Unusual bronchial foreign body without atelectasis

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DESCRIPTION
An 8-year-old girl presented at the emergency department with coughing and wheezing. She had been playing with a ballpoint pen in her mouth when her parents called her, and the tip of the pen disappeared at this time point. No abnormality was noted in the region from her mouth to the larynx, and the chest radiography results were unremarkable. The wheezing and coughing persisted; therefore, she was admitted to the paediatrics department of our hospital the next day. CT revealed the presence of the plastic tip of the pen in the truncus intermedius (figure 1). The tip was parallel to the bronchus; therefore, the airway had been maintained. The tip of the pen was removed using alligator forceps and a flexible bronchoscope via a laryngeal mask (figure 2).

In previous studies on foreign body aspiration, radiological test results had high false negativity that was inappropriate for correct diagnosis, and the chest radiography results were unremarkable in 6–80% of the patients.\(^1\) The most frequent radiography finding was atelectasis.\(^2\) In our case, the tip of the pen was hollow and was parallel to the bronchus; therefore, atelectasis did not occur. Although there are no specific symptoms and signs for a clear-cut diagnosis of foreign body aspiration, a history of witnessed foreign body aspiration, hospital admission within 24 h from respiratory symptom onset and wheezing are appropriate indications for bronchoscopy.\(^1\)

Learning points
- Radiological studies are not enough for correct diagnosis.
- Although there are no specific symptoms and signs for a clear-cut diagnosis of foreign body aspiration, a history of witnessed foreign body aspiration, hospital admission within 24 h from respiratory symptom onset and wheezing are appropriate indications for bronchoscopy.

Figure 1  CT scan of the chest showing the tip of the pen in the truncus intermedius. (A) Coronal section with the arrow showing the foreign body. (B) Sagittal section showing the arrow pointing to the foreign body.

Figure 2  (A) A bronchoscopic image showing the tip of the pen around the granulation tissue in the truncus intermedius. (B) The tip of the pen after removal.
REFERENCES
