

Hamartoma Originating From The Chest Wall

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Citation

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Abstract

Pulmonary localized hamartomas were first reported in 1906 by Hart(1). Hamartoma is the most common benign neoplasm to occur in the lung. Histologically, the lesions consist of a combination of cartilage, connective tissue, smooth muscle, fat, and respiratory epithelium. Malign transformation is rare (2,3). Pulmonary hamartomas occur more common in males. However, some authors reported male/female ratio was 1/1 (4,5).

CASE REPORT

A 21 year old male was admitted to the hospital because of his mass on the scapula. It looked erythematous. The size was 25x15 cm and palpation determined that skin and subskin tissues were quite soft and lax in this area (Figure 1).

Figure 1



Routine laboratory investigations were within normal limits.

The Chest roentgenogram showed rib deformation and

decreased chest volume in the upper left hemithorax (Figure 2a,2b). The CT scan revealed a neoplastic lesion. It involved the pleura and caused decreased volume in the left hemithorax.

Figure 2

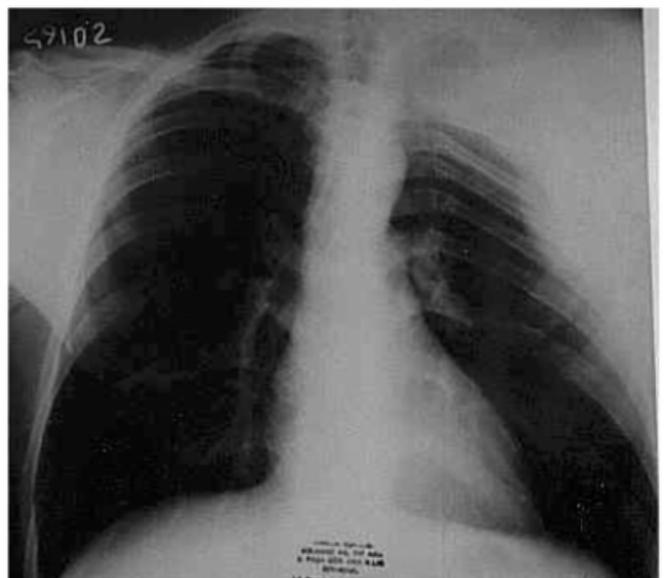


Figure 3



Destruction of the 3rd rib could be observed at the posterior chest wall (Figure 3).

Figure 4



Pulmonary function tests showed a restrictive pattern.

Flexible bronchoscopic exam revealed a normal bronchial system. CT guided fine needle aspiration and biopsy were performed, but revealed no diagnosis. Consequently, incision biopsy was performed under general anesthesia.

Histological examination showed a soft tissue hamartoma..

After the diagnosis, the patient was treated with en bloc excision (including 3, 4, 5th ribs) via left posterolateral J thoracotomy (Figure 4,5).

Figure 5



Figure 6



DISCUSSION

Hamartomas are frequently observed benign tumors of the lungs. Their incidence in a series of autopsies in the general population was reported to be 0.25% (6). Hamartomas originating from chest wall are very rare. To our knowledge this is the first chest wall hamartoma described in the literature. Chest wall hamartomas manifest themselves at birth or during early infancy with deformity of the thoracic wall and/or varying grades of respiratory symptoms (7,8,9). First symptoms in our case started at the age of 3 and had worsen gradually over time.

However chest wall hamartomas are generally benign but have some malign transformation risk (8,10). Early complete

resection is recommended in order to avoid respiratory complications and more severe postoperative orthopedic problems or malignant transformation (7). Both, pulmonary function disorders and chest wall deformation were seen in our case.

Percutaneous transthoracic fine needle biopsy yields positive diagnostic information in as many as 85% of pulmonary hamartomas (3). However, we were not able to make a diagnosis with CT guide percutaneous fine needle biopsy and had to perform a incision biopsy under general anesthesia. Histopathologic examination revealed a soft tissue hamartoma. The tumoral mass was completely removed.

Chest wall hamartomas should be treated as soon as possible in early infancy in order to avoid complications and malignant transformation. Although our patient suffered symptoms since early childhood, he had not any previous treatment because of his socio-economic condition.

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