

Coughing: think about long-standing bronchial foreign body

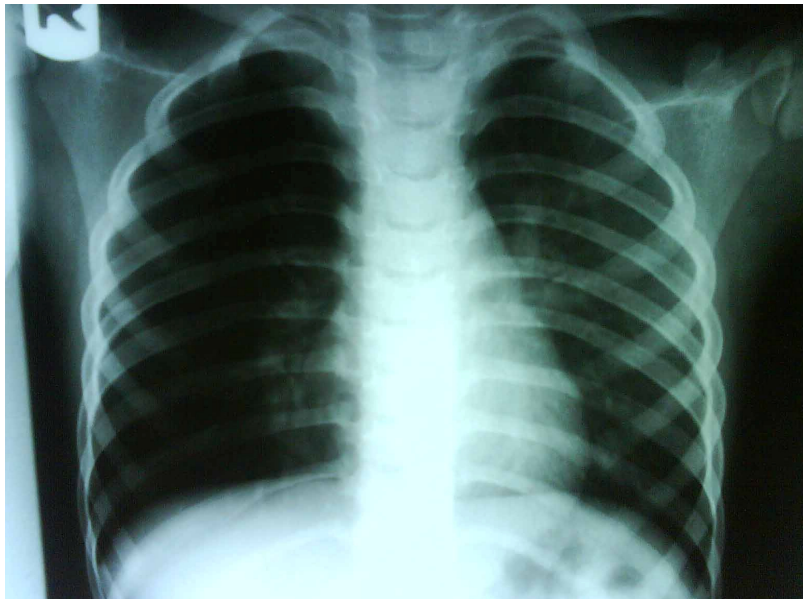
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Clinical—A 5-year-old-boy presented to our hospital with coughing, sneezing and low-grade fever from 2 days earlier. On physical examination, he didn't have any evidence of respiratory distress such as fast breathing, stridor, subcostal or suprasternal retraction.

On lung auscultation, diffuse wheezing sounds over both hemithorax and coarse crackles over the right hemithorax could be heard, and the right hemithorax was hyper-resonant to percussion.

PA chest X-ray of the patient is seen in Figure 1.

Figure-1. PA chest X-ray of the patient



With suspicion of a foreign body in the right bronchus, bronchoscopy was performed and a plastic foreign body was found partially obstructing the right main bronchus and successfully removed.

After we asked more questions his mother mentioned that he had swallowed the plastic part of a pen 17 days earlier but his parents hadn't noticed any respiratory symptoms after the event.

Figure-2. Foreign body removed from right main bronchus



Discussion—Foreign body aspiration (FBA) can be a tremendous cause of death and disability, and age is the most important factor in the incidence of FBA.¹ The incidence of FBA is higher in children younger than 3 years old.²⁻⁴ It also occurs more in males than females.^{3,4} Most aspirated foreign bodies are of vegetable origin and the majority of them are located in the right bronchial tree.⁴

In most cases aspiration of the foreign body is diagnosed 2–3 days of the event, but in a few cases the diagnosis may not be made for several days or weeks.⁵

In this case, a coughing episode mimicking pneumonia resulted from a long-standing foreign body. Thus in coughing cases with some doubt in diagnosis, we should take a chest X-ray to rule out a predisposing factor such as a foreign body.

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References:

1. Gürpnar A, Nizamettin KLC. Foreign Body Aspiration in Children. Turkish Respiratory Journal. December 2003;4(3).
2. Oğuz F, Citak A, Ünüvar E, Sidal M. Airway foreign bodies in childhood. Int J Pediatr Otorhinolaryngol. 2000 Jan 30;52(1):11-6.
3. Ciftci AO; Bingol-Kologlu M; Senocak ME, et al. Bronchoscopy for evaluation of foreign body aspiration in children. J Pediatr Surg 2003 Aug;38(8).
4. Roda J, Nobre S, Pires J, et al. Foreign bodies in the airway: a quarter of century's experience. Rev Port Pneumol. 2008 Nov-Dec;14(6):787-802.
5. Sharma JK, Pippal SK, Sethi Y, et al. Bronchial foreign body: a case report. Indian Journal of Otolaryngology and Head and Neck Surgery 2006;58(4).