

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 sharp, tearing pain that radiates to his back. He has a blood pressure of 180/100 mmHg and a heart rate of 100 bpm. Physical examination is unremarkable. An electrocardiogram (ECG) shows sinus tachycardia. A chest X-ray is normal. The patient is administered morphine for pain relief. Laboratory tests show a serum creatinine of 1.5 mg/dL and a blood urea nitrogen (BUN) of 20 mg/dL. The patient is diagnosed with aortic dissection and is transferred to the intensive care unit for further management.

Parameter	Value
Blood Pressure	180/100 mmHg
Heart Rate	100 bpm
Serum Creatinine	1.5 mg/dL
BUN	20 mg/dL

What is the most appropriate initial medical management for this patient?

ANSWER



The most appropriate initial medical management for this patient is intravenous beta-blockade. Beta-blockers are the first-line treatment for aortic dissection because they reduce the heart rate and decrease the shear stress on the aortic wall. The patient should be started on a beta-blocker such as metoprolol or esmolol. Other management options include pain control with morphine and blood pressure control with intravenous antihypertensives like labetalol or nicardipine. The patient should be transferred to the intensive care unit for further management.

What is the most appropriate initial medical management for this patient?