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Anterior Chest Wall Mass in an Asymptomatic Child

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Abstract

We describe a pediatric case of mediastinal benign teratoma presenting as recurrent chest wall mass. Most common differential diagnosis for chest wall mass in children is cavernous hemangioma, PNET/Ewing's sarcoma, rhabdomyosarcoma, osteosarcoma and chondrosarcoma. These tumors arise from chest wall and may have both intra and extra-thoracic components. The treatment of choice for benign mediastinal teratomas in children <15 years is total surgical excision and there is no role of radiotherapy. Recurrence of these tumors has not been reported after complete resection; therefore, long term prognosis is excellent.

Keywords: Chest Wall Mass, teratoma, Children

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Introduction

A 5 year old boy presented with complaint of painless mass lesion noted over the middle of chest noted since 3 months of age. There was history of surgery to remove the mass at 1 year of age with complete resolution but no documents were available. The mass reappeared at around 3 years of age and has been slowly increasing in size since then. There was no history of cough, fast breathing, difficulty in breathing, swelling over face, loss of weight, fever or any skin changes observed over the lesion. There was no history of contact with TB. The child was hemodynamically stable with no evidence of respiratory distress. There was no pallor, icterus, edema or lymphadenopathy. A well defined, non compressible, 10 X 5 cm mass lesion over the sternum and anterior part of left chest wall was noted which was soft to firm in



Figure 1. Well defined, non-compressible, soft to firm mass lesion over the sternum and anterior part of left chest wall

consistency, with no changes on the overlying skin except scar mark of previous surgery (Figure 1).

There were no other skin or soft tissue lesions. His complete blood count, liver and renal function test were within normal limits. Chest x-ray revealed apparent cardiomegaly with a mass in the anterior mediastinum but there was no involvement/ destruction of bony thoracic cage (Figure 2).

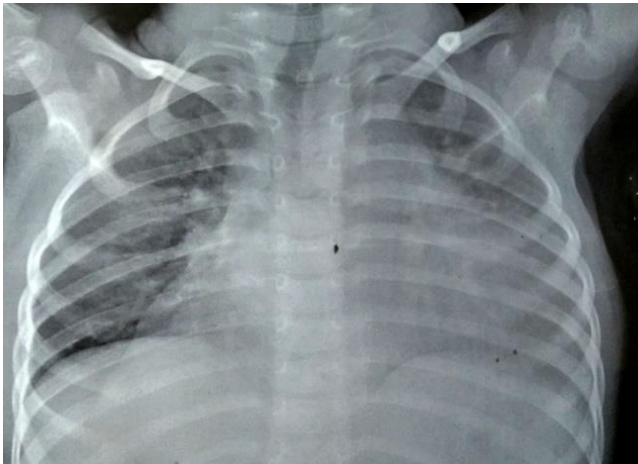


Figure 2. Chest x ray showing apparent cardiomegaly with anterior mediastinal mass but no bony involvement/ destruction



Figure 3. Heterogeneously enhancing anterior mediastinal mass with both cystic and solid components, compressing the aorta and main pulmonary artery and extending superficially in the pre-sternal region but no bony involvement

True-cut biopsy from the mass revealed mature cystic teratoma with no immature or malignant component. The child had undergone excision of the lesion with uneventful intra and post operative course.

We describe a pediatric case of mediastinal benign teratoma presenting as recurrent chest wall mass. Most common differential diagnosis for chest wall mass in children is cavernous hemangioma, PNET/Ewing's sarcoma, rhabdomyosarcoma, osteosarcoma and chondrosarcoma [1]. These tumors arise from chest wall and may have both intra and extra-thoracic components. While teratomas comprises 20% childhood mediastinal tumors [2] but they are not known for their extra-thoracic extension. Benign teratomas of mediastinum are often asymptomatic and mostly diagnosed incidentally when a chest X-ray or CT scan is done for other indications [3]. In symptomatic cases, they present most commonly with respiratory complaints [2]. The treatment of choice for benign mediastinal teratomas in children <15 years is total surgical excision [4] and there is no role of radiotherapy. Recurrence of these tumors has not been reported after complete resection; therefore, long term prognosis is excellent [5].

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