

Papillary fibroelastoma of the mitral valve chordae causing transient ischemic attacks

Geçici iskemik ataklara neden olan mitral kapak kordasında papiller fibroelastoma



Cardiac papillary fibroelastoma (CPF) is the most common tumor of the heart valves. Although the tumor generally arises from the valvular endocardium of the mitral or aortic valve, there have been limited numbers of reports on isolated CPF of the mitral valve chordate. This benign tumor may present with systemic embolization. Fragile papillary fronds or fibrin aggregations on the tumor is a cause for systemic embolization. The differential diagnosis includes other heart tumors such as myxoma or lipoma, vegetation, thrombus formation, calcification and Lambl's excrescences. Surgery can be performed with complete resection preserving the mitral valve and its subvalvular apparatus.

A 36-year-old woman presented with history of transient ischemic attacks. The patient had experienced several episodes of dysphasia and mental confusion previously. Transthoracic echocardiography revealed a mobile intracardiac mass along the anterior chordae of the mitral valve. To evaluate this lesion in detail, transesophageal echocardiography examination revealed an isolated lesion along the primary chordae of the mitral valve was 15x13 mm in size with an irregular border (Fig. 1, Video. See corresponding video/movie images at www.anakarder.com). There was no invasion of the papillary muscle, mitral leaflets, or annulus. The tumor was removed from the primary chordae with shave excision

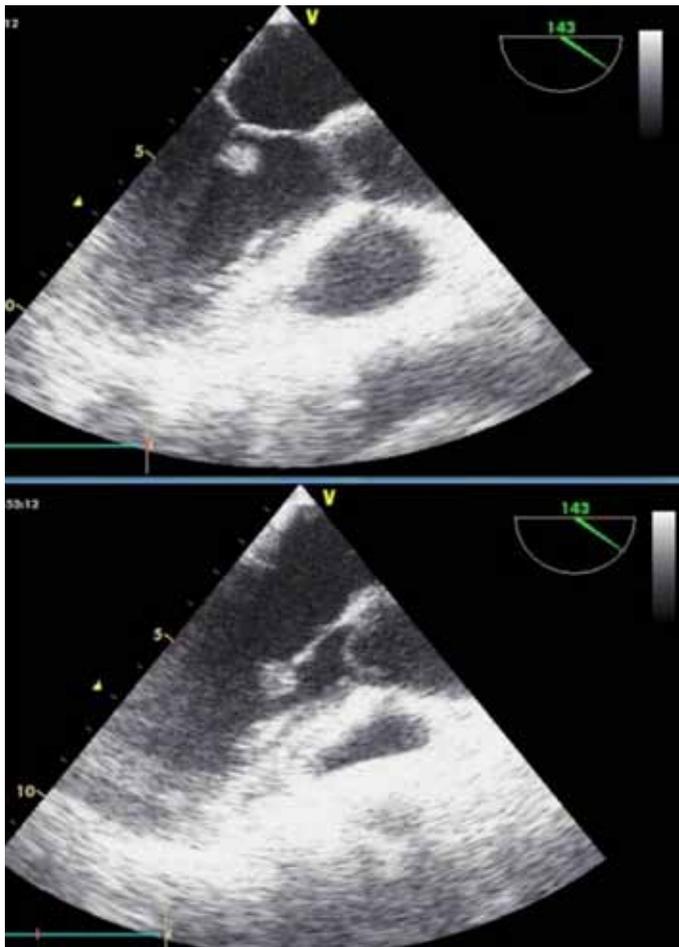


Figure 1. Transesophageal echocardiography shows an isolated tumor of the mitral valve chordae

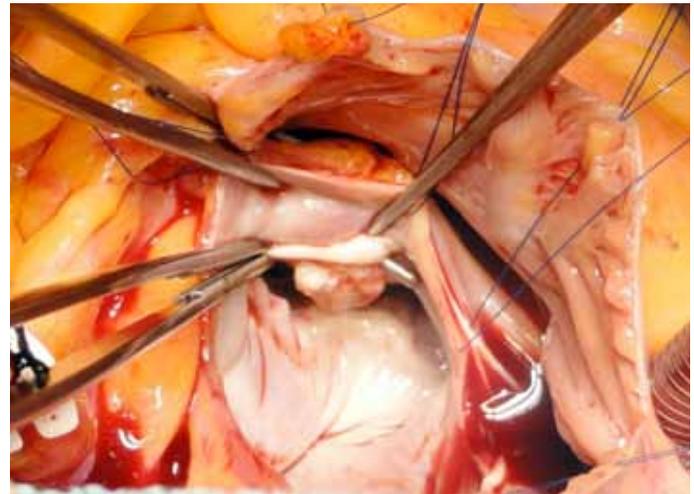


Figure 2. Operative view of the tumor of the primary chordae of the mitral A1 scallop



Figure 3. Macroscopic view of the tumor that shows papillary projections (left panel). Microscopic examination shows papillary fibroelastoma with branching papillae, which is composed of central avascular collagen and variable elastic tissue surrounded by endothelial cells [hematoxylin and eosin stain; original magnification x40 (right panel)]

(Fig. 2). Pathologic examination revealed CPF (Fig. 3). Macroscopically, the lesion was white-yellowish in color and rubbery in consistency. Microscopy revealed branching papillae from the tumor that were composed of central vascular collagen and variable elastic tissue, surrounded by acid mucopolysaccharide and endothelial cells. At 11-month follow-up, the patient was well and free from a neurologic event.

Video 1: Transesophageal echocardiography examination with different views shows an isolated tumor of the mitral valve chordae. The tumor was originated from the mitral chordae without showing an association with papillary muscle or mitral leaflets. Of note, the tumor was mobile during cardiac cycle and localized through the left ventricular outflow tract

Burak Onan, İsmihan Selen Onan, Kürşad Öz, İhsan Bakır
From Clinic of Cardiovascular Surgery, İstanbul Mehmet Akif Ersoy Thoracic and Cardiovascular Surgery Training and Research Hospital, İstanbul-Turkey

Address for Correspondence/Yazışma Adresi: Dr. İhsan Bakır, İstanbul Mehmet Akif Ersoy Göğüs Kalp ve Damar Cerrahisi Eğitim ve Araştırma Hastanesi, Kalp ve Damar Cerrahisi Kliniği, 34303 İstanbul-Türkiye
Phone: +90 212 692 20 00/2003 Fax: +90 212 471 94 94
E-mail: ihsanbak@yahoo.com

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