

A delayed spontaneous expulsion of a three teeth bridge after 6 months period of aspiration in the right lung following cardiac surgery

*El Tayeb Areeg Magzoub,
Saleh Ahmed Al Ghamdi,
Khalid Dagriri, Ahmed Al Fagih*
Department of Adult Cardiology,
Prince Sultan Cardiac Centre,
Riyadh, Kingdom of Saudi Arabia

Address for correspondence:
Dr. El Tayeb Areeg Magzoub,
Department of Adult Cardiology,
Prince Sultan Cardiac Center,
Riyadh, Kingdom of Saudi Arabia.
E-mail: areegdina@yahoo.com

ABSTRACT

Aspiration of loose teeth is a well-known complication of endo-tracheal intubation hence the importance of oral check by anesthetist prior to ventilation. Artificial teeth crown (single) or bridges (multiple) can be fixed or removable by the patient. The presence of a foreign body in the lung tissue or airways is a clinical situation that needs aggressive management as it can lead to refractory infections and possible death. We report this unique case of aspiration of a three bridge teeth (10 mm × 30 mm) following cardiac surgery. The case is complicated by pneumonia, chronic cough and severe bouts of cyanosis and finally removed by spontaneous expulsion after 6 months following forceful cough.

Key words: *Aspiration, coronary artery bypass grafting, teeth bridge*

INTRODUCTION

Aspiration of tooth is much more common in children.^[1,2] Adult reported cases are mainly during trauma or absence of gag reflex secondary to neurological problems or during intubation. The main treatment approach is by removing the foreign body using rigid or flexible bronchoscope as soon as the condition is discovered.^[3,4] To our knowledge this is the first case to be reported in the literature as a delayed spontaneous expulsion of such a big (10 mm × 30 mm) foreign body after a delayed period of 6 months duration from the aspiration date.

CASE REPORT

A 60-year-old lady known to have ischemic heart disease underwent coronary artery bypass grafting. She is also known to have multiple dental problems with two fixed bridge treatments (three teeth each) being stable for years. After the recovery of her cardiac surgery, she and the

family noticed that one of her three teeth bridge is missing. Five days post-surgery her condition was complicated by right sided pneumonia that required prolonged treatment [Figures 1 and 2]. She was discharged home 3 weeks later, but continued to have irritating severe continuous bouts of cough. Six months later; during one of her strongest bouts of cough she had spontaneous expulsion of her intact three teeth bridge and brought it to her doctor [Figure 3]. Cough subsided, and her chest X-ray and computed tomography scan showed no evidence of bronchiectasis as a consequence of the condition [Figure 4].

DISCUSSION

Aspiration of loose teeth or teeth segments in adults are a well-known complication of oral manipulation during intubation or bronchoscope.^[5] Extreme caution is needed during this situation. The usual anatomical preference for an aspirated foreign body is the right bronchus.^[6] Clinical presentation is variable commonest of which are acute shortness of breath, wheezes, and cyanosis due to complete obstruction of the bronchus. Bronchitis, pneumonia, bronchiectasis, lung abscess, lung collapse and emphysema are also well-known complications. Simple chronic cough can be a manifestation of foreign body aspiration as well.^[7] Management plan should be tailored according to the presentation and the degree of obstruction. Encouragement of forceful coughing and treatment of the underlying infection are essential. Urgent approach with

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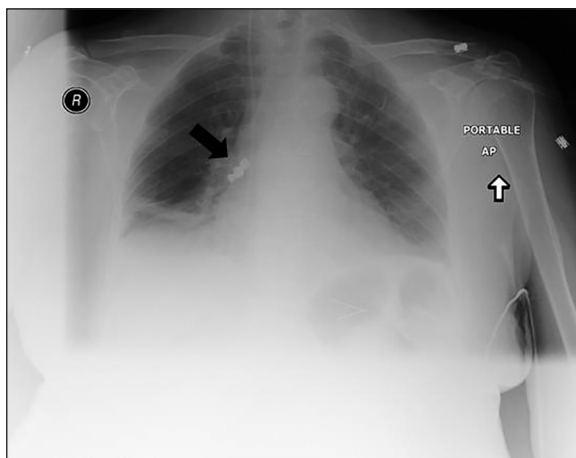


Figure 1: Portable antero-posterior chest X-ray postsurgery, note the foreign body in the right middle lobe (black arrow)

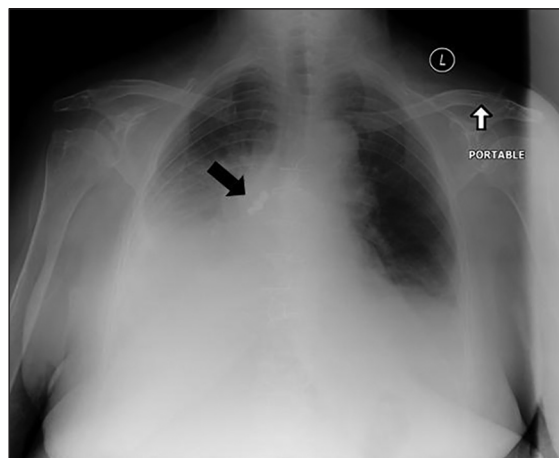


Figure 2: Portable antero-posterior chest X-ray with right sided lobe collapse/consolidation pneumonia



Figure 3: Picture of the expelled three teeth bridge

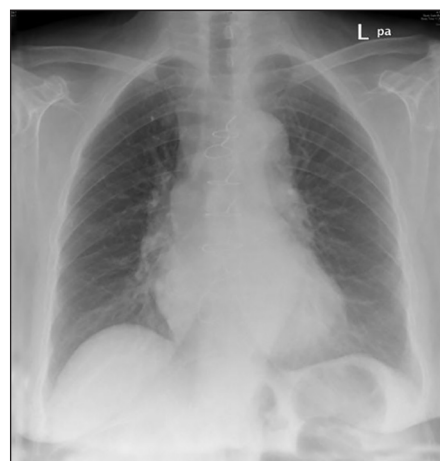


Figure 4: Postero-anterior chest X-ray after teeth expulsion

chest and the abdominal thrust.^[8] until a definite removal is achieved. Bronchoscope are sometimes needed.

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