A 71-year-old man with a history of previous anterior myocardial infarction, triple coronary artery bypass graft and left ventricular (LV) aneurysmectomy was admitted to the cardiology unit for chest pain. Physical examination showed a pulsing mass in the left chest wall. Cardiac multislice computed tomography showed a rare case of LV pseudoaneurysm (6.3×6×10 cm) communicating by a fistulous tract (1 cm) with the left anterior chest wall (C7-C8), creating a subfascial mass (7.1×3.6 cm).

Key Words: Aneurysm; Computed tomography; Myocardial infarction

Case Report

A 71-year-old man had a history of previous anterior myocardial infarction (1989) and in 1990 he underwent triple coronary artery bypass graft and left ventricular (LV) aneurysmectomy.

He was admitted to the cardiology unit for chest pain at the site of a large, pulsating mass. Physical examination confirmed the presence of such a mass, pulsing in synchrony with the heart beat, in the left chest wall, surrounded by blood suffusion. Vital signs were stable and ECG showed atrial fibrillation with controlled mean heart rate. Cardiac enzyme levels were negative and the blood count was within normal limits. Cardiac multislice computed tomography was performed and showed a dilated left ventricle with evident antero-apical pseudoaneurysm (6.3×6×10 cm) (Figures A, B). The pseudoaneurysmal wall was occupied by a thrombus with blood in its center and it communicated by a fistulous tract (1 cm) with left anterior chest wall (C7-C8), creating a subfascial mass (7.1×3.6 cm; Figure C).

Based on these findings, the patient was promptly transferred to the cardiac surgery department where he successfully underwent surgical resection of the pseudoaneurysm and closure of the connection between the ventricle and false aneurysm with a Dacron patch.

The pathological findings confirmed the diagnosis of LV pseudoaneurysm communicating by a fistulous tract with the thoracic wall. The pseudoaneurysm had formed after a partial suture dehiscence after aneurysmectomy. The patient’s chest pain was probably related to the extension of the mass through the thoracic muscle wall into the subcutaneous layers.
Discussion

LV pseudoaneurysm is a rare complication of aneurysm repair.\(^1,2\) Diagnosis may be done by echocardiography and confirmed by ventriculography or other imaging technique such as magnetic resonance or computed tomography.\(^3\) In the present case, CT was readily available, very accurate in making a correct diagnosis and useful for planning appropriate surgery. LV pseudoaneurysm carries a high risk of rupture and sudden cardiac death, so surgical treatment is advisable.\(^4\)

References