

Symptomatic Large Pericardial Cyst: Case Report

Semptomatik Büyük Perikardiyal Kist: Olgusu

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ABSTRACT Pericardial cyst is a benign paracardiac mass. It should be considered in differential diagnosis when paracardiac mass is detected. It is usually asymptomatic. But pericardial cyst can have different symptoms depending on the location size of the cyst and whether pressure on another tissue or not. The diagnosis is usually made based on chest X-ray. Transthoracic echocardiography, computed tomography or magnetic resonance imaging of the thorax can be used for confirm diagnosis. Surgical treatment should be considered in symptomatic cases. Treatment can be done with percutaneous or open surgery. Usually, asymptomatic patients are followed-up at regular intervals. If rapid progression of cyst or new symptoms become in patients, interventional treatment may planned. We presented a case report of a pericardial cyst in the right cardiophrenic angle caused by dyspne.

Key Words: Pericardium; mediastinal cyst

ÖZET Perikardiyal kist iyi huylu bir parakardiyak kitledir. Parakardiyak kitle tespit edildiğinde ayırıcı tanıda düşünülmelidir. Sıklıkla sağ kardiyofrenik açıda bulunur. Genellikle asemptomatiktir. Fakat bulunduğu lokalizasyona, büyüklüğüne ve bası olup olmamasına bağlı olarak farklı semptomlar verebilir. Tanı genellikle çekilen bir akciğer grafisi ile konur. Transtorasik ekokardiyografi, toraksın bilgisayarlı tomografisi veya manyetik rezonans inceleme yöntemleri ile tanı doğrulanabilir. Cerrahi tedavi semptomatik olgularda düşünülmelidir. Tedavi perkütan yolla ya da açık cerrahi şeklinde yapılabilir. Asemptomatik olgular genellikle sadece takip edilmektedir. Bu hastalarda yeni semptom gelişirse ya da kistte hızlı bir progresyon görülürse girişimsel tedavi planlanabilir. Biz de sağ kardiyofrenik açıda bulunan ve dispneye neden olan bir perikardiyal kist olgusunu sunduk.

Anahtar Kelimeler: Perikard; mediasten kisti

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Pericardial cysts are rare, benign congenital anomaly of the pericardium and usually asymptomatic. Most frequently localization is the right cardiophrenic angle and usually detected incidentally on chest X-ray.¹⁻³ The diagnosis is confirmed by echocardiography. Conservative approach is preferred in asymptomatic patients. Interventional treatment is indicated for symptomatic patients.

In this article we present a case of a large pericardial cyst which treated surgically.

CASE REPORT

64-year-old female patient admitted to cardiology outpatient clinic with shortness of breath which existing over the past year and worsening in the last six months. The cardiovascular system examination was normal. ECG was unremarkable. The lung functional tests and reversibility tests were normal. On the chest X-ray right cardiophrenic sinus closed and space-occupying lesion was detected in the same area (Figure 1). The large cystic lesion atria was seen adjacent of the right atrium on the transthoracic echocardiography (TTE) examination (Figure 2). There was no gradient between the tricuspid valve and right ventricular outflow tract via continuous wave Doppler (Figure 3). Thorax computed tomography (CT) scan



FIGURE 1: On the chest X-ray right cardiophrenic sinus was closed and space-occupying lesion.

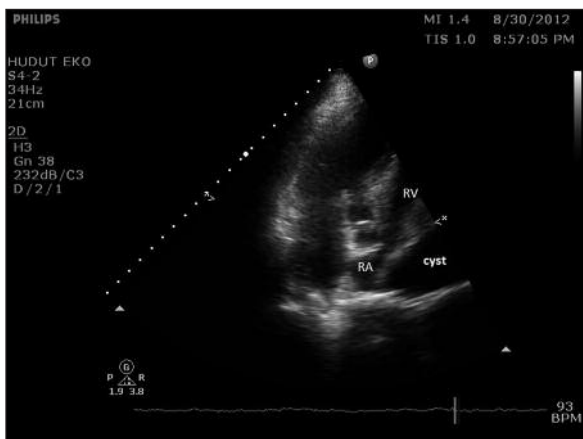


FIGURE 2: Transthoracic echocardiography (TTE) examination a large cystic lesion adjacent of the right atria.
(RA: Right atria; RV: Right ventricle)



FIGURE 3: The tricuspid valve on continuous wave Doppler, there was no gradient between right atria and ventricle.
(RA: Right atria; RV: Right ventricle)

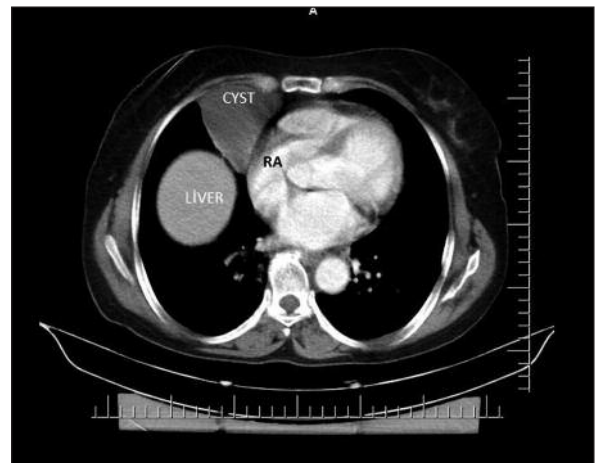


FIGURE 4: Thorax computed tomography (CT) scan showed that 6.0x5.0 cm sized mass at the right anterolateral side of the heart.
RA: Right atria.

showed that 6.0x5.0 cm sized mass which suggesting bronchogenic cyst at the right anterolateral side of the heart (Figure 4). We decided to operation for the symptomatic patient. The patient was under general anesthesia through a right thoracotomy was performed excision of the cyst (Figure 5), and pathological examination of the material revealed a simple pericardial cyst. 1-month postoperative follow-up was uneventful. After the operation, the patient's symptoms reduced.

DISCUSSION

Pericardial cyst is a rare congenital anomaly of the pericardium.^{1,2} Most frequently localization of the

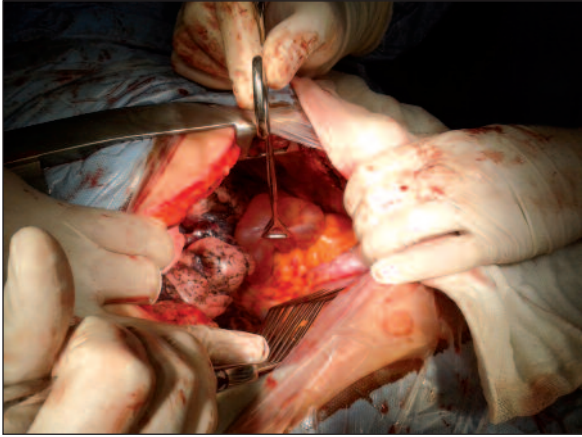


FIGURE 5: Appearance of pericardial cyst during the operation, the pericardial cyst end of the clamp.

(See color figure at <http://www.turkiyeklinikleri.com/journal/turkiye-klinikleri-journal-of-case-reports/1300-0284/tr-index.html>)

cysts is the right cardiophrenic angle.^{1,2} Rarely cysts are located left mediastinum, anterosuperior and posterior mediastinum, respectively.^{2,4} Histologically, a pericardial cyst wall is composed from a single layer of endothelial or mesenchymal cells.⁵

Cysts are usually asymptomatic.^{1,3} But depending on the localization, size and compression

of heart can lead to variable symptoms like chest discomfort, dyspnea, cough, palpitations, fatigue, abdominal distention and swelling of the legs.³ Rarely, the opening to the pericardium of the cyst may lead to cardiac tamponade and sudden cardiac death. Also main bronchi and right ventricular out-flow tract compression may cause sudden cardiac death.^{2,4}

Chest X-ray should be the first choice for the diagnosis. TTE is usually sufficient to confirm the diagnosis. In addition to conventional views, right parasternal view may be an alternative method for the assessment of the pericardial cysts. CT and MRI can be useful for the diagnosis.

Prominent fat pad, ventricular aneurysm, pericardial hematoma, mediastinal tumors, bronchogenic cysts, paracardiac hydatid cyst and hiatal hernias should be considered for the differential diagnosis of the pericardial cysts.⁶ Patients with symptomatic pericardial cysts should be treated with percutaneous drainage or surgical resection.² Asymptomatic patients should be followed closely.

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