Ectopic Bronchogenic Cyst

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Bronchogenic cysts are congenital cystic lesions most commonly seen in the pulmonary parenchyma or mediastinum, rarely they can present in ectopic locations as cutaneous or subcutaneous cysts, cervical masses, or masses in the thoracic wall(1). We report a case of ectopic bronchogenic cyst that presented as a low neck mass, for the rarity of occurrence of this entity at this site.

Case Report

An 11-month-old male infant presented with a history of progressively increasing cough, breathlessness and fever of ten days duration. There was no history of any illness in the past. Examination revealed a 4x4 cms cystic mass in the left anterior triangle of the neck close to the sternal notch. There were no local signs of acute inflammation. Trachea was shifted to the right and bilaterally, harsh bronchovesicular breath sounds with a prolonged expiratory phase could be heard in the chest. There were no crepitations or rhonchi. The rest of the systemic examination was unremarkable.

A hemogram on admission showed a slight leukocytosis with a normal differen-

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Manuscript Received: November 8,1996; Initial review completed: December 11,1996; Revision Accepted: June 20,1997 tial count. Throat swab culture grew no microorganisms. The chest roentgenogram showed a few scattered infiltrates in both lung fields and a left paratracheal soft tissue shadow that caused tracheal indentation. Computerised Tomography revealed it to be well-defined hypodense lesion in the lower cervical region reaching upto the superior mediastinum (*Fig. 1.*) The lesion did not seem to have any attachment or communication with anterior chest wall or surrounding structures; there was no calcification seen.

Surgery done through a low transverse cervical incision, revealed a 5x3 cms multilocular mucus filled cyst that was impinging upon and which was adherent to the left wall of the lower cervical trachea. The cyst could be completely excised. The post-operative period was uneventful. Microscopically, the cyst wall consisted of fibroconnective tissue and bits of cartilage, the inner lining being that of respiratory epi-thelium.

Discussion

Foregut cysts, including bronchogenic cysts account for almost 10% of all intrathoracic masses, but there are no available estimates of their incidence in the neck(2). In a series of 15 patients with foregut cysts, only one case was documented with a cyst in the neck(3). Further, in a 20 year study comprising 20 cases of bronchogenic cysts, only 3 such cases were located in the neck(4).

Most of the cervical bronchogenic cysts present as supraclavicular masses and mimic cystic hygromas, branchial cleft cysts, thyroglossal cysts, thyroid abscesses or ectopic cysts of thymic origin(1,5). The cervical bronchogenic cysts very rarely may have cutaneous openings and mucoid discharge very similar to a branchial cleft sinus(6). An occasional child may present

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Fig. 1. Computerised tomography of the neck showing a hypodense paratracheal lesion.

with stridor and tracheal indentation due to rapid enlargement of the cervical cyst(7).

Precise soft tissue radiographs may pick up the mass, but computerised tomography or magnetic resonance imaging would help in delineation of the lesion.

Surgical excision of the cyst is easy. Although the ectopic bronchogenic cyst is characteristically described as unilocular, multilocular cysts have also been occasionally reported. Diagnosis of the true nature of the cyst would rest on microscopic demonstration of an inner lining of respiratory epithelium with smooth muscle and occasionally bits of cartilage in its wall(5). Cervical bronchogenic cysts are almost always benign although there have been reports of squamous cell carcinoma and rhabdomyosarcoma arising from intrathoracic bronchogenic cysts(8,9).

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