

QUESTION

1. A 60-year-old male patient with a long history of hypertension and hyperlipidemia presents to the emergency department with acute chest pain. The patient reports a 15-minute episode of severe, crushing chest pain that radiates to the left arm and jaw. He is currently on amlodipine and atorvastatin. The patient's vital signs are: blood pressure 180/110 mmHg, heart rate 110 bpm, respiratory rate 20 breaths per minute, and oxygen saturation 92% on room air. The physical examination is unremarkable. The electrocardiogram (ECG) shows ST-segment elevation in leads V1, V2, and V3. The patient is given aspirin, nitroglycerin, and morphine. The patient is then transported to the cardiac catheterization laboratory for primary percutaneous coronary intervention (PPCI).

2. A 55-year-old female patient with a history of diabetes mellitus and chronic kidney disease (CKD) stage 3 presents to the emergency department with a 2-day history of severe, bilateral lower extremity weakness and numbness. The patient reports that the weakness and numbness are worse in the feet and have been progressively worsening. She is currently on insulin and lisinopril. The patient's vital signs are: blood pressure 150/90 mmHg, heart rate 90 bpm, respiratory rate 18 breaths per minute, and oxygen saturation 98% on room air. The physical examination shows bilateral lower extremity weakness and numbness, with a sensory level at the L4-L5 level. The reflexes are normal. The patient is given intravenous (IV) calcium and magnesium. The patient is then transported to the emergency department for further evaluation.

3. A 45-year-old male patient with a history of alcohol use disorder and chronic liver disease presents to the emergency department with a 2-day history of severe, bilateral lower extremity weakness and numbness. The patient reports that the weakness and numbness are worse in the feet and have been progressively worsening. She is currently on insulin and lisinopril. The patient's vital signs are: blood pressure 150/90 mmHg, heart rate 90 bpm, respiratory rate 18 breaths per minute, and oxygen saturation 98% on room air. The physical examination shows bilateral lower extremity weakness and numbness, with a sensory level at the L4-L5 level. The reflexes are normal. The patient is given intravenous (IV) calcium and magnesium. The patient is then transported to the emergency department for further evaluation.

ANSWERS

1. The patient is presenting with acute chest pain, which is a medical emergency. The patient's history of hypertension and hyperlipidemia, along with the physical examination findings, suggest a high risk for atherosclerotic disease. The ECG findings of ST-segment elevation in leads V1, V2, and V3 are consistent with an acute myocardial infarction (AMI). The patient's vital signs, including a blood pressure of 180/110 mmHg and a heart rate of 110 bpm, are also consistent with a high-risk AMI. The patient's symptoms and physical examination findings are consistent with a diagnosis of acute myocardial infarction. The patient is given aspirin, nitroglycerin, and morphine, which are standard treatments for AMI. The patient is then transported to the cardiac catheterization laboratory for primary percutaneous coronary intervention (PPCI).

2. The patient is presenting with bilateral lower extremity weakness and numbness, which is a medical emergency. The patient's history of diabetes mellitus and chronic kidney disease (CKD) stage 3, along with the physical examination findings, suggest a high risk for atherosclerotic disease. The patient's symptoms and physical examination findings are consistent with a diagnosis of acute lower extremity weakness and numbness. The patient is given intravenous (IV) calcium and magnesium, which are standard treatments for acute lower extremity weakness and numbness. The patient is then transported to the emergency department for further evaluation.

3. The patient is presenting with bilateral lower extremity weakness and numbness, which is a medical emergency. The patient's history of alcohol use disorder and chronic liver disease, along with the physical examination findings, suggest a high risk for atherosclerotic disease. The patient's symptoms and physical examination findings are consistent with a diagnosis of acute lower extremity weakness and numbness. The patient is given intravenous (IV) calcium and magnesium, which are standard treatments for acute lower extremity weakness and numbness. The patient is then transported to the emergency department for further evaluation.