

A heart- like cystic image in the heart**Kalp içinde kalp şeklinde görünüm****P. 510****Right Answer:** 2. Hydatid Cyst

The cysts were approached through a right atriotomy with echocardiographic guidance and irrigated with hypertonic solution and then removed (Fig. 3). Six hours postoperatively, suddenly hypotension and then cardiopulmonary arrest developed and the patient died unexpectedly. Echocardiography is a useful diagnostic tool for detecting hydatid cyst. We diagnosed our patient's hydatid cyst because of this fluid-filled mass with a well defined outer wall and the typical appearance of cyst with initial septations on transthoracic echocardiography (1). Pathological examination of the cyst confirmed the diagnosis of cardiac hydatid cyst. However, blood serology with indirect agglutination test was negative for echinococcal disease. Hydatid cyst is a parasitic disease that is caused by the larval form of *Echinococcus granulosus*. Cardiac involvement is rare but can be potentially fatal. The cysts have been seen most commonly at the left ventricular free wall because of its thickness and rich blood supply. The IVS is the next more frequent site of cyst involvement, followed by the atria, right ventricle and pericardium (2). Nevertheless, computed tomography and magnetic resonance imaging should be kept in mind in differential diagnosis of this cystic structures and their relation with surrounding cardiac and non-cardiac structures. The presenting symptoms of the cardiac hydatid cysts depend on the site, size, number and the complications of the cyst. Although most of the patients with cardiac involvement remain asymptomatic, a patient with a cardiac hydatid cyst may present with a variety of symptoms such as angina, syncope, arrhythmias, valvular dysfunction, pericardial effusion or tamponade (3). As in this case, the rupture of a hydatid cyst may result in hazardous complications including

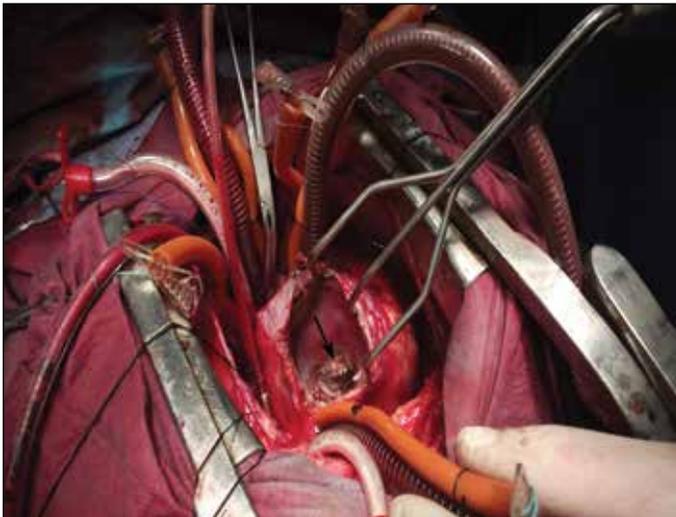


Figure 3. The operative image showing the cyst (arrow) in the interventricular septum

cardiac tamponade, systemic and pulmonary embolism, an anaphylactic shock or sudden death. By virtue of the potentially life threatening consequences, patients with cardiac hydatid cyst should be diagnosed and undergo surgery without delay.

Cardiac angiosarcoma is an extremely rare but life threatening disease with a mean survival of 6-11 months (4). It should be considered in patients with recurrent pericardial effusions. The most common location is the right atrium (80% of cases) (5). Echocardiographically, angiosarcomas are described as large, inhomogeneous echogenic masses with poor border definition. This malignant cardiac tumor is characterized by MRI as heterogeneity or isointensity on T1-weighted images and hyperintensity on T2-weighted images. A noted heterogeneous signal on T2-weighted imaging may be related to infiltration of the pericardial space with hemorrhagic and necrotic material (6). Additional descriptions have been proposed and including local nodular areas of increased signal intensity interspersed within areas of intermediate signal intensity characterized as a 'cauliflower' appearance (7). Cardiac rupture is a rare event, with only a few cases reported in the literature (8). As seen our patient, cardiac angiosarcoma should be a consideration in the differential diagnosis of any patient with cardiomegaly associated with hemorrhagic pericardial effusion with tamponade. In an afebrile patient with no history of prosthetic valves or materials isolated intramyocardial abscess formation is very unusual, despite the relatively high prevalence of bacteremia. Suppurative myocardial infections commonly related to native or prosthetic valves or perivalvular structures.

Pericardial cysts are rare benign structures, most frequently located in the right costophrenic angle. Pericardial cysts are usually asymptomatic and discovered incidentally on chest X-ray or echocardiography. Echocardiogram typically shows a hypoechoic mass with the characteristic posterior acoustic enhancement denoting the presence of fluid (9).

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