

EMT

Chapter 15 Review

1. A 41-year-old man presents with slow, irregular breathing; hypotension; and dilated pupils. These signs MOST likely indicate dysfunction of the:
 - A. brain stem.
 - B. hypothalamus.
 - C. cerebrum.
 - D. cerebellum.

Answer: A

Rationale: The brain stem is responsible for functions such as breathing, blood pressure, and pupil constriction. Brain stem dysfunction would result in abnormal findings with these functions.

1. A 41-year-old man presents with slow, irregular breathing; hypotension; and dilated pupils. These signs MOST likely indicate dysfunction of the:

A. brain stem.

Rationale: Correct answer

B. hypothalamus.

Rationale: The hypothalamus causes changes to occur in the heart rate, body temperature, and thirst.

1. A 41-year-old man presents with slow, irregular breathing; hypotension; and dilated pupils. These signs MOST likely indicate dysfunction of the:

C. cerebrum.

Rationale: The cerebrum causes changes to occur in emotion, thought, touch, and movement.

D. cerebellum.

Rationale: The cerebellum causes changes to occur in muscle control, body coordination, standing, walking, and writing.

2. An acute ischemic stroke is caused by:
- A. a ruptured cerebral artery.
 - B. increased intracranial pressure.
 - C. an acute rise in a person's blood pressure.
 - D. a blocked cerebral artery.

Answer: D

Rationale: There are two types of stroke—hemorrhagic and ischemic. A hemorrhagic stroke is caused by a ruptured cerebral artery (aneurysm), which causes bleeding within the brain and increased intracranial pressure. An ischemic stroke is caused by a blocked cerebral artery—either from a clot that grows locally (thrombus) or that travels to the brain from another part of the body (embolus).

2. An acute ischemic stroke is caused by:

A. a ruptured cerebral artery.

Rationale: This is known as a hemorrhagic stroke.

B. increased intracranial pressure.

Rationale: This can be caused by swelling, bleeding, or tumors.

2. An acute ischemic stroke is caused by:

C. an acute rise in a person's blood pressure.

Rationale: This is known as a hypertensive crisis.

D. a blocked cerebral artery.

Rationale: Correct answer

3. A 56-year-old man experienced a sudden, severe headache and then became unresponsive. He has a history of high blood pressure. The MOST likely cause of his condition is a(n):
- A. hemorrhagic stroke.
 - B. acute ischemic stroke.
 - C. severe migraine headache.
 - D. transient ischemic attack.

Answer: A

Rationale: Hemorrhagic strokes are typically preceded by a sudden, severe headache (signals the rupture of a cerebral artery), after which the patient becomes unresponsive due to bleeding within the brain. Ischemic strokes and transient ischemic attacks generally do not cause a sudden, severe headache, and migraine headaches typically do not cause a loss of consciousness.

3. A 56-year-old man experienced a sudden, severe headache and then became unresponsive. He has a history of high blood pressure. The MOST likely cause of his condition is a(n):

A. hemorrhagic stroke.

Rationale: Correct answer

B. acute ischemic stroke.

Rationale: This generally does not cause a sudden, severe headache.

3. A 56-year-old man experienced a sudden, severe headache and then became unresponsive. He has a history of high blood pressure. The MOST likely cause of his condition is a(n):

C. severe migraine headache.

Rationale: This generally does not cause a loss of consciousness.

D. transient ischemic attack.

Rationale: This generally does not cause a sudden, severe headache.

4. Unlike an ischemic stroke, a transient ischemic attack is characterized by all of the following EXCEPT:
- A. symptoms that resolve within 24 hours.
 - B. symptoms that persist for longer than 24 hours.
 - C. weakness or paralysis to one side of the body.
 - D. an acute onset of confusion and slurred speech.

Answer: B

Rationale: Signs and symptoms of a transient ischemic attack (TIA) are usually identical to those of an acute ischemic stroke (eg, hemiparesis, slurred speech, confusion, facial droop). Unlike the ischemic stroke, however, the symptoms of a TIA usually resolve within 24 hours.

4. Unlike an ischemic stroke, a transient ischemic attack is characterized by all of the following EXCEPT:

A. symptoms that resolve within 24 hours.

Rationale: This is a sign of a transient ischemic attack.

B. symptoms that persist for longer than 24 hours.

Rationale: Correct answer

4. Unlike an ischemic stroke, a transient ischemic attack is characterized by all of the following EXCEPT:

C. weakness or paralysis to one side of the body.

Rationale: This is a sign of a transient ischemic attack.

D. an acute onset of confusion and slurred speech.

Rationale: This is a sign of a transient ischemic attack.

5. A patient with a suspected stroke presents with slurred speech that is difficult for you to understand. This is referred to as:
- A. aphasia.
 - B. dysphasia.
 - C. dysphagia.
 - D. dysarthria.

Answer: D

Rationale: Dysarthria is defined as slurred, poorly articulated speech; it is common in stroke patients. Dysphasia is defined as difficulty speaking; the patient's speech may or may not be slurred. Aphasia is the inability to speak. Dysphagia is defined as difficulty swallowing.

5. A patient with a suspected stroke presents with slurred speech that is difficult for you to understand. This is referred to as:

A. aphasia.

Rationale: Aphasia is the inability to produce or understand speech.

B. dysphasia.

Rationale: Dysphasia is difficulty in speaking.

5. A patient with a suspected stroke presents with slurred speech that is difficult for you to understand. This is referred to as:

C. dysphagia.

Rationale: Dysphagia is difficulty in swallowing.

D. dysarthria.

Rationale: Correct answer

6. A type of seizure that is characterized by severe twitching of all the body's muscles and lasts for several minutes or longer is called a(n):
- A. partial seizure.
 - B. absence seizure.
 - C. tonic-clonic seizure.
 - D. generalized seizure.

Answer: D

Rationale: Generalized seizures are characterized by generalized severe twitching of all of the body's muscles; they often last for several minutes or longer. An absence seizure is characterized by a blank stare; generalized muscle twitching is absent.

6. A type of seizure that is characterized by severe twitching of all the body's muscles and lasts for several minutes or longer is called a(n):

A. partial seizure.

Rationale: A partial seizure is broken down into simple (jerking of one part of the body) and complex (changes in behavior and emotion).

B. absence seizure.

Rationale: An absence seizure does not involve any changes in motor activity.

6. A type of seizure that is characterized by severe twitching of all the body's muscles and lasts for several minutes or longer is called a(n):

C. tonic-clonic seizure.

Rationale: A tonic-clonic seizure exhibits muscle contraction and incontinence.

D. generalized seizure.

Rationale: Correct answer

7. The MOST important reason for promptly transporting a stroke patient to the hospital is because:
- A. a transient ischemic attack can be ruled out.
 - B. medications may be given to reverse the stroke.
 - C. the clot in the coronary artery may be dissolved.
 - D. he or she needs close blood pressure monitoring.

Answer: B

Rationale: Fibrinolytic medications (clot busters) have been shown to reverse the symptoms of a stroke by dissolving the clot that is blocking the cerebral artery. However, for the patient to be eligible for this therapy, it must be initiated within 3 hours after the onset of symptoms. For this reason, prompt transport of the stroke patient is critical.

7. The MOST important reason for promptly transporting a stroke patient to the hospital is because:
- A. a transient ischemic attack can be ruled out.
Rationale: In a TIA, stroke symptoms resolve (on their own) usually in less than 24 hours with no neurologic deficits.
 - B. medications may be given to reverse the stroke.
Rationale: Correct answer

7. The MOST important reason for promptly transporting a stroke patient to the hospital is because:

C. the clot in the coronary artery may be dissolved.

Rationale: The coronary artery is in the heart and not the brain.

D. he or she needs close blood pressure monitoring.

Rationale: Monitoring of a patient's blood pressure is important, but dissolving the clot and stopping the progression of damage is more important.

8. Which of the following are components of the Cincinnati Prehospital Stroke Scale?
- A. Arm drift, blood pressure, speech
 - B. Speech, pupil response, arm drift
 - C. Facial symmetry, speech, arm drift
 - D. Pupil response, facial droop, speech

Answer: C

Rationale: The three components of the Cincinnati Prehospital Stroke Scale are facial symmetry, speech, and arm drift. Both sides of the patient's face should move symmetrically (equally) when he or she smiles. The patient's speech should be easily understandable and without slurring. The patient should be able to hold both arms out in front of his or her body—with eyes closed and palms up—without one arm drifting down to his or her side.

8. Which of the following are components of the Cincinnati Prehospital Stroke Scale?

A. Arm drift, blood pressure, speech

Rationale: The scale does not use blood pressure.

B. Speech, pupil response, arm drift

Rationale: The scale does not use pupil response.

C. Facial symmetry, speech, arm drift

Rationale: Correct answer

D. Pupil response, facial droop, speech

Rationale: The scale does not use pupil response.

9. Your patient opens his eyes when you say his name, is making incomprehensible sounds, and withdraws when you pinch his earlobe. What is his GCS score?

A. 9

B. 8

C. 11

D. 12

Answer: A

Rationale: The Glasgow Coma Scale gives a score of 3 to a patient who opens his or her eyes in response to speech. “Incomprehensible sounds” has a score of 2, and “withdraws to pain” has a score of 4. When added together, this patient’s GCS score is 9.

9. Your patient opens his eyes when you say his name, is making incomprehensible sounds, and withdraws when you pinch his earlobe. What is his GCS score?

A. 9

Rationale: Correct answer

B. 8

Rationale: This is not the right score.

C. 11

Rationale: This is not the right score.

D. 12

Rationale: This is not the right score.

10. If a patient complains of a severe migraine, how should she be transported?
- A. In a brightly lit ambulance so she can see while her vision is impaired
 - B. With loud sirens so she can get to the hospital as soon as possible
 - C. Without lights and sirens
 - D. This patient should not be transported.

Answer: C

Rationale: Treatment of a migraine headache is supportive; however, you should always assess the patient for other signs and symptoms that might indicate a more serious condition. Applying high-flow oxygen, if tolerated, may help ease the patient's condition. When possible, provide a darkened and quiet environment because patients are sensitive to light and sound. Do not use lights and sirens during transport.

10. If a patient complains of a severe migraine, how should she be transported?

A. In a brightly lit ambulance so she can see while her vision is impaired

Rationale: Migraine patients are sensitive to light.

B. With loud sirens so she can get to the hospital as soon as possible

Rationale: Migraine patients are sensitive to loud noises.

10. If a patient complains of a severe migraine, how should she be transported?

C. Without lights and sirens

Rationale: Correct answer

D. This patient should not be transported.

Rationale: A migraine could indicate a more serious condition.