

IMAGES IN EMERGENCY MEDICINE

Airway

A man with chest discomfort

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Email: vin_shyong@hotmail.com**1 | CASE PRESENTATION**

A 21-year-old man visited our emergency department, complaining about mild middle chest dullness. He accidentally swallowed a plastic dental floss pick around 2 hours ago. According to his description, he held a dental floss pick in his mouth and yawned. While he was yawning, the floss pick got into his throat and he swallowed it. Upon arrival, his vital signs were within normal range. He complained only about mild midchest discomfort. He presented with no airway symptom. Emergent panendoscopy failed to find the floss pick over the upper gastrointestinal tract. A chest to abdomen computed tomography (CT) scan was arranged to locate the floss pick.

2 | DIAGNOSIS

Foreign body aspiration.

3 | DISCUSSION

Emergent CT scan showed a foreign body between his right main and intermediate bronchi (Figure 1 and Video S1). Under general anesthesia, the dental floss pick was removed by a chest surgeon using a rigid bronchoscopy.

Most airway foreign body aspirations happen in children younger than 15 years; however, it could happen at any age. Aspirated foreign bodies settle mostly into 3 anatomic sites, the larynx, trachea, or bronchus. Clinical presentation depends on the location and size of the foreign body and the severity of obstruction.¹

It could be a life-threatening emergency if the object is large enough to cause complete airway obstruction. In adults, smaller foreign bodies

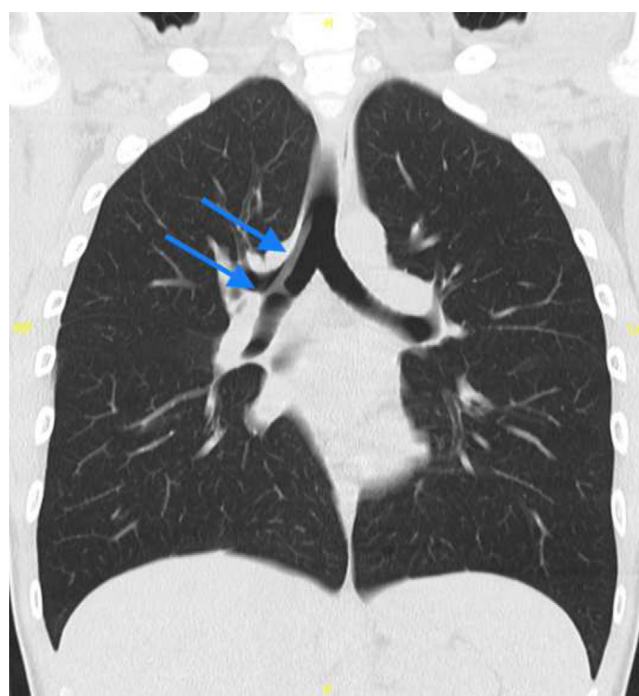


FIGURE 1 A coronal view of chest computed tomography (lung window): the floss pick located in between the right main and intermediate bronchus (blue arrows)

tend to be lodged in the right main bronchus because of its lesser angle of convergence.

Bronchial foreign bodies typically present with cough, unilateral wheezing, and decreased breath sounds. Delay in diagnosis commonly complicates with chronic cough, pneumonia, atelectasis, even granulation tissue formation that could be misdiagnosed as malignancies.²

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As most aspirated foreign bodies are radiolucent, a normal finding on chest radiographs does not exclude the diagnosis.³ CT scanning of the chest may show the object or may identify localized air trapping.⁴

To prevent complications, airway foreign bodies should be removed as soon as possible. Bronchoscopy can be diagnostic and therapeutic. Rigid bronchoscopy is the procedure of choice for removing foreign bodies in children and in most adults.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

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