CASE REPORT

BRONCHOGENIC CYST MIMICKING THERAPY-RESISTANT ASTHMA

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SUMMARY : *The case of a six-year-old girl who had recurrent episodes of wheezing and cough for five years, is presented. A bronchogenic cyst in the mediastinum, clinically masquerading as bronchial asthma, was diagnosed by computed tomography scan. Asthma is not usually difficult to recognize. However, cystic anomalies of the tracheobronchial tree in young children are commonly mentioned in the differential diagnosis for asthma. In suspected cases, computed tomography scan should be one of the the initial steps in the evaluation of such patients.*

Key Words: *Asthma, Bronchogenic Cyst.*

INTRODUCTION

Recognition of bronchial asthma in the differential diagnosis of young children with recurrent or persistent wheezing is important. Both congenital and acquired mediastinal masses result in a narrowing of the airways and may present with cough or wheezing. The diagnosis is established by chest radiograph, computed tomography, and ultimately by thoracotomy. We report here a young girl who was referred to our department with symptoms of chronic asthma despite inhaled corticosteroid treatment.

CASE REPORT

A 6-year-old girl was referred to our asthma department for further evaluation of chronic respiratory symptoms. A previously healthy girl began to have mild recurrent episodes of wheezing and cough starting at 12 months of age. Chest x ray, serum immunoglobulin concentrations and sweat test were normal. She was diagnosed as having bronchial asthma by a local physician. The symptoms progressed slowly and never required hospitalization. She had been treated with ketotifen and cromolyn sodium for five years, and with inhaled corticosteroids for one year. However, the control of her symptoms was far from satisfactory.

On her visit to our department, physical examination was unremarkable except for bilateral rhonchi. Posteroanterior and lateral roentgenograms (Fig. 1) of the chest demonstrated a mediastinal mass. Thorax CT confirmed the presence of a mediastinal cystic lesion compressing the left lower bronchi (Fig. 2). Left thoracotomy was performed and the diagnosis was confirmed pathologically to be a bronchogenic cyst, which was noninfected and did not communicate with the tracheobronchial tree.

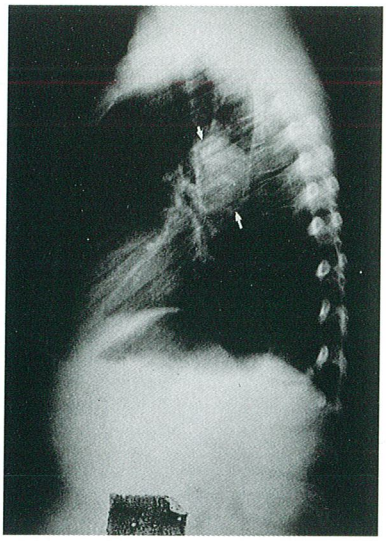

Fig. 1 : Lateral chest radiogram on admission.

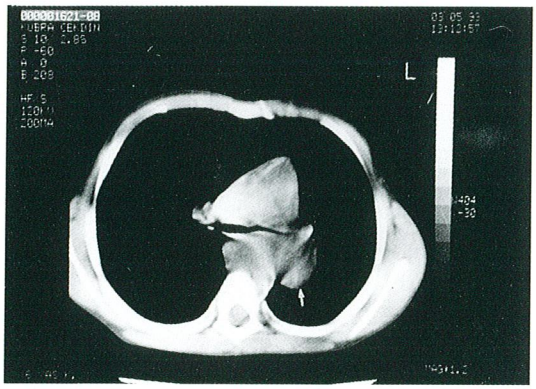

Fig. 2 : Computed tomography section showing a cyst lying in the left hilar region. The cyst is approximately 3x3x4 cm and compressing the left main bronchi posteriorly.

DISCUSSION

In our patient who was a healthy child until 12 months of age, congenital anomaly and parenchymal diseases were effectively excluded. The patient had normal chest roentgenogram, and had normal serum immunoglobulin and sweat chloride concentration. She responded clinically to an empiric course of a bronchodilator, oral corticosteroids and antibiotic combination during the exacerbations. Therefore, asthma was definitely diagnosed initially. Congenital cystic anomalies of the tracheobronchial tree in infants and children present a different clinical picture, which are often difficult to diagnose. Altyn et al. reported a 14-month-old boy with a bronchogenic cyst in the mediastinum which caused respiratory distress (1). As previously reported, some children are asymptomatic initially (2). Also in our patient, obstructive symptoms were not present in the neonatal period but she ultimately became symptomatic. Sometimes these cysts are not visible on the chest rontgenogram, being obscured by mediastinal structures or by surrounding inflammation (3). In children with asthma, repeated chest rontgenograms during exacerbations are not indicated in the absence of suspicion of complications such as pneumonia or pneumothorax (4). Since our patient was diagnosed to have asthma, follow-up films were not obtained during periods of exacerbation, and this was the most important cause of delay in diagnosis. Assessment of response to appropriate treatment in asthma is one of the most valuable criteria of the correct diagnosis, particularly in young children. Although the patient responded to symptomatic treatment, the quality of the response to specific treatment is very important, and it is necessary to distinguish between improvement and optimal control.

This case reemphasizes that pediatricians must be alert to the differential diagnosis of asthma in young children. In suspected cases, thorax CT should be one of the the initial steps in the evaluation of the patients.

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