## Letter to Editor / Editöre Mektup

## A Giant Unilocular Thymic Cyst with Symptoms Mimicking Coronary Heart Disease

Semptomları Koroner Arter Hastalığını Taklit Eden Dev Uniloküler Timik Kist

Mehmet Güzeloğlu<sup>1</sup>, Koray Aykut<sup>1</sup>, Gökhan Albayrak<sup>1</sup>, Taha Okan<sup>2</sup>, Eyüp Hazan<sup>1</sup>

<sup>1</sup>İzmir Üniversitesi Medicalpark Hastanesi, Kalp Damar Cerrahisi Anabilim Dalı, İzmir <sup>2</sup>Kardia Kalp Merkezi, İzmir

Thymic cysts are rare benign lesions of the mediastinum, comprising only 3% of all mediastinal masses (1). They can be divided into two types: unilocular thymic cysts and multilocular thymic cysts (2). Unilocular thymic cysts are generally detected in the cervical region. The latter one is usually located in the mediastinum. Mediastinal thymic cysts are generally asymptomatic and detected incidentally.

## **Case Report**

A 41-year-old male was referred to our hospital with complaints of palpitation, dull anterior mediastinal pain and dyspnea. He was tachycardic, a 12-lead electrocardiogram revealed sinus tachycardia at 120 beats per minute. The rest of his physical examination was normal.

We detected an anterior mediastinal mass on the lateral chest x-ray. Thorax computed tomography (CT) confirmed a huge cystic mass in the upper anterior mediastinum extending to the lateral of the left ventricle. It was 10\*12 cm in size with regular borders. Two-dimensional echocardiography revealed a cystic mass very close to the left ventricle. A coronary angiography was performed to exclude coronary artery disease and it showed normal coronary arteries. Total excision of the mass was performed carefully preserving the left phrenic nerve through a median sternotomy (Figure 1,2).





Histopathologic diagnosis was a unilocular thymic cyst. Postoperative period was uneventful, and the patient was discharged on the fifth day after the operation.

Thymic cysts represent only 3% of all mediastial masses (1,2). They may be cervical, mediastinal, or extend into both regions. Unilocular thymic cysts are considered as developmental malformations arising from embryonic duct remnants. They are usually detected in the cervical region, rarely in the mediastinum. Multilocular thymic cysts are considered of reactive nature as a result of inflammation of the structures derived from thymic medullary ductal epithelium. The cyst contents vary from clear fluid to bloody, green viscous fluid, with the cyst wall containing remnants of thymic and lymphoid tissue (3). As a result of hemorrhage within the cyst cavity or secondary infection, the cysts can enlarge rapidly.

Although mediastinal thymic cysts are usually asmyptomatic and detected incidentally. In this case, our patient had symptoms of coronary heart disease.

Diagnosis and treatment of thymic cysts are controversial. Mediastinal thymic cysts are well demarcated masses in the anterior mediastinium

Yard. Doc. Dr. Mehmet Güzeloğlu, İzmir Üniversitesi Medicalpark Hastanesi, Kalp Damar Cerrahisi Anabilim Dalı E-posta: islandc2007@hotmail.com Geliş tarihi / Received: Temmuz / July 20, 2012; Kabul tarihi / Accepted: Ağustos / Agust 16, 2012 Çıkar Çatışması / Conflict Of Interest: Yok /None radiographically (4). So, chest X-ray and CT are very useful as diagnostic imaging techniques. Also, an ultrasound exam can be helpful in diagnosis of mediastinal cysts. But, a definitive diagnosis can be made by histopathological study.

Fine-needle aspiration biopsy, mediastinoscopy and surgery are suggested for diagnosis and treatment. If the lesion is detected incidentally in an asymptomatic patient, some authors recommend observing it (5). In the literature, there are a few thymic cyst cases presenting with cardiac

## KAYNAKLAR

- Nomori H, Horio H, Suemasu K, Orikasa H, Yamazaki K, Nakano K. A case of rapidly enlarging unilocular thymic cyst. J Clin Pathol. 2002;55:636-637
- Suster S, Rosai J. Multilocular thymic cyst: an acquired reactive process—study of 18 cases. Am J Surg Pathol 1991;15:388–398
- Graeber GM, Thompson LD, Cohen DJ, Ronnigen LD, Jaffin J, Zajtchuk R. Cystic lesion of the thymus: an occasionally malignant cervical and/or anterior mediastinal mass. J Thorac Cardiovasc Surg 1984;87:295-300
- 4. Avila NA, Mueller BU, Carrasquillo JA, Kontny HU, Jaffe ES, Pizzo PA. Multilocular thymic cysts: imaging features in children with human immunodeficiency virus infection. Radiology 1996;201:130–134
- 5. Rastegar H, Arger P, Harken AH. Evaluation and therapy of mediastinal thymic cyst. Am Surg 1980;46:236-238
- Nogi M, Yokosuka T, Nishiyama S. A case report of giant thymic cyst presenting cardiac symptoms. Nihon Kyobu Geka Gakkai Zasshi. 1979;27:1201-5.
- Efthymiou CA, Thorpe JA. Thymic cyst presenting as tachy-brady syndrome. Eur J Cardiothorac Surg 2009;35:1108-1110.

symptoms (6). Even, a sick-sinus syndrome due to a thymic cyst is reported (7). Our patient had serious cardiac symptoms due to a big cystic mass that was very close to the left ventricle. Surgery was performed for both diagnosis and treatment.

We think that, histopathologic diagnosis should be done even for asymptomatic patients to exclude the other cystic lesions such as a cystic thymoma, a neoplasm with secondary cystic degeneration which can easily mimic a thymic cyst.