

A rare but life-threatening complication of self-bougienage: iatrogenic esophageal foreign body

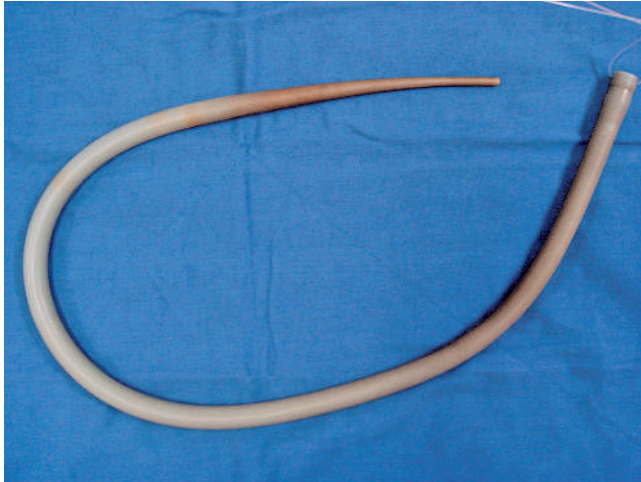


Fig. 1 A 42-Fr mercury-free Maloney esophageal bougie.



Fig. 2 Chest radiography revealed a linear radiopaque foreign body in the lower esophagus and stomach. Dilatation of the esophagus shows air fluid level, which is due to achalasia.

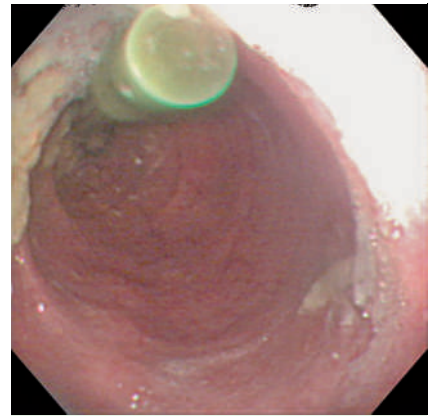


Fig. 3 Endoscopy revealed a Maloney bougie impacted in the distal esophagus.

Bougie dilatation is a routine procedure for benign esophageal stricture for patients in whom surgery is not feasible [1]. Repeated bougienage by the patients themselves, “self-dilatation,” has been proven safe and effective [2]. The major complication of bougienage is esophageal perforation, although the incidence is only 0.04%–0.2% [3].

Case. A 74-year-old man, diagnosed as achalasia 7 years ago, underwent routine Maloney esophageal bougienation (tungsten filled and mercury free; Rusch, Limerick, Pennsylvania, USA) (● Fig. 1) at our outpatient department at regular intervals. Unfortunately, the patient mis-swallowed the dilator because of carelessness on 4 December 2006. Chest radiography was done immediately, and revealed a foreign body in the lower esophagus and stomach (● Fig. 2). An attempt to remove the device with an endoscopic extractor was made (● Fig. 3), and rigid esophagoscopy under general anesthesia was also performed the next morning but in vain. After consultation with a gastrointestinal surgeon, open gastrotomic surgery was done, and the dilator was finally removed. The patient achieved uneventful recovery and was discharged 6 days later.

Discussion. Bougie dilatation is the most widely used modality for inoperable pa-

tients with the motility disorders of the esophagus [1]. Although various complications have been reported [3,4], perforation of the esophagus is the primary concern, and no cases of bougie mis-swallowing have been reported. Most foreign bodies pass harmlessly through the gastrointestinal tract. But if the foreign body is retained, complications will occur and can be lethal. In this case, we could not remove the foreign body by an endoscopic extractor or rigid esophagoscopy, so the external approach seemed to be the best alternative. To prevent this complication, the usual securing wire at the base of the dilator should be as long as the necklace. With this precaution taken, patients can perform self-bougienage safely at home.

Iatrogenic esophageal foreign body following self-bougienage can be life threatening, and prevention is the best policy.

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