

QUESTION

A 65-year-old male patient with a long history of hypertension and hyperlipidemia is brought to the emergency department by ambulance. He is found unconscious on the street. On arrival, he is unresponsive to verbal stimuli and has a Glasgow Coma Scale score of 3. His vital signs are: blood pressure 180/110 mmHg, heart rate 110 bpm, respiratory rate 18 breaths per minute, and oxygen saturation 92% on 4 L oxygen. He has a patent airway and a normal pupillary reflex. A physical examination reveals a normal head and neck examination, clear lungs, and a normal abdomen. A CT scan of the head shows a large right parietal subdural hematoma with a midline shift to the left. The patient is intubated and transferred to the intensive care unit. A lumbar puncture is performed, and the cerebrospinal fluid (CSF) is found to be normal. The patient is given a bolus of 100 mg of mannitol and 100 mg of dexamethasone. His vital signs improve, and he is extubated 24 hours later. He remains unconscious but is able to follow simple commands. A second CT scan shows a significant reduction in the size of the hematoma. The patient is discharged to a rehabilitation center.

Question	Answer	Explanation
1. What is the most likely cause of the patient's unconsciousness?	Subdural hematoma	The patient's history of hypertension and hyperlipidemia, along with the CT scan findings of a large right parietal subdural hematoma with a midline shift, strongly suggest this as the cause of his unconsciousness.
2. What is the Glasgow Coma Scale score of the patient on arrival?	3	The patient is unresponsive to verbal stimuli and has a Glasgow Coma Scale score of 3.
3. What is the most appropriate initial management of the patient's unconsciousness?	Intubation and mechanical ventilation	The patient is unconscious and has a patent airway, but intubation is necessary to ensure adequate ventilation and oxygenation.
4. What is the most appropriate treatment for the patient's subdural hematoma?	Mannitol and dexamethasone	Mannitol and dexamethasone are used to reduce intracranial pressure and decrease cerebral edema.
5. What is the most likely outcome of the patient's treatment?	Significant reduction in the size of the hematoma	The patient's vital signs improve, and he is extubated 24 hours later. A second CT scan shows a significant reduction in the size of the hematoma.

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ANSWERS

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Subdural hematoma

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4. What is the most appropriate treatment for the patient's subdural hematoma?
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