A toddler with shortness of breath

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A 17-month-old girl was brought to our emergency department with shortness of breath of 18 hours' duration. About 6 hours prior to presentation she had been treated at a primary care facility for tonsillitis with antibiotics.

She had an oxygen saturation of 50% in room air with reduced chest movements and reduced air entry on her left chest. High-flow oxygen by face mask corrected the saturation to 90%. There were no wheezes on either side of the chest.

A chest X-ray done soon after arrival is shown below (Figure 1).

**Figure 1. Chest X-ray (AP erect view)**

In our patient there was no history of choking. In a review of 200 cases of foreign body aspiration only 88% gave a history of choking.\(^1\) She was febrile on arrival with a temperature of 38°C.

Chest radiograph shows grossly hyper expanded right lung crossing the midline shifting the mediastinum and the cardiac silhouette to left side.
A foreign body aspiration was suspected. Having a suspicion of foreign body aspiration is the most important step in diagnosis. Therefore a bronchoscopy should be done in all cases of suspected foreign body aspiration.

Prompt bronchoscopy by the paediatric surgical team showed three pieces of peanut in the left main bronchus. These were removed and she made an uneventful recovery.

Most objects aspirated by children are not radio opaque, and are not identified by standard radiographs unless there is associated airway obstruction. As a result the clinical history, and not the radiographs, is the main determinant of whether to perform a bronchoscopy.

In our patient it was the radiographic findings not the clinical history that pointed towards a diagnosis of foreign body aspiration.

In young children, pneumonia, asthma, recurrent viral wheeze, and bronchiolitis are the common causes of shortness of breath. Clinicians should consider uncommon causes of shortness of breath when treating young children even in the absence of a suggestive history.

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