Unusual giant cell aortitis

Tanina Rolf, Piergiorgio Tozzi and Salah D. Qanadli*

* Department of Cardiovascular Surgery, University of Lausanne, Lausanne, Switzerland
b Cardiothoracic and Vascular Unit, Department of Radiology, University of Lausanne, Lausanne, Switzerland

* Corresponding author. Department of Radiology, CHUV–University of Lausanne, Rue du Bugnon 46, 1011 Lausanne, Switzerland. Tel: +41-79-5562112; fax: +41-21-3144488; e-mail: salah.qanadli@chuv.ch (S.D. Qanadli).

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A 76-year old patient was admitted for syncopal episodes, weight loss and fever. Laboratory findings revealed an inflammatory status. Computed tomography (Fig. 1) angiography showed a tumour-like process of aortic and mitral valves involving the aortic valve (arrows), anterior mitral leaflet (black arrowheads) extended to the interventricular septum (stars) and the aortic wall (white). (D) ‘Late enhancement’ acquisition in the axial transverse plan that shows a clear enhancement of the aortic wall (attenuation value of 56 hounsfield units) (arrows).

Figure 1: Cardiac computed tomography angiography. (A) Axial transverse view, (B) long axis view and (C) short axis view show well-defined pseudo mass involving the aortic valve (arrows), anterior mitral leaflet (black arrowheads) extended to the interventricular septum (stars) and the aortic wall (white). (D) ‘Late enhancement’ acquisition in the axial transverse plan that shows a clear enhancement of the aortic wall (attenuation value of 56 hounsfield units) (arrows).
extended to the aortic wall. The pathology (Fig. 2) revealed granulomatous process suggestive of giant arteritis. The patient received aortic valve replacement, a pacemaker and corticosteroid therapy.

Figure 2: Pathology findings. (A) Excised aortic valve specimen during aortic valve replacement intervention. (B) Histology revealed granulomatous process with giant cells (arrows), necrosis and fibroinflammatory infiltrates highly suggestive of giant arteritis.