Mitral regurgitation due to a hydatid cyst located in the left ventricular papillary muscle

Sol ventrikül papiller adalesine yerleşen kist hidatike bağlı mitral yetersizlik

Hydatid disease is caused by the cestode tapeworm *Echinococcus* granulosus or *Echinococcus multilocularis* and cardiac involvement is rare (0.5%-2%). The most common localizations within the heart are left ventricle, interventricular septum, right ventricle, pericardium and right or left atrium. To our knowledge, this case is the first to report a hydatid cyst located in the left ventricular papillary muscle, which also caused mitral regurgitation.

A 32-year-old woman with a history of cranial surgery for hydatid cyst nine years ago, presented with the complaints of seizures. Cranial magnetic resonance imaging revealed a hydatid cyst in the parietooccipital lobe. Abdominal computed tomography showed another hydatid cyst in the left kidney. The patient was consulted to cardiology department for the evaluation of an apical II°/VI° pansystolic murmur. Her electrocardiogram was normal. Transthoracic echocardiogram (TTE) revealed a 47x50 mm cystic structure with septations in the left ventricular posteromedial papillary muscle (Fig.1). A moderate mitral regurgitation jet was seen towards the left atrial posterolateral wall (Fig. 2). Blood serology was positive for Echinococcus granulosus. Her medical history and laboratory examinations suggested that this cystic structure in the posteromedial papillary muscle was a Gharbi type III hydatid cyst. The cyst was excised under cardiopulmonary bypass and the pathological examination of the cyst confirmed the diagnosis of cardiac hydatid cyst. No perioperative complications occurred and the patient was started on long-term 400 mg/day albendazole therapy. Postoperative control TTE revealed only trivial mitral regurgitation.



Figure 1. The arrow indicates hydatid cyst located in the left ventricular posteromedial papillary muscle

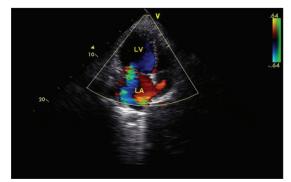


Figure 2. Moderate mitral regurgitation towards left atrial posterolateral wall

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A case of incomplete cor triatriatum sinister associated with large secundum atrial septal defect in an adult patient

Erişkin bir hastada büyük atriyal septal defekt ile ilişkili inkomplet kor triatriyatum sinister olgusu

A 38-year-old-woman presented with dyspnea and palpitation. On physical examination the blood pressure was 120/70 mmHg and the heart rate was regular at 95 beats/min. Cardiac auscultation revealed normal S1, widely split S2 and grade 3/6 systolic murmur along the left sternal edge. Transthoracic echocardiography showed the fibromuscular membrane located above the mitral valve and secundum atrial septal defect (ASD) (Fig. 1, Video 1. See corresponding video/movie images at www.anakarder.com). A minimal pulmonary regurgitation and a moderate tricuspid regurgitation were found. The systolic pressure gradient over the tricuspid valve was 47 mm Hg. The ratio of pulmonary blood flow to systemic blood flow (Qp/Qs) was 2,6. Transesophageal echocardiography clearly showed cor triatriatum sinistra and a large ASD (25mm) (Fig. 2, 3; Video 2, 3. See corresponding video/movie images at www.anakarder.com). The Doppler echocardiography did not show significant gradient through fibromuscular membrane in left atrium. The patient underwent elective surgical treatment with excision of the membrane through a left atriotomy and closure of an ASD

Cor triatriatum sinistrum is rare congenital cardiac malformation. It occurs in about 0.1-0.4% of all patients with congenital heart disease (CHD). Incomplete cor triatriatum sinister is extremely rare. The clinical symptoms depend on the size of the orifice, the morphology of the



Figure 1. Transthoracic echocardiography (apical four -chamber view) shows the fibromuscular membrane (arrow) and atrial septal defect (ASD)

LV - left ventricle; LA - left atrium; RV - right ventricle; RA - right atrium