

Migratory pushpin in the tracheobronchial tree

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DESCRIPTION

A healthy 10-year-old boy presented to the emergency department, with a 3-day history of cough and odynophagia, which started after eating squid. On examination, he had decreased breath sounds in the lower half of the right lung. The physical examination was otherwise unremarkable. Chest X-ray showed a consolidation of the right lower lobe with small pleural effusion, and a foreign body

in the right bronchus (figure 1A). The patient was admitted for antibiotic treatment and bronchoscopy, but had a sudden onset of coughing with respiratory distress, pale skin and cold extremities, for a few seconds. A subsequent chest X-ray performed after this episode showed that the foreign body had migrated to the left bronchus (figure 1B). Rigid bronchoscopy revealed a pushpin in the left main bronchus, which was removed. Recovery was uneventful. Follow-up X-ray was normal.

Tracheobronchial foreign body aspiration (FBA) is a significant cause of morbidity and mortality in childhood.¹ In the absence of a witnessed episode of choking, which is the most sensitive predictor of FBA, the diagnosis can be significantly delayed, hence predisposing to complications such as recurrent or persistent pneumonia, lung abscess, bronchiectasis and lung collapse.²

Rigid bronchoscopy is the standard of care for children with FBA. It is known that tracheobronchial foreign bodies may displace and migrate during bronchoscopy.³ However, foreign body migration irrespective of medical procedures is very rare, particularly for sharp objects, which have a tendency to become fixed to the mucosa.³

FBA presents diagnostic and management challenges. It is mandatory to have a detailed clinical history and a high index of suspicion.

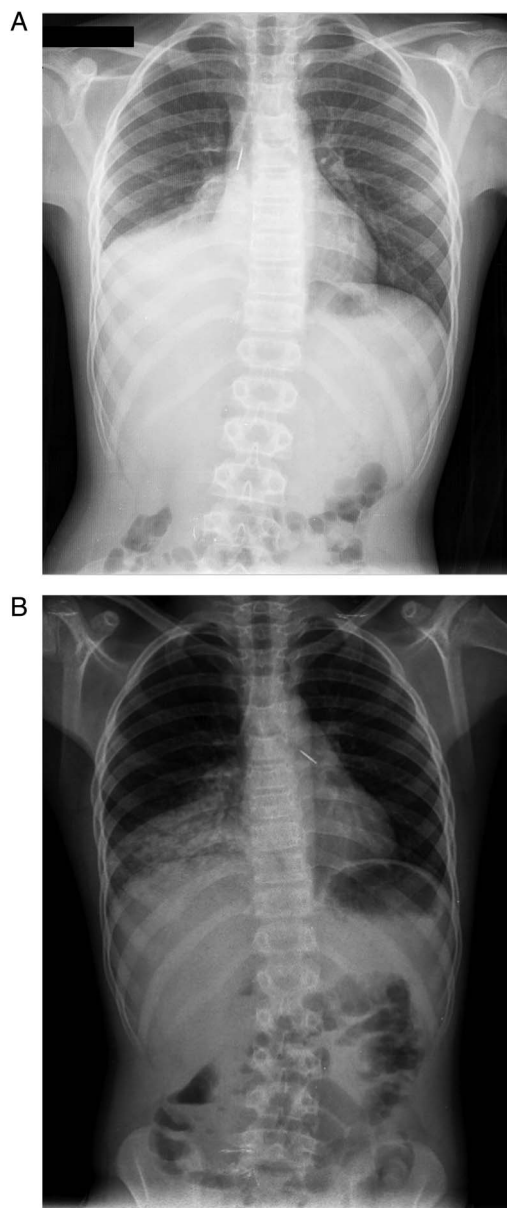


Figure 1 (A) Chest radiograph of the patient, showing a foreign body on the right bronchus, and consolidation/collapse of the right lower lobe with a small pleural effusion. (B) A later chest radiograph showing the foreign body now in the left bronchus, and consolidation in the right lower lobe.

Learning points

- ▶ In the absence of a witnessed episode of choking, the diagnosis of foreign body aspiration (FBA) can be significantly delayed, hence predisposing to complications.
- ▶ Foreign body migration irrespective of medical procedures is very rare, particularly for sharp objects, which have a tendency to become fixed to the mucosa.
- ▶ Rigid bronchoscopy is the standard of care for children with FBA.

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