

Case Report

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ISSN: 1735-0344 Tanaffos 2012; 11(1): 61-62

TANAFFOS 

A 50-Year-Old Man with Progressive Dyspnea

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Received: 31 October 2011

Accepted: 25 December 2011

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Dental foreign body aspiration is a known complication in patients with maxillofacial trauma. Although diagnosis may be delayed, especially in elderly people with radiolucent dental appliances, clinician must be aware of dental tracheobronchial aspiration to minimize potentially serious consequences. We present a 50-year-old man with three months history of progressive dyspnea due to foreign body aspiration occluding distal trachea. The patient had a history of car accident with facial trauma and denture fracture two years before presentation. Fiberoptic bronchoscopy revealed almost totally obstructing mass-like lesion with nodular infiltration in distal trachea. The patient underwent rigid bronchoscopy and a piece of denture with three teeth was extracted.

Key words: Dental foreign body aspiration, Foreign body aspiration, Fiberoptic bronchoscopy, Maxillofacial trauma

INTRODUCTION

Tooth aspiration is recognized as a potentially serious complication in facial trauma (1). Although, it leads to acute symptoms, diagnosis may be delayed especially in elderly patients (2). Overall, acute symptoms and dyspnea in adults are uncommon, since the foreign body is usually wedged in lower lobe bronchi or the bronchus intermedius. We present a patient who aspirated a piece of denture into the trachea following facial trauma two years before symptoms progress.

CASE SUMMARIES

A 50-year-old man presented with three months history of progressive dyspnea. Over the past two weeks patient's symptoms deteriorated and he developed dyspnea at rest. He also complained of orthopnea and nonproductive cough. He denied any fever, chills, or weight loss. He was an ex-smoker with 8 packs/year. During the past three months he was diagnosed with COPD and received albuterol and ipratropium bromide by metered-dose inhaler without any improvement in his symptoms. On

physical examination, the patient had severe respiratory distress with inspiratory and expiratory stridor. The rest of examination was unremarkable other than sinus tachycardia. Laboratory examinations showed: hemoglobin: 12.3, WBC count: 12900, platelet count: 258000, pH: 7.33, PCO₂: 51.1, PO₂: 50.1, and HCO₃: 26.2. Chest radiography was unremarkable. Fiberoptic bronchoscopy was performed (Figure 1).



Figure 1. Fiberoptic bronchoscopic view of distal trachea revealed almost totally obstructing mass-like lesion with nodular tracheal infiltration.

The patient underwent rigid bronchoscopy and a piece of denture with three teeth was removed (Figure 2). On detailed review of past medical history, patient explained history of a car accident with facial trauma and denture fracture two years ago. He lost a piece of his denture which was never found. Surprisingly, during the past two years, he sometimes suffered from a very short lasting dyspnea that improved spontaneously.



Figure 2. Artificial teeth aspirated two years ago, removed by rigid bronchoscope

DISCUSSION

We described a 50 year-old man with mostly occluded distal trachea due to foreign body aspiration for two years. Although foreign body almost totally obstructed the trachea, the patient had minimal symptoms for a long time.

As seen in our patient, if the foreign body is not radio-opaque (e.g., acrylic denture), plain chest radiography may be negative and result in delayed diagnosis (3). In such cases other possible radiographic findings including atelectasis, recurrent or nonresolving pneumonia, unilateral pulmonary hyperinflation, and pneumomediastinum are the clues to suspect foreign bodies (4). Although, chest radiography remains the first imaging study in patients with clinically suspected foreign body aspiration, CT scan can be helpful in those with negative chest radiography results (4,5). However, in cases with delayed diagnosis, inflammatory granulation tissue

formation could make the foreign body extraction difficult (6). Therefore, in patients with facial trauma, the clinician must be aware of dental injury and probable tracheobronchial aspiration. In patients with high clinical suspicion and suggestive clinical and radiographic findings, bronchoscopic evaluation of airways should be considered as the best diagnostic and therapeutic method (7,8).

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