Removal of a Large Endobronchial Foreign Body with a Fiberoptic Bronchoscope

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To the Editor

The aspiration of foreign bodies into the tracheo-bronchial tree is frequent in childhood, but it is also not unusual in adults as a labor accident (nails, pins), in mentally retarded patients, in prison population and as suicidal attempts. Although large endobronchial foreign bodies usually require the use of a rigid bronchoscope (RB) [1, 2], we have recently removed a big nail clipper using a fiberoptic bronchoscope (FB).

A 26-year-old imprisoned male intravenous drug abuser, came to the emergency room of our hospital because of cough and dyspnea. The physical examination was normal and a chest x-ray film showed a nail clipper behind the right pulmonary hilus which was outside the esophagus and measured $6.5 \times 1.7 \times 1.8$ cm (fig. 1). Fiberoptic bronchoscopy (Olympus BF-10) showed the nail clipper to be located in the right main bronchus. We inserted a grasping forceps (Olympus FG-4L) through the channel of the FB and successfully took out the foreign body together with the FB.

During the last 15 years, the FB has been progressively introduced into clinical practice, while the use of the rigid bronchoscope (RB) has decreased for several reasons: worse clinical tolerance, the need of sedation, technical difficulty and worse vision of distal airways. However, the removal of foreign bodies (especially the larger ones located in the proximal airways) remains a first-choice indication of RB [1, 2], since it allows the introduction of larger and stronger forceps, ventilation of the anesthetized patient if required, and is successful in most cases when FB has

Fig. 1. a Chest X-ray film. The nail clipper is located behind the right pulmonary hilus. b Esophagogram. The foreign body is outside the esophagus.

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failed [3]. The use of FB is often restricted to the removal of small foreign bodies located in peripheral airways, and to patients with cervical malformations or heart disease [4].

Although some reports of successful removal of endobronchial foreign bodies with FB have been published in the last decade [3–6], the interest of our case is the unusually large size of the foreign body removed with the FB and the appropriate forceps. We think that the better clinical

tolerance of FB and the simplicity of the technique are important reasons to use FB as a first-choice method in adults to remove large endobronchial foreign bodies, while the RB should be limited to certain cases such as cutting objects, or when FB has failed, or when the FB technique is not available.

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