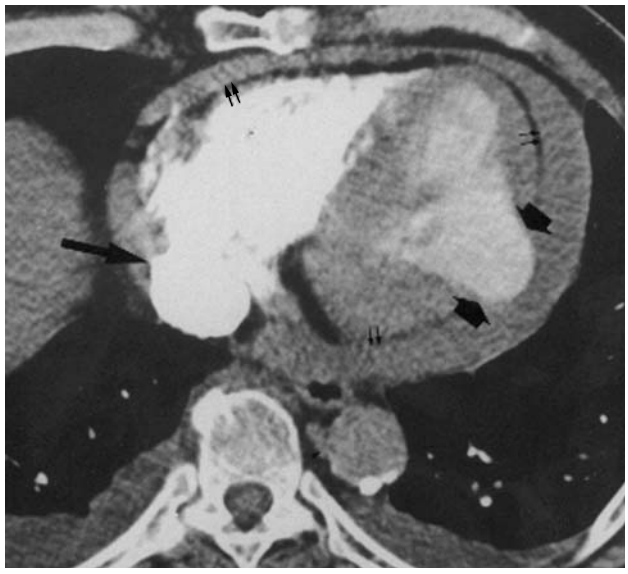

Helical CT in Left Ventricular Pseudoaneurysm Rupture

A 51-year-old male patient was seen in the emergency room for back pain irradiated to the neck of one week in duration. During the examination, the patient presented hypotension. The electrocardiogram (ECG) showed negative T waves on the inferior face and tall T waves in V1 and V2. In the chest radiograph, mediastinal widening and cardiomegaly were evident. Given the clinical suspicion of aortic dissection, helical CT with intravenous contrast was performed (Figure 1). Dilatation of the upper vena cava was visualized, reflux of contrast into the lower vena cava (long arrow) and suprahepatic veins, pericardial effusion (double arrows) and a defect in the posteroinferior wall of the left ventricle with contrast filling through a luminal communication (short arrows). After confirmation by color Doppler echocardiography, an intervention was carried out to suture a 2-cm pseudoaneurysmal orifice after evacuating the hemopericardium. The patient was released in favorable postoperative condition without complications.

Left ventricular pseudoaneurysm is rare late complication of inferior acute myocardial infarction (AMI) that occurs in 0.1% of cases. Unlike a true aneurysm, it is a self-contained myocardial rupture resulting in a narrow-necked hematoma of posteroinferior location. Many diagnostic tests have been used (echocardiography, isotopic ventriculography, contrast ventriculography, transesophageal echography, MRI and cinema-CT). However, to our knowledge, the use of fast-acquisition helical CT (instrument equipped with multidetectors and tube rotations of less than a second) after contrast administration to diagnose rupture of a left ventricular pseudoaneurysm has not been published previously.

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