

A rare case: blood cyst of the mitral valve

Nadir bir vaka: Mitral kapakta kan kisti

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A 35 year-old male patient who was asymptomatic before, has been admitted to our clinic with palpitations. His physical examination was normal except the mild systolic murmur (1-2/6) in apical area. Transthoracic echocardiography demonstrated a 1.5 X 2.1 cm in size, non-echogenic, rounded, thin-walled cystic mass - blood cyst – on the ventricular aspect of the anterior mitral leaflet through the subvalvular tissue (Fig. 1a and 1b). Antiplatelet therapy was started and the patient refused from further transesophageal echocardiographic assessment and operation.

Blood cysts; firstly defined by Elaser in 1844- are usually seen on atrioventricular heart valves in infancy during first 6 months, however they are rarely detected in adults (1). Blood cysts are benign cardiovascular tumor mass lesions and there are 35 cases reported in the literature. They are usually detected on pulmonary, tricuspid and mitral valves and rarely in right ventricle, left ventricle and right atrium. There are 3 hypothesis for its etiology; 1) Blood infiltration to the scratches over the surface of mitral valve and closing of the orifices of these scratches

enveloping the blood inside, 2) Heteroplastic changes of the tissue coming primitive pericardial mesothelial (attaches to the fibrous skeleton of the heart during embryological period), 3) Hypoxia, inflammation, and presence of bleeding diathesis. Differential diagnosis should be done with myxoma, other cardiac malignancies, vegetation, hydatid cyst and thrombus. There are controversies regarding its therapy since long-term follow-up results are lacking. Operation is the therapy of choice for blood cysts, potential source of embolism and left ventricular outflow tract obstruction, even in asymptomatic patients to discriminate from cardiac malignancies (2,3).

References

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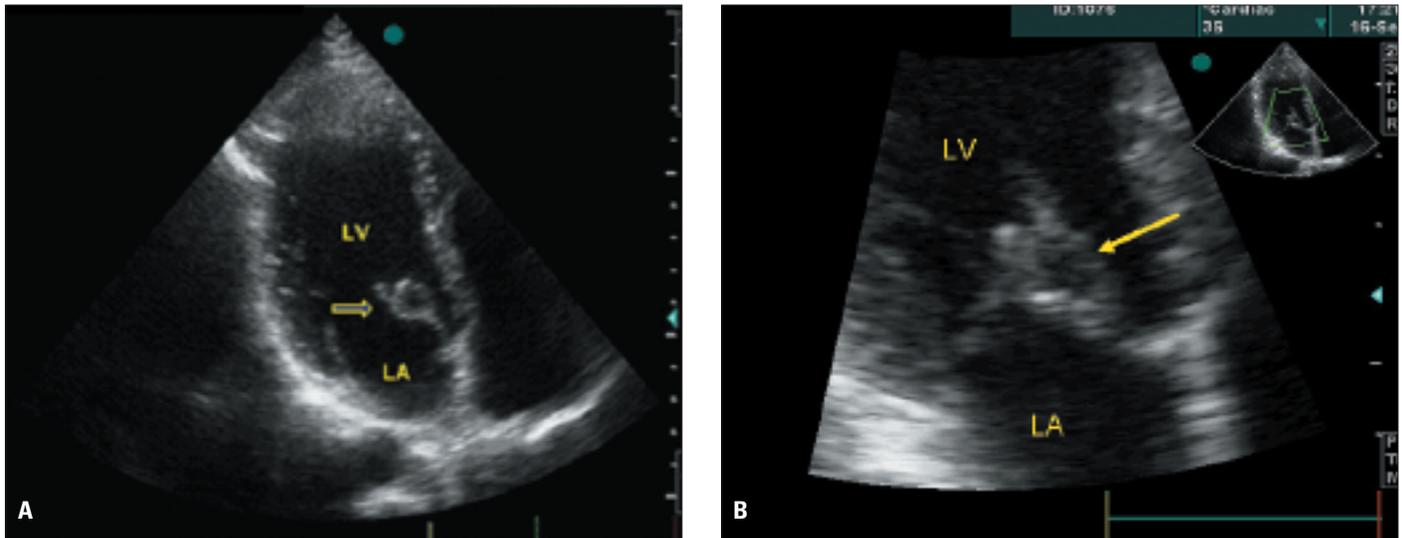


Figure 1.a) Blood cyst on the anterior leaflet of mitral valve b) Magnified view of a blood cyst.