Multidetector computed tomographic angiography diagnosis of a giant pseudoaneurysm of the left ventricular outflow tract

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Keywords: Aortic valve replacement; Left ventricular outflow tract; MDCT; Pseudoaneurysm

A 43-year-old-man, underwent ascending aorta replacement with preserving the aortic root and prosthetic aortic valve implantation for aortic dissection 8 months ago, presented with chest pain and dyspnea on exertion (Fig. 1). A 64-slice MDCT angiography revealed a giant pseudoaneurysm of the left ventricular outflow tract.

Fig. 1. Axial (A), coronal (B) and sagittal (C and D) multiplanar reformatting MDCT angiography images show a giant (6 cm × 7 cm × 10 cm) pseudoaneurysm of the left ventricular outflow tract that surrounds the ascending aorta. It communicated with the left ventricle through a 3 cm neck (arrow) on the non-coronary side of the left ventricular outflow tract just below the sewing ring of the prosthetic aortic valve. The distance to the sternum and the dimensions of the pseudoaneurysm can be seen in (A) (Ao = aorta, LA = left atrium, LV = left ventricle, PsAn = pseudoaneurysm, RV = right ventricle). The reoperation, including removal of the aortic prosthesis and exclusion of the pseudoaneurysm with a left ventricular outflow tract patch repair, was to have been performed but the patient died during the operation.