

Case Report

Asymptomatic Bronchogenic Cyst in a 35-Year-Old Woman as an Incidental Finding

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ABSTRACT

Bronchogenic cyst is a result of abnormal development of the ventral foregut presents as a discrete mass. Most commonly, it is appeared in the middle mediastinum and rarely is seen in adults. We report a 35-year-old woman who was asymptomatic and incidentally was found with a mass in chest radiograph.

Keywords: Bronchogenic Cysts, Case Reports, Iran

Introduction

Bronchogenic cyst (BC) results from developmental anomalies of bronchogenic cells in primitive ventral foregut (1, 2). It presents 7-15% of the cystic lesions arising from foregut and its prevalence is one case per 68000 populations. Mostly they are single but some cases are multiple (3). It is usually found in middle mediastinum but rarely seen in connection with the tracheobronchial tree (2, 4). The cysts can be filled with clear fluid, but it may be purulent because of infection (3, 5). These lesions are seen most frequently in children and rarely seen in adults (6).

There is variation between the reports about pa-

tients complaining with symptoms in literature, although BC in mediastinum is usually symptomatic (7-9). Herein, we report a case of BC who was not diagnosed by the age of 35 years.

Case report

A 35-year-old woman was admitted to Shahid Beheshti Hospital, Babol, Iran for diagnosis of an incidentally lesion found in chest radiograph. The patient medical history revealed multiple sclerosis from 5 months ago. She denied any respiratory symptoms. The physical exam was unremarkable. The lesion was further evaluated by CT scan with intravenous contrast, revealing a 40×30 mm right side tracheobronchial mass at the level of T4 -T5.

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Differential diagnoses included mature cystic teratoma, neurogenic lesion, pericardial cyst, esophageal duplication cyst, and lymphangioma. Thoracic surgery was performed. At surgery, the mass was seen in the middle mediastinum (Fig. 1).

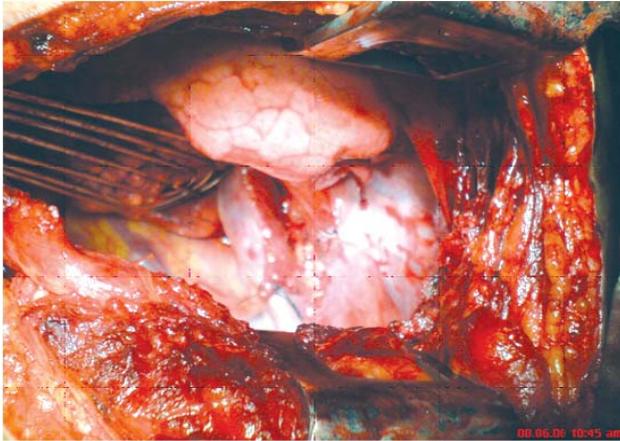


Fig. 1- Middle mediastinal mass at surgery

The specimen was sent to pathology. Gross examination revealed uniloculated cyst with smooth surface, measuring 4 cm in greatest diameter, filled with viscous fluid. Microscopic study showed cyst wall with ciliated pseudostratified columnar epithelium overlies a fibromuscular connective tissue that contained seromucinous glands and cartilage plate (Fig. 2). Diagnosis of BC was made by these findings.

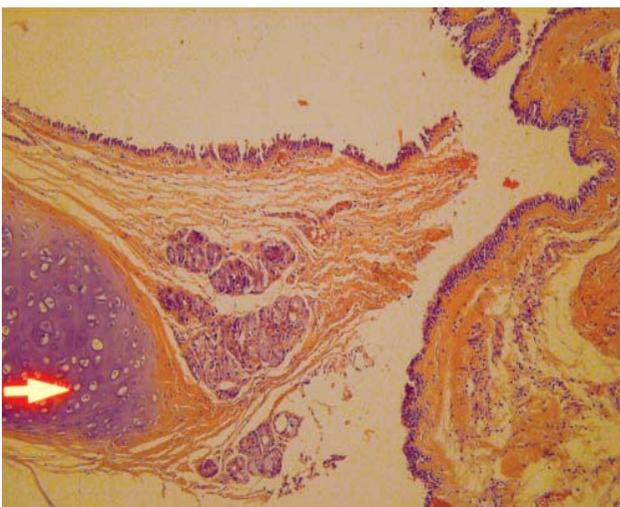


Fig. 2- Microscopic view of the cyst (H&E, ×4)

Discussion

Bronchogenic cyst is seen most frequently in children and young adults and may present with symptoms related to infection of cyst, superior vena cava syndrome, compression of trachea, pneumothorax, pleurisy, pneumonia, and compression of left main coronary artery (10, 11). They are noted most frequently in the middle mediastinum, but rarely may be present in a midline location in the abdomen or very rarely in the neck region (2, 12, 13). Rarely they can connect to the tracheobronchial tree or the lung parenchyma (4, 14).

Cases of interatrial septum, giant pulmonary, intradural and multiple pulmonary leiomyomata associated with a BC were reported (1, 14-16).

As mentioned before, BC in mediastinum is usually symptomatic and mostly these symptoms are related to complications (7-9). We described a case of asymptomatic BC in a 35-year-old female who demonstrated a 4 cm mediastinal mass in chest X-ray as routine checkup.

CT –Scanning and MRI are not enough to diagnose this lesion and its diagnosis depends on the histopathological findings to differentiate BC from other malignant cystic lesions in this area.

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