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Case Report

Giant Thymolipoma Mimicking Cardiomegaly

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Abstract
A 28-year-old man presented with a chest radiograph strongly suggestive for cardiomegaly. Although he did not consent any hemodynamic studies, cardiomegaly was ruled out on the basis of the clinical course. Computed tomography showed the existence of a large mass in both sides of the heart and in both lower hemithoraces. The tumor was resected by anterior mediastinotomy; it was weighted 2100 g and measured almost 35×25×6cm. Histopathologic examination revealed thymolipoma.
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Keywords ● Mediastinum ● Cardiomegaly ● Thymus neoplasm ● Lipoma

Introduction

Thymolipoma is a rare benign mediastinal tumor that accounts for 2%–9% of all thymus neoplasms and 1.1% of all solid mediastinal tumors.[1,2] It was initially described by Lange in 1916.[3] Huge thymolipomas as large as 4–36 cm in diameter and weighing up to 12 kg were reported. However, large mediastinal thymolipoma has rarely been reported.[2] The exact nature of thymolipoma is unclear. Herein, we described a giant thymolipoma mimicking cardiomegaly on chest roentegogram in a 28-year-old man.

Case Presentation

A 28-year-old man with presented with severe dyspnea and sweating was admitted to Imam Khomeini Hospital affiliated to Tabriz University of Medical Sciences, Tabriz, Iran in July 2004. He complained of exertional dyspnea since two years before. His chest roentgenogram clearly indicated cardiomegaly (fig 1). Echocardiographic studies showed normal heart size with an ejection fraction of 50%. Computed tomography revealed a tumor in the anterior mediastinum containing fatty materials adjoining the heart and which filled both hemithoraces (fig 2). The tumor was resected *en bloc* through a median sternotomy. According to the operative findings, the tumor was in the anterior mediastinum and hung inferiorly toward the diaphragm and filled half of both hemithoraces. Grossly, the tumor was a well-circumscribed encapsulated soft fatty yellow-brownish lobulated mass measuring 35×25×6 cm and weighing 2100g. Histopathologic study revealed thymolipoma (fig 3). No postsurgical complications occurred. In two-year follow-up, the patient was doing well.

Discussion

Clinically, thymolipomas are asymptomatic in the majority of patients and most of them are identified incidentally. Sometimes, it represents with respiratory symptoms.[4,5] The etiology of the tumor is still unknown. Thymolipoma is an anterior

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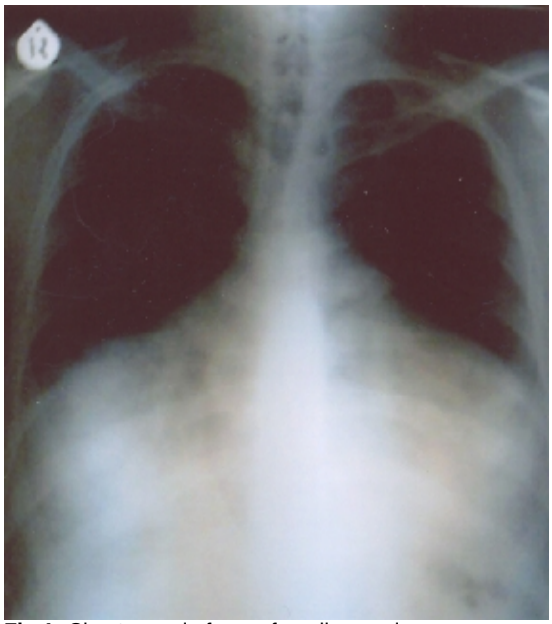

Fig 1: Chest x-ray in favor of cardiomegaly

mediastinal mass that hangs into the lower chest and extends into both hemithoraces mimicking cardiomegaly or elevation of both hemidiaphragms.[6,7] Lucent edges of the mass opposed to the more opaque borders of an enlarged heart is characteristic and is a clue for making the correct diagnosis.[8] Computed tomography is specifically showed fat attenuation. The soft tissue may appear as linear whorls intermixed with fat.[4,5,7] Since computed tomography is not always diagnostic, some authors recommend fine-needle aspiration biopsy.[9]

Thymolipoma presents as a mass ranging 4–36 cm in diameter and up to 12 kg in weight. It is a soft yellow rough bilobulated mass in shape.[2] These tumors are benign with intact capsule. Compression of adjacent organs, however, may become troublesome depending on the size and location of the tumor. Our patient was different from those reported cases earlier since he did not have symptoms like myasthenia gravis, aplastic anemia, licken planus or hypogammaglobulinemia.[10,11] Lipomatous tumors are the only differential diagnosis. Mature adipose tissue intermingled with thymus tissue containing numerous Hassall's corpuscles are seen histologicaly.[4,9] Recurrence and malignant transformation of the tumor have not been reported.

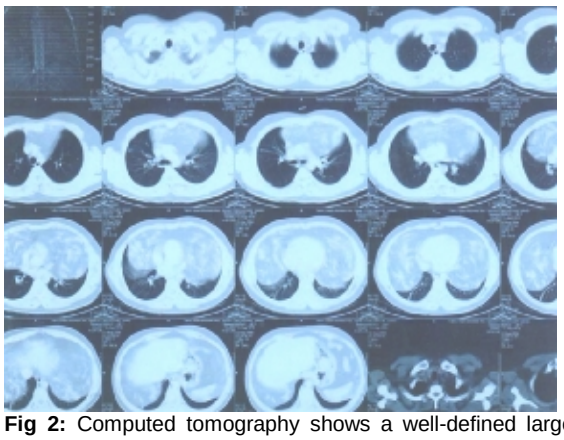

Fig 2: Computed tomography shows a well-defined large mediastinal mass which filled both lower hemithoraces

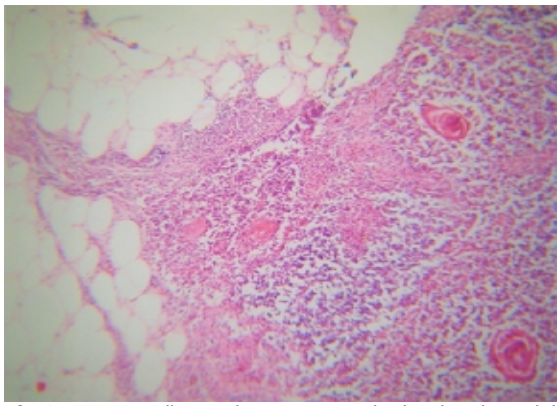

Fig 3: Mature adipose tissue surrounds the thymic nodule. The Hassall's corpuscles are easily seen (H&E, ×400)

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