

**QUESTION**  
 A 60-year-old male patient with a long history of hypertension and diabetes mellitus presents to the emergency department with acute onset of severe, crushing chest pain. The pain is described as a heavy weight on his chest and is not relieved by rest or nitroglycerin. He has a history of smoking 20 cigarettes per day for 30 years. His vital signs are: heart rate 110 bpm, blood pressure 180/110 mmHg, respiratory rate 20 breaths per minute, and oxygen saturation 92% on room air. Physical examination reveals a pale, diaphoretic patient with a third heart sound (S3) and a crackle in the left lower lung field. An electrocardiogram (ECG) shows ST-segment elevation in leads I, II, III, aVL, aVF, and ST-T depression in leads V1, V2, and V3.

Parameter	Value	Normal Range
Heart Rate	110 bpm	60-100 bpm
Blood Pressure	180/110 mmHg	90-120/60-80 mmHg
Respiratory Rate	20 breaths/min	12-20 breaths/min
Oxygen Saturation	92% on RA	95-100% on RA
ECG Findings	ST-segment elevation in leads I, II, III, aVL, aVF; ST-T depression in leads V1, V2, V3	Normal sinus rhythm

## ANSWER



**ANSWER**  
 The patient's presentation is highly suggestive of an acute myocardial infarction (MI), specifically a ST-segment elevation MI (STEMI). The symptoms of severe, crushing chest pain, diaphoresis, and pallor, along with the physical findings of an S3 and crackles, indicate a significant increase in pulmonary vascular pressure and pulmonary congestion. The ECG findings of ST-segment elevation in leads I, II, III, aVL, and aVF, along with ST-T depression in leads V1, V2, and V3, are characteristic of an inferior wall MI.