Giant left atrial myxoma with dual blood supply accompanying significant coronary artery stenosis

Ciddi koroner arter darlığına eşlik eden çift arteriyel beslemesi olan dev sol atriyal miksoma

A 69-year-old woman presented to our institution with palpitation and fatigue, which had started one month ago. She had no prior history of cardiac disease. On admission, her arterial blood pressure was 100/70 mmHg; pulse rate was 138 bpm/irregular. On physical examination there was a systolic murmur with a grade of 1/6 on the apex of heart. Chest radiography revealed a hypodense area on the right border of sternum (Fig. 1). Electrocardiography showed atrial fibrillation with rapid ventricular response. Transthoracic echocardiographic examination detected a hyperechoic, globular, large mass occupying almost the entire the left atrium (Fig. 2). Subsequent transesophageal echocardiogram confirmed the presence of a huge mass (7.6 x 5.1 cm) within the left atrium (Fig. 3). Mass was partly cystic and attached to the fossa ovalis part of interatrial septum. This tumor prolapsed across the mitral valve into the left ventricle during diastole and causing 5 mmHg left

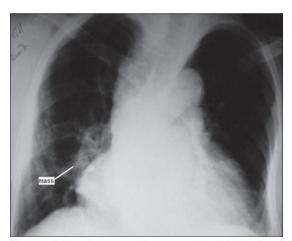


Figure 1. A hypodense area is seen on the right border of the sternum on chest radiography

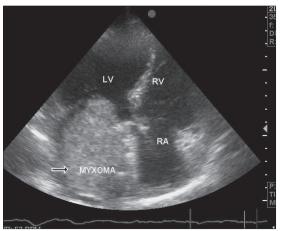


Figure 2. Transthoracic echocardiogram in the apical view shows the mass occupying the left atrium

ventricular inflow mean diastolic gradient. Mild mitral regurgitation was present. Because of her advanced age, we performed coronary angiography to exclude coronary artery disease before surgery. Angiography revealed significant LAD and first diagonal artery stenosis (Fig. 4) with

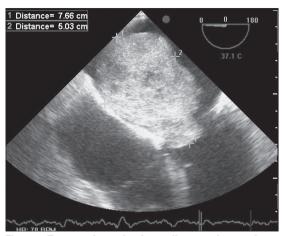


Figure 3. Transeophageal echocardiogram shows a huge myxoma within the left atrium

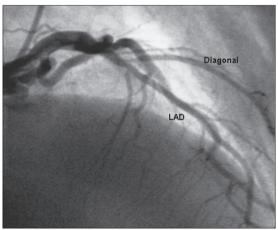


Figure 4. Coronary angiogram of the left anterior descending (LAD) and diagonal coronary arteries shows significant stenosis

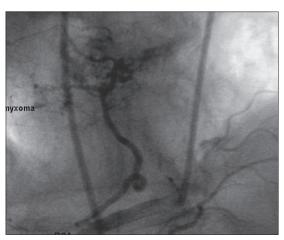


Figure 5. Coronary angiogram of the right coronary artery (RCA) shows blood supply through myxoma

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neovascularization of the myxoma by both right coronary artery and left circumflex artery (Fig. 5, 6). Bypass surgery and mass resection was performed (Fig. 7). The postoperative course was uneventful. Histological examination confirmed the mass was a benign atrial myxoma (Fig. 8).

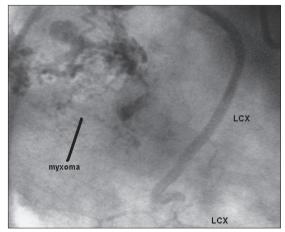


Figure 6. Coronary angiogram of the left circumflex artery (LCx) shows blood supply through myxoma

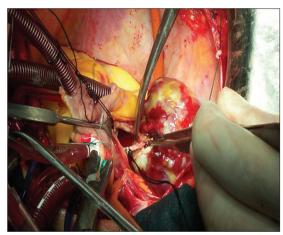


Figure 7. Intraoperative view of myxoma and its vascular structure



Figure 8. The large atrial myxoma after excision

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Aortico-left ventricular fistula associated with infective endocarditis

İnfektif endokardit ile birlikte görülen aort-sol ventrikül arası fistül

A 23-year-old man was admitted to an outpatient clinic for 2-month history of fever up to 38°C and weight loss. A grade IV continuous murmur with a thrill localized at the left sternal border was remarkable.

Echocardiography showed vegetations on the ventricular sides of a bicuspid aorta and the mitral valve. The ejection fraction was within normal ranges. There was a severe degree of aortic regurgitation. Apical 5-chamber view showed Doppler color flow between the ascending aorta and the left ventricular outflow tract, which was suspicious for a fistula (Video 1 and 2. See corresponding video/movie images at www.anakarder.com). Suprasternal view demonstrated an aortic coarctation with a maximum gradient of 56 mm Hg. The patient was commenced on a standard antimicrobial therapy with intravenous ampicillin and gentamycin. During further workup, magnetic resonance imaging (Fig. 1A) and the computed tomography (Fig. 1B) revealed the destructive aortic valve endocarditis complicated with an aortic fistula between the left ventricle outflow tract and the ascending aorta besides the rupture of the posterior leaflet of a bicuspid aorta (Fig.1C), (Video 3 and 4. See corresponding video/movie images at www.anakarder.com). As the blood cultures grew enterococcus, the regimen was not substituted with another antibiotherapy. He underwent Bentall procedure (Fig. 2), subsequently elective endovascular stent implantation was performed to ameliorate the coarctation. The patient was discharged after full recovery.

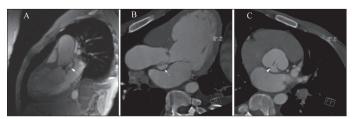


Figure 1. Electrocardiogram gated A) Magnetic resonance imaging and B) Computed tomography demonstrating the fistula and C) the rupture