Bronchoscopic removal of a dental tool

Clementine Bostantzoglou¹, Konstantinos Samitas¹, Eleftherios Zervas¹, Mina Gaga¹, Likurgos Kolilekas¹

7th Pulmonary Department and Asthma Center, Athens Chest Hospital, Greece

A 35 year-old female patient with free medical history, presented to the emergency department with an hours-long history of cough with blood-tinged sputum after endodontic therapy. A chest X-ray revealed a radiopaque foreign body in the right main bronchus (Figure 1A). The patient underwent urgent flexible bronchoscopy, which established the presence of a metallic foreign body, impacted in the right main bronchus. The removal of the foreign body was achieved using a simple biopsy forceps demonstrating a file of ~3cm length (Figure 1B, C, D). Aspiration of foreign body during dental procedures is a serious and potentially fatal event. Aspirated objects may be organic as bones or inorganic, usually of iatrogenic origin, such as tools or dental prosthesis. The patient may be asymptomatic or have non-specific symptoms such as cough, hemoptysis or wheezing. The diagnostic approach includes imaging and bronchoscopy. Chest X-ray may be normal, usually in case of aspiration of organic materials, thus requiring further imaging by chest computed tomography. The flexible bronchoscopy is the preferred method of removing aspirated objects, while the rigid bronchoscopy has a complementary role, accordingly the size and nature of the foreign body.



FIGURE 1. Chest X-ray. Presence of a radiopaque foreign body at the level of the right main bronchus (arrows) (**A**). Bronchoscopic image of the impacted file in the right main bronchus (**B**), and after the removal (**C**). The extracted dental file of ~3cm length (**D**).

Competing Interests

All the authors declare that they do not have a financial relationship with a commercial entity that has an interest in the subject of this manuscript.

No conflict of interest to declare

Correspondence:

Likurgos Kolilekas MD, PhD, Consultant, 7th Pulmonary Department, Athens Chest Hospital 'Sotiria', 152 Mesogion Ave, 11527, Athens, Greece; Tel.: +30 210 7763306, Fax: +30 210 77681911, e-mail: lykol@yahoo.gr.