Hair: An Unusual Foreign Body in Airways Presenting with Haemoptysis in an Adult Patient

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Abstract

Haemoptysis is defined as expectoration of blood originating from the lungs or tracheo-bronchial tree. It is attributed to various causes like tuberculosis, bronchiectasis, lung cancer, mycetoma, foreign bodies etc. Various types of foreign bodies have been reported in the literature. We report the case of an adult female patient who presented with an episode of haemoptysis (150 mL) in whom flexible fibreoptic bronchoscopy revealed a single long hair at the carina going to left main bronchus. Following successful removal of this hair there were no further episodes of haemoptysis and the patient manifested clinical and radiological improvement. [Indian J Chest Dis Allied Sci 2014;56:53-54]

Key words: Haemoptysis, Lung, Tracheo-bronchial tree, Hair, Foreign body.

Introduction

Haemoptysis is defined as expectoration of blood originating from the lungs or tracheo-bronchial tree. It is a common clinical symptom presenting to respiratory emergencies. Haemoptysis is classified as massive based on the volume of blood loss. Most authors define massive haemoptysis as expectoration of blood exceeding a volume of 100 to 600 mL in 24 hours.1 Massive haemoptysis has been described due to various causes like tuberculosis (TB), bronchiectasis, lung cancer, aspergilloma, foreign bodies, etc.² Various types of foreign bodies have been reported in the literature, like eatables, pieces of plastic, metal, teeth, stone, bead, balloon needle, thread, etc, as causes of massive haemoptysis.3-5 We report the case of an adult female patient who presented with an episode of haemoptysis (150 mL) in whom flexible fibreoptic bronchoscopy revealed a single long hair at the carina going to left main bronchus.

Case Report

A 21-year-old female reported to emergency department with the complaint of haemoptysis (150 mL) of sudden onset. She denied any history of cough, fever, weight loss, joint pain or night sweat and aspiration. She also denied past history of TB. There were no previous episodes of haemoptysis. There was no significant personal and family history of TB or any other lung and cardiovascular disease. The patient was non-smoker and non-alcoholic. At the time of presentation, the patient was clinically stable anxious. Vitals within were limits. There was no evidence of cyanosis, lymphadenopathy and clubbing. Cardiovascular,

gastrointestinal and otorhinolaryngological examinations were normal. Respiratory system examination revealed occasional crepitations in left infra-scapular region. Routine haematology, biochemistry and urine analysis were within normal limits. Her coagulation profile was normal. Serological testing for human immunodeficiency virus (HIV) was non-reactive. Electrocardiogram was within normal limits. Sputum did not reveal acid-fast bacilli. Chest radiograph, (postero-anterior view) showed left lower zone haziness (Figure 1). High resolution computed tomography (HRCT) of chest showed left lower lobe consolidation (Figure 2). On flexible fibreoptic bronchoscopy a bleeding spot was seen just at the level of carina with hyperemia in left bronchial tree and a single long hair was seen at the carina going to left main bronchus (Figure 3) which

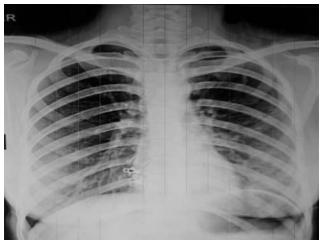


Figure 1. Chest radiograph (postero-anterior view) showing left lower zone haziness.

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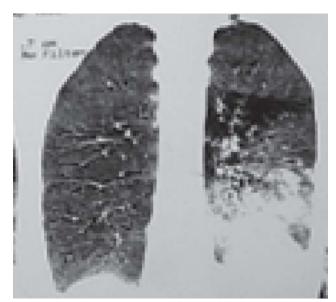


Figure 2. High resolution computed tomography of chest showing left lower lobe consolidation.

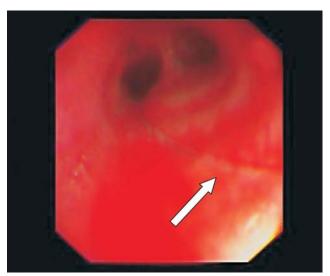


Figure 3. Bronchoscopy view at level of carina showing a long hair going in left main bronchus.

was successfully removed. The patient was discharged on symptomatic treatment. She remained symptom free after discharge. Repeat chest radiograph obtained after 15 days showed complete clearance of the haziness. The radiological haziness was probably due to blood that trickled down the airways during haemoptysis.

Discussion

Haemoptysis is a common clinical occurrence and a serious symptom of pulmonary pathology. Besides common causes like infection, lung neoplasms, bronchiectasis, a wide variety of other causes are seen and idiopathic in up to 30% cases.² Till date only few case reports of foreign bodies presenting with massive haemoptysis are available in the literature.⁶⁻⁸ Foreign

body aspiration is rare in adults but common in children. In a report describing foreign bodies commonly seen in children aged 1-2 years (n=214), the patients commonly presented with cough and/or breathlessness following choking episodes. 9 In adults, foreign body aspiration is more common in the setting of advanced age, underlying neurological disorders, poor dentition, alcohol consumption and sedative use.8 In the absence of these risk factors, a high degree of suspicion is needed for diagnosing tracheo-bronchial foreign body especially in cases of radiolucent foreign body and negative history of aspiration.5 Type of foreign body depends upon eating habits, cultural and social factors. Most of the foreign bodies can be successfully extracted by both rigid as well as flexible bronchoscope depending upon the size and location.9 Recently a rare case of thread aspiration in right lower lobe in an adolescent girl presenting as chronic cough, recurrent haemoptysis and pulmonary infection is reported.⁵ We are also reporting an unusual case of foreign body as hair presenting with massive haemoptysis in an adult female. In our case clinicoradiological presentation was of acute onset. The mechanisms by which foreign bodies cause haemoptysis are not well understood. In our patient, we considered irritation and inflammation of bronchial mucosa induced by foreign body may be responsible for haemoptysis. To the best of our knowledge, this is the first report documenting of the presence of hair causing massive haemoptysis.

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