

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 is currently on amlodipine and atorvastatin. The patient's vital signs are stable, and physical examination is unremarkable. The electrocardiogram (ECG) shows ST-segment depression in leads II, III, and aVF, and ST-segment elevation in leads V1 and V2. The patient's troponin I level is elevated.

ANSWER
 The patient's presentation is consistent with a non-ST-elevation myocardial infarction (NSTEMI). The ECG findings of ST-segment depression in leads II, III, and aVF, and ST-segment elevation in leads V1 and V2, along with the elevated troponin I level, support this diagnosis. The patient's history of hypertension and hyperlipidemia, along with his current medications, are relevant to his condition.

NSTEMI

NSTEMI is a type of myocardial infarction characterized by chest pain and ST-segment depression on the ECG. It is caused by a partial occlusion of a coronary artery, leading to a temporary reduction in blood flow to the heart muscle. Unlike ST-elevation myocardial infarction (STEMI), NSTEMI does not typically cause ST-segment elevation on the ECG.

The diagnosis of NSTEMI is based on the patient's symptoms, physical examination, ECG findings, and blood test results. Treatment for NSTEMI typically involves aspirin, beta-blockers, and statins. The patient's current medications, amlodipine and atorvastatin, are appropriate for his condition.