

### QUESTION

A 65-year-old male patient with a long history of hypertension and hyperlipidemia presents to the emergency department with a 2-day history of severe, tearing chest pain that radiates to his left arm. He reports a sudden onset of symptoms while watching television. He has no known allergies and is currently on lisinopril and atorvastatin. His vital signs are stable, and physical examination is unremarkable. An electrocardiogram (ECG) shows ST-segment depression in leads II, III, and aVF, and ST-segment elevation in leads V1, V2, and V3. A chest X-ray is normal. The patient's medical history is significant for a recent fall from a ladder 2 weeks ago, which resulted in a fracture of his right wrist. He has been on bed rest since the fall. He has a family history of premature coronary artery disease.

System	Findings
Cardiovascular	ST-segment depression in leads II, III, and aVF; ST-segment elevation in leads V1, V2, and V3
Respiratory	Chest X-ray: normal
Neurological	Recent fall from a ladder 2 weeks ago, resulting in a fracture of his right wrist
Medications	lisinopril, atorvastatin
Allergies	None known
Vital Signs	Stable
Physical Examination	Unremarkable

What is the most likely diagnosis?

### ANSWER



The most likely diagnosis is aortic dissection. The patient's symptoms of severe, tearing chest pain that radiates to his left arm are characteristic of this condition. The ECG findings of ST-segment depression in leads II, III, and aVF, and ST-segment elevation in leads V1, V2, and V3, are also consistent with aortic dissection. The patient's history of hypertension and hyperlipidemia, along with a recent fall from a ladder, are risk factors for this condition. The chest X-ray is normal, which is also typical for aortic dissection. The patient's medical history is significant for a recent fall from a ladder 2 weeks ago, which resulted in a fracture of his right wrist. He has been on bed rest since the fall. He has a family history of premature coronary artery disease.

What is the most likely diagnosis?