INTRODUCTION

Aspiration of foreign bodies into the tracheobronchial tree is extremely rare in adults without an underlying predisposing factor. Clinical presentation can vary from no or trivial symptoms to life-threatening airway obstruction or death. Foreign body aspiration is frequently suspected in children with acute pulmonary symptoms. However, it is rarely considered in adults with subacute or chronic respiratory symptoms unless there is a clear history of an aspiration event. Thus, foreign body aspiration in adults can remain undetected for months to years, leading to erroneous diagnosis of asthma, pneumonia, bronchiectasis or malignancy. Occult tracheobronchial foreign bodies can be detected incidentally during bronchoscopic or radiological examinations. According to a previous report, the longest duration of foreign body retention in bronchial tree was 40 years.

We present a case of coexisting pulmonary tuberculosis and unsuspected foreign body which remained in the bronchus of an adult for 42 years before the diagnosis.

CASE REPORT

A 84-year-old non-smoker female presented with a six-month history of cough, sputum production and dyspnea. Past history and family history was not significant. She had received two courses of antibiotics, with no improvement of her symptoms. Physical examination was normal. Chest X-ray revealed consolidation in the right lower zone. Full blood count and routine biochemical tests were normal. Erythrocyte sedimentation rate was 20 mm/h. C-Reactive Protein (CRP) level was 8 mg/L. She was given Ampicillin + Sulbactam for 7 days with no clinical or radiological improvement. Smear examination of two sputum samples was negative for *Mycobacterium tuberculosis*. Computed tomography of the thorax showed a calcified lesion in the right middle lobe bronchus (Figure 1) and consolidation in right lower lobe (Figure 2).

Fiberoptic bronchoscopy revealed a solid lesion covered with yellow-white granulation tissue in the proximal part of the middle lobe bronchus (Figure 3). Foreign body was found to be a dental fragment which was removed via fiberoptic bronchoscope. A detailed history revealed that the patient had undergone a dental procedure 42 years earlier. The procedure was multiple dental extractions and a dental prosthesis. Culture examination of two sputum samples was positive for *Mycobacterium tuberculosis*. She was started a 4-drug regimen of antituberculosis therapy [isoniazid (300 mg/day), rifampicin (600 mg/day), pyrazinamide (1500 mg/day) and ethambutol (1500 mg/day)] after diagnosis.

DISCUSSION

Tracheobronchial foreign body aspiration is a major cause of morbidity and mortality all over the world. Although it is more common in children than adults, it can occur at any age. Foreign body aspiration in...
Tracheobronchial foreign body aspirations can manifest with various symptoms. They can present with the acute presentation of choking, wheezing, cough, and dyspnea or produce chronic non-specific symptoms. A high index of suspicion is the most important factor leading to a diagnosis of foreign body aspiration. Mostly adult patients with a foreign body aspiration have a strong history suggesting aspiration of unsuspected foreign bodies are uncommon in adults. However, once the acute symptoms pass, the episode is forgotten. Only 38% of the patients remember a possible episode of aspiration. Unless the patients give a clear history of aspiration, a foreign body in adults may remain occult for years. These cases are often misdiagnosed and treated as asthma, pneumonia lung abscess, bronchiectasis and lung cancer. Long standing airway foreign bodies for more than 10 years are rare.

At the time of admission, this patient did not give any history of foreign body aspiration. Foreign body was not visible on chest X-ray. Not all foreign bodies are visible on chest X-ray. The incidence of having normal chest X-ray is as high as 24%. The authors had a suspicion in diagnosis in adults. The presence of tracheobronchial foreign body is suspected, bronchoscopy must be performed. Bronchoscopy is the gold standard procedure in the diagnosis and extraction of an airway foreign body. Bronchoscopic examination revealed a foreign body in this patient. It was removed via fiberoptic bronchoscopy which was found to be a dental fragment. A detailed history revealed that the patient had undergone a dental procedure 42 years ago. The present case had two new features. First, she had the longest airway foreign body retention in an adult. To the authors’ knowledge, the longest bronchial foreign body retention in an adult recorded in English literature is 40 years. Second, there was co-existence of pulmonary tuberculosis in our patient. To authors’ knowledge, the present case is the first case of co-existing pulmonary tuberculosis and bronchial foreign body aspiration. The authors conclude that pulmonary tuberculosis and bronchial foreign body aspiration is a coincidence in this patient.

REFERENCES