

# QUESTION

A 60-year-old male 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 his back. He has a blood pressure of 180/110 mmHg, a heart rate of 100 bpm, and an oxygen saturation of 92% on 2L oxygen. Physical examination is notable for a new diastolic murmur at the aortic valve.

Which of the following is the most likely diagnosis?



The most likely diagnosis is aortic dissection. The patient's symptoms of acute-onset tearing chest pain radiating to the back, along with a new diastolic murmur, are characteristic of this condition. The patient's history of hypertension and hyperlipidemia are risk factors for aortic dissection.