Coughing: think about long-standing bronchial foreign body

Leila Rasi Marzabadi, Samad Shams Vahdati, Arezou Tajlil

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.
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. The incidence of FBA is higher in children younger than 3 years old. It also occurs more in males than females. Most aspired foreign bodies are of vegetable origin and the majority of them are located in the right bronchial tree. 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.

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.

Author information: Leila Rasi Marzabadi, Medical Student; Samad Shams Vahdati, Assistant Professor of Emergency Medicine; Arezou Tajlil, Medical Student; Tabriz University of Medical Sciences, Tabriz, East Azarbaijan Province, Iran

Correspondence: Samad Shams Vahdati, MD, Tabriz University of Medical Sciences, Emergency Department, Imam Reza Hospital, Gholghasht Street, Tabriz, Iran. Fax: +98 (0)411 3349414; email: sshamsv@yahoo.com

References: