus in the intensive care unit. She has received two doses of lorazepam and a loading dose of phenytoin. It has been 45 minutes since the start of therapy with no improvement in her condition. Her tonic-clonic movements are diminishing, but she is not arousable. What would be the next appropriate step?

- A. Give another dose of IV lorazepam
- B. Give a dose of IV diazepam
- C. Bolus with IV valproic acid
- D. Initiate midazolam infusion
- E. Give a second phenytoin bolus

14. All of the following agents can be given intravenously in refractory status epilepticus *except*?

- A. isoflurane
- B. lacosamide

- C. ketamine
- D. levetiracetam
- E. none of the above

15. You are helping to treat a 50 kg patient in refractory status epilepticus who is currently on midazolam infusion at 5 mg/hour. She has been on this dose for the past 12 hours, and the continuous EEG reports ongoing seizure activity. She is receiving therapeutic doses of fosphenytoin. Which of the following would be the next best intervention?

- A. Increase the infusion rate by 5 mg/hour
- B. Give a 5 mg IV bolus of midazolam
- C. Switch to propofol infusion
- D. Start levetiracetam therapy
- E. Give a ketamine bolus

Answers to Self-Assessment Questions

1. C

2. B

3. E

4. A

5. B

6. D

7. B

8. C

9. C

10. E

11. D

12. C

13. D

14. A

15. B