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 Lamb’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 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 (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 avascular 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: Transeosophageal 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.