

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 sudden onset 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 treatment for hypertension and hyperlipidemia for several years. The patient is currently on a beta-blocker, a calcium channel blocker, and a statin. The patient's vital signs are stable, and there are no signs of trauma or other acute conditions. The patient's electrocardiogram (ECG) shows ST-segment depression in leads II, III, and aVF, and ST-segment elevation in leads V1, V2, and V3. The patient's chest X-ray is normal. The patient's blood work shows a troponin I level of 0.15 ng/mL, a creatine phosphokinase-MB level of 150 U/L, and a D-dimer level of 0.5 ng/mL. The patient is diagnosed with acute coronary syndrome (ACS) and is treated with aspirin, clopidogrel, and a beta-blocker. The patient is discharged on a beta-blocker, a calcium channel blocker, and a statin. The patient is followed up in the outpatient clinic and is stable on his medications.

Parameter	Value
Troponin I	0.15 ng/mL
Creatine phosphokinase-MB	150 U/L
D-dimer	0.5 ng/mL

QUESTION

ANSWER



The diagram illustrates the coronary artery system, showing the aorta branching into the left and right coronary arteries. The left coronary artery branches into the anterior interventricular artery and the circumflex artery. The right coronary artery branches into the posterior interventricular artery and the circumflex artery. The diagram illustrates the distribution of blood flow from the coronary arteries to the myocardium.

ANSWER