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An Iceberg in the heart: A calcified amorphous tumor of mitral valve

Burak Onan, Mehmet Karacalılar, Serdar Başgöze, Korhan Erkanlı

Department of Cardiovascular Surgery, İstanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul, Turkey

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Calcified amorphous tumor (CAT) is a rare and benign pathology which is composed of calcified nodules on a background of a degenerative and inflammatory amorphous fibrous material. [1-3] Although the pathogenesis of cardiac CAT is unknown, abnormal calcium-phosphorous metabolism, particularly in renal failure, is suspected. Differential diagnosis includes benign/malignant cardiac tumors such as a myxoma, teratoma, or rhabdomyoma, thrombosis, and vegetations.

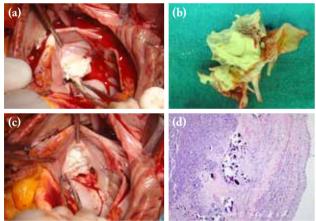


Figure 1. (a) An intraoperative view showing extensive calcification of the anterior leaflet of the mitral valve with decreased mobility of the leaflet, leading to severe insufficiency. (b) An intraoperative view after resection of the valve showing dense calcification in the periannular area of the anterior mitral leaflet. (c) A macroscopic view of the resected mitral leaflets. (d) A histological view of the specimen showing the presence of the calcified nodules in an amorphous background of fibrin and dense inflammation with macrophages and plasma cells (H-E x 200).

Herein, we report a 67-year-old case who underwent mitral valve surgery through a transseptal incision with a favorable outcome. During operation, we observed that the anterior leaflet of the mitral valve and its subvalvular apparatus were calcified and presented as a giant tumor (Figure 1). After resection of the calcified leaflet, the annulus of the mitral valve was reconstructed using a pericardial patch, and the valve was successfully replaced with a mechanical prosthesis.

Declaration of conflicting interests

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Corresponding author: Burak Onan, MD. İstanbul Mehmet Akif Ersoy Göğüs ve Kalp ve Damar Cerrahisi Eğitim ve Araştırma Hastanesi, Kalp ve Damar Cerrahisi Kliniği, 34303, Küçükçekmece, İstanbul, Turkey.

Tel: +90 553 - 622 38 78 e-mail: burakonan@hotmail.com