Pneumonia of unknown cause

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Case report

The patient was a man aged 38 yrs. While at work early in the day, his illness started suddenly with severe cough, which was initially non-productive and which lasted for several hours. He felt breathless but had no wheeze. He had a small quantity of frank haemoptysis. By evening he had a hectic fever, that was initially associated with chills. He was treated by a general practitioner with parenteral penicillin. By the fourth day he had developed left-sided pleuritic chest pain. At this stage a chest roentgenogram was obtained. His fever settled gradually over three weeks, and his cough became scantily productive. He continued to have chest pain and breathlessness and was referred to us for evaluation.

The patient then had moderately high grade fever, scantily productive cough, chest pain and breathlessness of three weeks' duration. He had no history of drug/alcohol intake, unconsciousness or epilepsy, head or faciomaxillary trauma or general anaesthesia. He had been treated two years previously for right middle and lower lobe pneumonia. He had his upper left premolar tooth extracted one year earlier. He was a smoker and a teetotaller.

When first seen by us, he had clinical signs of resolving pneumonia of left lower lobe and bronchiectasis of right middle and lower lobes. He also had gingivitis and periodontitis. Upper right second molar and upper left premolar teeth were missing.

Laboratory findings were haemoglobin (Hb) 95 g·l⁻¹, leucocytes 12.5×10⁹ cells·l⁻¹, differential leucocyte count (DLC) N78 L18 E4 MO, erythrocyte sedimentation rate (ESR) (Westergren) 70 mm in first h. Plasma sugar fasting was 6.1 mmol·l⁻¹ and 2 h post-prandial 6.7 mmol·l⁻¹. Direct smear of sputum was negative for acid-fast bacilli.

Review of the roentgenogram (postero-anterior view) obtained by his general practitioner revealed consolidation in left lower and mid zones; a small dense opacity was visible in the left hilar region. Fresh roentgenograms showed features of resolving pneumonia of the left lower lobe with no shift of midline structures (fig. 1).

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Diagnosis

A dense shadow with silhouette resembling a molar tooth was seen in the region of the left lower lobe bronchus (fig. 1a and b). A diagnosis of pneumonia secondary to aspiration of a tooth was made, and bronchoscopy was planned. However, the very next day (exactly 30 days after the onset of illness) the patient reported back with a molar tooth which he had spontaneously coughed out the previous evening. A repeat roentgenogram confirmed this. The patient subsequently had complete resolution of pneumonia on medical treatment but for some residual fibrotic changes.

Discussion

Aspiration of a wide variety of foreign bodies is a common clinical problem in the paediatric age group but is not uncommon in adults. Complications arising from these are many and depend on the nature, site of lodgement and duration of retention of a foreign body [1, 2]. Various invasive procedures are usually required for their management. We report here a case of aspiration of a tooth in an adult that presented with a slowly resolving pneumonia and subsequently recovered after spontaneous expectoration of the foreign body.

Less than five percent of aspirated foreign bodies are spontaneously coughed out [3]. To our knowledge no case has been reported where an intact tooth has been unknowingly aspirated and later spontaneously expectorated. We believe that as the inflammation of the respiratory tract subsided with treatment, the patient was able to cough out the tooth. A similar clinical course has been reported in other foreign body-induced lung infections [4, 5].

Foreign body aspiration in adults usually occurs during episodes of impaired consciousness from any cause or faciomaxillary trauma and in the mentally ill. In our patient no such history was available. The patient was unaware all along of having lost or aspirated a tooth, which is quite unusual [6]. We therefore recommend that even in the absence of suggestive history, foreign body aspiration should be considered in cases of recalcitrant lung infections.

References


RÉSUMÉ: Un homme, sans aucun facteur prédisposant pour la fausse route de corps étrangers, a inhalé une dent molaire intacte de façon totalement méconnue. Il consulte pour une pneumonie à résolution lente, qui s’améliore lentement sous traitement médical. Ultérieurement, il a expectoré la dent spontanément. La guérison ultérieure fut sans problème. Eur Respir J., 1990, 3, 487–488.