

QUESTION

A 65-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 has a history of smoking 20 cigarettes per day for 30 years and has been on a statin and beta-blocker for several years. His vital signs are: heart rate 100 bpm, blood pressure 180/100 mmHg, respiratory rate 20 breaths per minute, and oxygen saturation 92% on room air. Physical examination reveals a clear lung field, normal heart sounds, and no murmurs. An electrocardiogram (ECG) shows ST-segment elevation in leads V1, V2, and V3, consistent with an anterior wall myocardial infarction (MI). The patient is currently on aspirin, clopidogrel, and a beta-blocker.

Parameter	Value	Reference Range
Heart Rate	100 bpm	60-100 bpm
Blood Pressure	180/100 mmHg	90-120/60-80 mmHg
Respiratory Rate	20 breaths per minute	12-20 breaths per minute
Oxygen Saturation	92% on room air	95-100%
ECG Findings	ST-segment elevation in leads V1, V2, and V3	Normal ECG

What is the most appropriate next step in the management of this patient?

ANSWER



The most appropriate next step in the management of this patient is to administer intravenous (IV) morphine for pain relief. The patient is experiencing severe chest pain, which is a common symptom of an acute MI. Morphine is a potent analgesic that can help to reduce the patient's pain and improve their comfort. Additionally, morphine can help to reduce the patient's blood pressure and heart rate, which is beneficial in the setting of an acute MI. Other options, such as aspirin, clopidogrel, and a beta-blocker, are already being administered to the patient. Therefore, the most appropriate next step is to administer IV morphine.

1. Administer IV morphine for pain relief.