

### QUESTION

A 65-year-old male patient with a long history of hypertension and hyperlipidemia presents to the emergency department with acute-onset chest pain and shortness of breath. The patient reports a tearing sensation in the chest that radiates to the back. Physical examination reveals tachypnea and a new murmur. An electrocardiogram (ECG) shows ST-segment depression in leads V1-V4. The patient's blood pressure is 180/100 mmHg. The most likely diagnosis is:

- A. Myocardial infarction
- B. Aortic dissection
- C. Pulmonary embolism
- D. Pericarditis

ANSWER: B

EXPLANATION: The patient's symptoms and physical findings are most consistent with aortic dissection.

### QUESTION



The patient's symptoms and physical findings are most consistent with aortic dissection. Aortic dissection is a life-threatening condition characterized by a tear in the inner layer of the aorta, allowing blood to flow between the layers of the vessel wall. This can lead to severe chest pain, often described as tearing or ripping, and can radiate to the back. The patient's blood pressure is significantly elevated, which is a common risk factor for aortic dissection. The ECG findings of ST-segment depression in leads V1-V4 are also consistent with aortic dissection. The patient's long history of hypertension and hyperlipidemia further supports this diagnosis.

ANSWER: B

EXPLANATION: The patient's symptoms and physical findings are most consistent with aortic dissection.