Empyema caused by foreign body aspiration

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DESCRIPTION

A 48-year-old man presented with a 2-week history of progressive dyspnoea and productive cough. He was an exsmoker and remembered recurrent bouts of hospitalisation due to pneumonia—like symptoms within the previous 4 years. He did not remember any aspiration event before that time. He was told to have localised right lower lobe bronchiectasis. Bronchoscopic exam of the airways revealed no evidence of stricture, tumour or foreign body at that time .He refused to undergo surgery.

On physical examination, fever, finger clubbing, diminished breath sounds and dullness over the lower region of right hemithorax were found.

Blood tests showed leucocytosis, thrombocytosis, normocytic normochromic anaemia, increased C reactive protein level and erythrocyte sedimentation rate.

There was right-sided pleural effusion on plain radiography of chest. Aspiration of frank pus on thoracentesis established diagnosis of empyema. CT scanning of the chest showed honeycombing bronchiectasis of posterobasal segment of right lower lobe and right-sided pleural effusion and pleural thickening (figure 1A,B).He received intravenous clindamycin and ceftriaxone and underwent tube thoracostomy. On fiberoptic bronchoscopy, a plastic foreign body measuring ~3×1 cm was removed from the lumen of posterobasal segment of right lower lobe (figure 2).

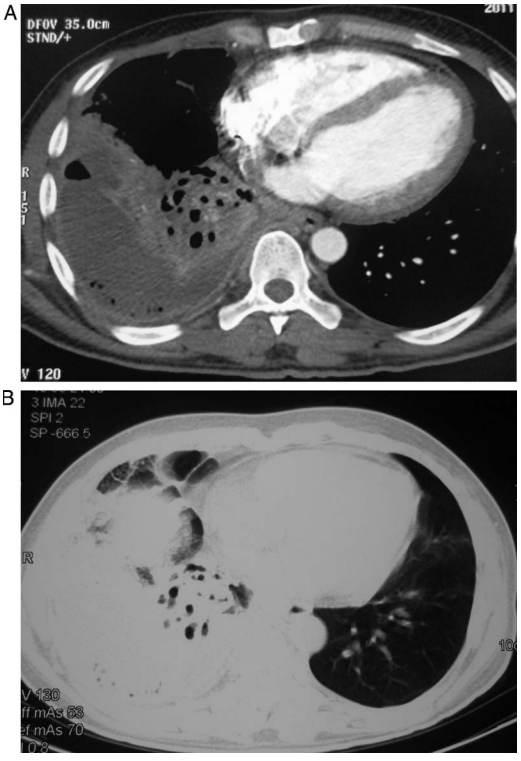

Figure 1 (A and B) Sections of CT scanning of chest illustrating pleural effusion, pleural thickening, iatrogenic pneumothorax and honeycombing bronchiectasis of posterior segment of right lower lobe.

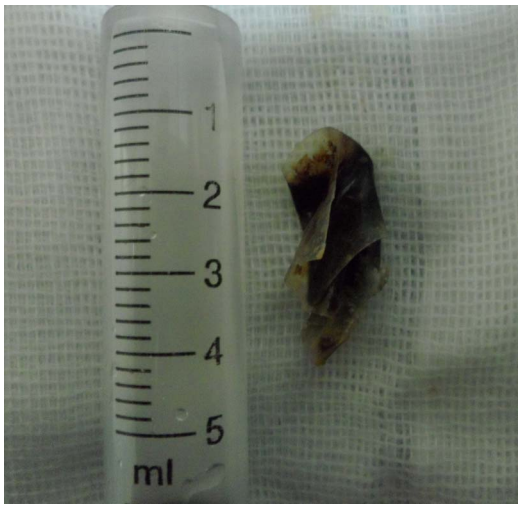

Figure 2 Extracted plastic foreign body from bronchial tree measuring ~3×1 cm.

Unsuspected aspirated foreign body may be the cause of unresolved pneumonia or empyema in adult patient. Fiberoptic bronchoscopy is the treatment of choice in majority of patients but the rate of procedure-related complications will be increased by delay in diagnosis. Unresolved pneumonia, localised bronchiectasis or localised hyperlucency/ air trapping are helpful clinical clues.[1 2] Therefore, a high clinical suspicion is necessary for on-time diagnosis and uneventful treatment.

Learning points

- Foreign body aspiration should be considered as an uncommon cause of unresolved pneumonia, localised bronchiectasis or localised air trapping in adult patients even in the absence of history of aspiration.
- It is not uncommon for a long-term unrecognised foreign body aspiration to present with an empyema.

Competing interests None.

Patient consent Obtained.

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