An isolated supramitral ring detected in an adult patient

Erişkin bir hastada saptanan izole supramitral halka

Supramitral ring is a very rare disorder and usually associated with other cardiac defects ranging from simple lesions such as ventricular septal defect to complex defects such as univentricular heart. We present here an otherwise healthy adult patient with incidentally diagnosed obstructing supramitral ring.

Twenty-three years old male patient having mild exercise-induced shortness of breath was referred to our clinic because of a cardiac murmur. Indeed, we detected a diastolic murmur best heard at the apex but first heart sound was not loud. A supramitral ring dividing the left atrium was found during transthoracic echocardiographic examination (Philips I33 machine, S5-1 probe) (Fig. 1). A further diagnostic test with 3D transesophageal echocardiographic (X7-2 probe) examination showed that supramitral ring was actually a membrane completely covering supramitral area with a small stenosing orifice with diastolic 22 mmHg peak gradient (Fig. 1, 2). The patient was referred for surgery. During surgery, the membrane was successfully excised without any residual gradient (Fig. 3). The patient was discharged uneventfully at postoperative day 8.



Figure 1. Transthoracic apical 4- chamber view of the supramitral membrane



Figure 2. 3D transesophageal view of both the supramitral membrane and stenosing orifice



Figure 3. Intraoperative view of stenosing orifice

An isolated supramitral ring in an adult patient is a very rare disorder which has not been reported previously. The differential diagnosis should include a more common disorder - cor triatriatum sinistrum. We thought that close vicinity of the membrane to mitral valve and the presence of left atrial appendage opening above the membrane provided satisfactory evidence for the supramitral ring.

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A case of ventricular septal aneurysm producing right ventricular outflow obstruction

Sağ ventrikül çıkış yolunda darlığa neden olan bir ventrikül septal anevrizma olgusu

A 6-year-old boy was referred to our pediatric cardiology clinic for investigation of his heart murmur. He had no complaints. On physical examination, the patient appeared well and nondysmorphic. Examination revealed a grade 3/6 pansystolic murmur. Laboratory findings were within normal limits and chest radiography showed normal cardio-thoracic ratio. The electrocardiogram showed normal sinus rhythm. Transthoracic echocardiography in the apical four-chamber, parasternal short axis and subcostal views revealed a membranous ventricular septal defect, but shunt from left ventricle to right ventricle was restricted by a large aneurysm of the membranous interventricular septum which was mobile and also obstructing rightventricle outflow tract (Video 1. See corresponding video/movie images at www.anakarder.com). Only minimal left-to-right shunt was detected with Doppler echocardiography from the aneurysm. Because the patient was asymptomatic and subpulmonic gradient was 46 mmHg, we decided on conservative treatment and follow-up.

Ventricular septal aneurysm is an important mechanism of closure and results in more favorable prognosis in perimembranous ventricular septal