

A Rare Mediastinal Tumor: Thymolipoma



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ABSTRACT

Thymolipoma is a rare benign tumor of mediastinum. It comprises 2-9% of all thymic neoplasms. A 35-year-old man patient applied to our hospital with chest pain. In physical examination nothing characteristic was found and the routine laboratory findings were not remarkable. A chest radiograph showed no abnormalities however chest multislice computed tomography scans revealed an anterior mediastinal lesion in thymic area. No findings was found in respect of invasion in magnetic resonance imaging. Preoperatively radiological diagnosis was thymic hyperplasia but histopathological diagnosis was thymolipoma. We present the case of thymolipoma phenomenon which causes the chest pain.

Key words: Thymolipoma, mediastinal tumor, thymic hyperplasia

Nadir Bir Mediastinal Tümör: Timolipoma

ÖZET

Timolipoma mediasteninin nadir benign tümörüdür. Timolipoma tüm timik neoplazilerin 2-9%' unu oluşturur. Otuzbeş yaşında erkek hasta, göğüs ağrısı ile hastanemize başvurdu. Fizik muayenede özellik yoktu. Laboratuvar bulguları normal sınırlarda idi Göğüs radyografisinde anormallik görülmedi ancak göğüs bilgisayarlı tomografisinde timik bölgede anterior mediastinal lezyon tespit edildi. Magnetic resonance görüntülemesinde invazyon açısından bulgu saptanmadı. Operasyon öncesi radyolojik tanı timik hiperplaziydi ancak histopatolojik tanı timolipomaydı. Biz burada göğüs ağrısına sebep olan nadir bir timolipoma olgusunu sunuyoruz.

Anahtar kelimeler: Timolipoma, mediastinal tümör, timik hiperplazi

INTRODUCTION

Thymolipoma is a rare benign tumor of mediastinum. Most of the patients are usually asymptomatic and most of the tumors are detected casually. Symptoms may occur due to the compression of the mediastinal structures. The tumor grows slowly but if there is no symptom due to the tumor, it could reach larger sizes before diagnosis. Here, we are reporting a patient with complaints of chest pain who had a thymolipoma. According to our valued knowledge, less than two hundred cases have been published in the English literature (1).

CASE

A 35-year-old man applied to our hospital with chest pain. In physical examination nothing characteristic was found and the routine laboratory findings were not remarkable. Also, chest radiograph showed no abnormalities. Chest multislice computed tomography was carried out to clarify the reason for the chest pain. Multislice computed tomography revealed an anterior mediastinal lesion in thymic area, 3x3,5x6 cm in size (Figure 1). Thymic shape was nearly preserved. Fat density was found in the lesion. Chest magnetic resonance imaging was obtained to detect the relationship between the lesion and the adjacent vascular structures. Although magnetic resonance imaging revealed a close rela-

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tionship between the lesion and the adjacent vascular structures, no finding was found in respect of invasion (Figure 2). Tumor markers and anti-acetylcholine receptor antibody were obtained for tumor and myasthenia gravis respectively. They were all within normal limits. Radiological diagnosis was thymic hyperplasia but the reason for chest pain was not understood and a surgical resection decision was made. Surgery was performed by median sternotomy. The lesion was removed by complete resection with bilateral mediastinal pleurectomy. No invasions was found in surgery. There was no postoperative complications and the patient was discharged from hospital without chest pain symptoms. On gross examination the tumor was fatty, well circumscribed, lobulated and encapsulated, 4x6x12 cm in size (Figure 3). Microscopically, the tumor was composed of mature adipose tissue and hyperplastic thymic structures with Hassall's corpuscles. The definite diagnosis was thymolipoma.

DISCUSSION

Thymolipoma comprises 2-9% of all thymic neoplasms (2). Its incidence is roughly 0.12 patients per 100.000 people per year (3). There is no gender predilection and the patients' ages range from 3 years old to 76 years old (1,4,5). Most of the patients are usually asymptomatic but symptoms may occur due to the compression of the mediastinal structures. These symptoms include cough,



Figure 2. Magnetic resonance imaging shows close relationship between lesion and vascular structure on axial T1-weighted image.

dyspnea, hemoptysis, chest pain and hoarseness. The tumor grows slowly but if there is no symptoms due to the tumor, it can reach larger sizes before diagnosis. Radiologically the size of the tumor in our case was 3 x 3,5 x 6 cm. Thymolipoma can be associated with other diseases; such as myasthenia gravis, systemic lupus erythematosus, red cell aplasia, hypogammaglobulinemia, graves' disease and cystic lymphangioma (6-8). There was no association between tumor and these diseases in our case. The pathogenesis of thymolipoma is unknown. Various hypothesis for the pathogenesis of tumor



Figure 1. Axial contrast-enhanced chest multislice computed tomography scan shows anterior mediastinal lesion in thymic region.



Figure 3. An encapsulated tumor was found at surgery.

have been proposed but involuting hiperplasia hypothesis means that thymic hiperplasia is replaced by fatty tissue which seems to be the most plausible hypothesis (9). Our case supports this hypothesis. Surgery is necessary for curative treatment. Thymolipoma do not recur.

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