

Neglected Bronchial Foreign Bodies

(Analysis of two adult cases)

Adnan Yılmaz, MD; Birol Bayramgürler, MD; Edbem Ünver, MD;
Müyesser Ertuğrul, MD; Ahmet Selvi, MD

SSK Süreyyapaşa Center for Chest Disease and Thoracic Surgery, İstanbul.

Abstract

Since most adult patients with foreign body aspiration have a high clinical index of suspicion, neglected foreign body aspiration is a condition infrequently encountered in adults. This report presents two adult patients with neglected bronchial for-

foreign body who underwent fiberoptic bronchoscopy for other reasons.

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Introduction

Tracheobronchial foreign body aspiration is an important cause of morbidity and mortality. Annual death rates due to foreign body aspiration range from 500 to 2000 in the United States (1). Aspiration of solid foreign bodies into the tracheobronchial tree most often occurs in infants and young children (2,3). This condition is uncommon in adults and they frequently have an underlying condition associated with impairment of airway protection, such as mental retardation, neurological disorders, alcohol or sedative abuse (1,4,5). Since most of the adult patients with foreign body aspiration have a high clinical index of suspicion, neglected foreign body aspiration is uncommon in adults (6,7). Two adult patients who underwent flexible bronchoscopy for other reasons and diagnosed as having foreign body aspiration were presented in this report.

Case Report

Case 1

A 44-year-old man was admitted in May 1999 with cough and sputum that began 15 days ago. He has had dyspnea for 5 years. He had a smoking history of 30 pack-year and has been working in a stone quarry for ten years. In April 1999, a chest x-ray showed infiltration in the right middle

Correspondence: Dr. Adnan Yılmaz
Zümrütevler Atatürk Cad. Abant Apt.
No:30 Daire:1 81530 Maltepe-İstanbul/Türkiye
e-mail: elifim@rt.net.tr

lung and no therapy was given. On admission his body temperature, pulse rate, blood pressure, and respiratory rate was 36.7°C, 96/min, 140/70 mm Hg, and 19/min, respectively. Auscultation of the lungs revealed bilateral sonorous rhonchus. The chest x-ray obtained in our clinic in May 1999 demonstrated the same lesions. Peripheral blood examination, routine biochemical tests and urine test were normal except hypoalbuminemia. Erythrocyte sedimentation rate was 40 mm/hour. Tuberculin skin test showed 10 mm endurance and sputum smear examination was negative for acid-fast bacilli. Following cefuroxime treatment for 15 days, his chest x-ray revealed partial improvement. Computed tomography of the thorax showed cavitation and infiltration in the right middle and lower lung. Fiberoptic bronchoscopy was performed and a foreign body was detected in right lower lobe. It was a stone with a diameter of 1.5 cm and was removed through rigid bronchoscope.

Case 2

A 48-year-old man was admitted with complaints of cough and fever present for one month in September 1999. He had a smoking history and has been working in an office. Amoxicilline was given for 12 days. In September 1999 his chest x-ray showed condensation in the right lower lung. On admission his body temperature was 37°C, pulse rate was 92/min, blood pressure was 120/70 mm Hg, and respiratory rate was 18/min. Physical examination was normal. Peripheral blood examination, biochemical tests and urine test were normal. Erythrocyte sedimentation rate was 75 mm/hour. Tuberculin skin test showed 10 mm endurance. Three sputum samples were negative for acid-fast bacilli. Beta-lactam combined with a macrolide were given for 15 days. His chest x-ray showed partial improvement. Computed tomography of the thorax showed consolidation in the right lower lobe. Fiberoptic bronchoscopy was performed and a dental fragment was determined in the medial segment of the right lower lobe. Rigid bronchoscope was used to remove the foreign body. After a detailed history, it was evident that the patient had dental procedure 5 months ago.

Discussion

Several reports exist indicating neglected bronchial foreign bodies in children and adults (6-9). Clinically neglected foreign bodies have been found in 1-9% of the pediatric patients who underwent flexible bronchoscopy for various reasons (8,9). Foreign body aspi-

ration is frequently suspected in children with acute or recurrent symptoms. However, in adults foreign body aspiration is rarely considered, unless there is a clear history of an aspiration event (1,10). Thus, foreign body can remain undiagnosed for years and may lead to a misdiagnosis such as asthma (6,7). The longest duration reported for tracheobronchial foreign body retention is 40 years (1).

We present here two adult patients with neglected bronchial foreign body in 1999. Chest x-ray was not revealing the foreign body in both cases. Both patients underwent flexible bronchoscopy for other reasons. In one case, tuberculosis was suspected and there was unresolved pneumonia in the other case. Both foreign bodies were in the right lower lobe and the rigid bronchoscope was used to remove the foreign bodies. The foreign body was a dental fragment in one case and a careful history revealed the dental procedure applied 5 months ago. This procedure is one of the most important factors predisposing adults to tracheobronchial foreign body aspiration (4). The other patient had been working in a stone quarry for ten years. Previous series reported 60 adult cases having a stone as a foreign body (4).

In conclusion, neglected foreign bodies can be found incidentally during daily bronchoscopic examinations. They should always be taken into consideration in differential diagnosis of pulmonary disorders.

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