OLGU SUNUMU

Ön mediastenin kondromatöz hamartomu

Anterior mediastinal choundromatous hamartoma

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ÖZET

Elli bir yaşında erkek hasta 1 aydır devam eden nefes darlığı yakınması ile başvurdu. Toraksın bilgisayarlı tomografisi, ön mediastende, sol pulmoner arter inen aortanın proksimal bölümüne komşu, 5.4x5.2 cm boyutlarında, düzgün sınırlı, "pop corn" kalsifikasyon içeren kitle gösteriyordu. PET-BT'de lezyonun SUVmaks değeri 2.7 olarak rapor edildi. Sol posterolateral torakotomi yapılarak tümor tam olarak rezeke edildi. Kesin tanı ön mediastenin hamartomu idi.

Anahtar kelimeler: hamartoma, mediasten, cerrahi

SUMMARY

A 51-year-old man presented with dyspnea for one month. Computed tomography scan of the thorax showed a 5.4x5.2 cm well-circumscribed mass with popcorn calcification near left pulmonary artery and proximal descending aorta in the anterior mediastinum. SUVmax value of the lesion on PET-CT was 2.7. Tumor was completely resected through a left posterior-lateral thoracotomy. The final pathological diagnosis was a hamartoma of the anterior mediastinum.

Keywords : hamartoma, mediastinum, surgery

Introduction

Hamartoma is defined as an abnormal mixture of tissue elements or an abnormal proportion of a single element normally present in an organ (1). It can originate from many organs (2). Pulmonary hamartoma is the most common benign tumor of the lung and it comprises 7-14 % of all solitary pulmonary nodules (3). The mediastinal location of this tumor is extremely rare and few cases of mediastinal hamartoma have been reported in the literature (1,2,4-6). We present a case of this rare tumor.

Case Report

A 51-year-old Turkish man presented with dyspnea for one month. He was a nonsmoker and his past medical history was unremarkable. Chest X-ray showed a mass with calcification in the left upper lung field (figure 1).

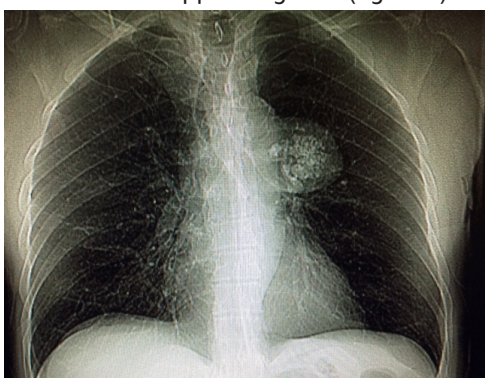

Figure 1. Chest x-ray shows a mass with calcification in the left upper lung field.

His physical examination and routine laboratory values were normal. Computed tomography scan of the thorax showed a 5.4x5.2 cm well-circumscribed mass lesion with popcorn calcification near left pulmonary artery and proximal descending aorta in the anterior mediastinum. (figure 2)

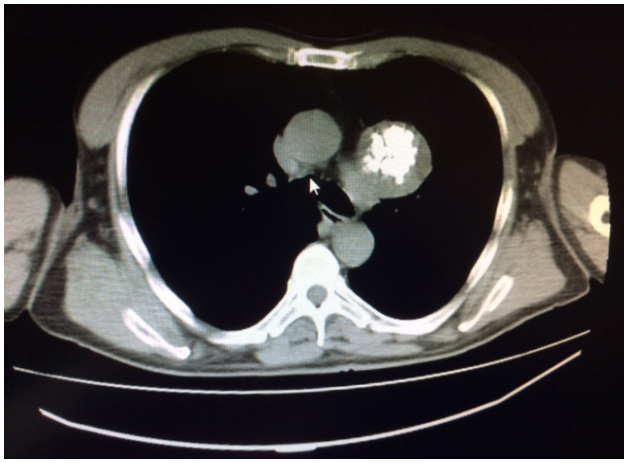

Figure 2. The computed tomography scan of the thorax shows a 5.4x5.2 cm well-circumscribed mass with popcorn calcification near left pulmonary artery and proximal descending aorta in the anterior mediastinum.

Also a 3.4x5.5 cm bullae in the left upper lobe. Bronchoscopy revealed normal endobronchial appearance. Pulmonary function tests were within normal limits (FEV1= 3.33 L 98% - FVC= 4.26 L 99% - FEV1/FVC= 102). The

patient underwent a left lateral thoracotomy. In operation, a large, firm, and yellowish-white colored mass was seen in the anterior mediastinum. The lesion was adjacent to vessels with no evidence of local invasion. The tumor was easily dissected free from the surrounding structures, and was subsequently resected. Also bullectomy was performed. Postoperative course was uneventful, and he was discharged home 2 days after the operation. Macroscopically, the tumor surface was regular and yellowish-white colored with calcification. Its size was 6.5x5.5x5 cm. Microscopic examination revealed a diagnosis of chondromatous hamartoma that consisted of fibrous connective tissue, adipose tissue, and portions of cartilage. At 8 months follow up, there was no evidence of tumor recurrence.

Discussion

Hamartoma is a benign tumor originating from the mesenchymal tissues. The term hamartoma was first introduced in 1904 by Albrecht (7) to describe lesions composed of elements of tissue that are native to an organ but are present in a disorganized array. Its nature has been debated. While this tumor was initially regarded as a development malformation, it is now accepted as a true neoplasm, probably originating from mesenchymal elements (2,6,8).

Hamartoma can occur in any organ, but it is extremely rare in the mediastinum. Few cases of mediastinal hamartomas have been published in the literature (1,2,4-6,9). Grosfeld et al (9) reported that there was only one case of hamartoma among 196 children with mediastinal tumor. This tumor may locate in any mediastinum compartment (1,2,4-6,10). It situated in the anterior mediastinum in our case. Possible mechanism for development of mediastinal hamartomas is unclear. Many authors described a migration theory. They believed that an intrapharenchymal hamartoma migrated across the visceral pleura into the mediastinum (1,2,6).

Histologically, hamartomas may include different proportions of mesenchymal elements. Its descriptive name depends on the predominant tissue. Predominant mesencymal component may be chondroid, fatty, osseos, fibroblastic, or muscle (1,2,8,10). There was a predominat chondroid differentiation in 80% of cases with pulmonary hamartoma (1). Chondromatous (2,6), leiomyomatous (1), and lymphangiomyomatous (10) mediastinal hamartomas were published in the literature. We presented a case of mediastinal chondromatous hamartoma.

Hamartomas are benign tumors. However, it is accepted that there is an association between hamartoma and malignancy. The risk of lung cancer is 6.3 times higher in patients with hamartoma than in the general population. Recurrence may be seen after incomplete resection (8). Thus, complete surgical excision of the tumor is the treatment of choice in the patients with mediastinal hamartoma (1,2,6,10). It was reported that there was no sign of recurrence after surgical resection (1,4,10). The tumor was completely removed through thoracotomy in our case. At 8 months follow up, there was no evidence of tumor recurrence.

In conclusion, mediastinal hamartoma is an extremely rare benign tumor. Complete surgical resection is the treatment of choice because of malignancy and recurrence risk. Though this tumor is rare, it should be considered in the differential diagnosis of the mediastinal masses.

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