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ÖZGÜN ARAŞTIRMA

# Unusual esophageal foreign body: Metal bottle cap

## Özofagusta beklenmeyen yabancı cisim: Metal şişe kapağı

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Foreign body of esophagus is frequently an emergency encountered in gastroenter-oogy clinic practice. Endoscopic treatment is effective and safe. Metal bottle cap is rarely swallowed. Metal bottle cap extraction presents a challenge in the manage-ment also, endoscopic treatment should be done quickly since metal bottle cap is quite large and sharp object. Here, we presented a very rare cause foreign body -a metal bottle cap- in the upper esophagus which was extracted using alligator jaw grasping forceps.

**Key words:** Esophagus, foreign body, metal bottle cap

Özofagus yabancı cisimleri gastroenteroloji klinik pratiğinde sıkça karşılaşılan acil klinik durumlarındandır. Endoskopik tedavi etkili ve güvenlidir. Metal şişe kapağı nadiren yutulur. Yönetimi zor olabilir. Metal şişe kapağı, oldukça geniş ve keskin kenarlı obje olmaları nedeniyle endoskopik tedavi hızlıca yapılmalıdır. Burada, tim-sah ağızlı yabancı cisim forsepsi kullanılarak çıkarılan, üst özofagusta görülen nadir bir yabancı cisim (metal şişe kapağı) nedeni ile başvuran bir vakayı sunuyoruz.

**Anahtar kelimeler:** Özofagus, yabancı cisim, metal şişe kapağı

*To the Editor,*

Foreign bodies (FB) of esophagus are frequently an emergency encountered in gas-troenterology clinic practice. Food bolus impactions and sharp-pointed objects were the most common FB of esophagus, and the cervical esophagus was the most fre-quent impaction site (1). Metal bottle cap is rarely swallowed and a there are only a few published cases (2,3). Because of their size and shape, management of the bottle cap in the esophagus represents a major challenge for endoscopists (3). Here, we present a very rare cause foreign body - a metal bottle cap - in the upper esophagus which was extracted endoscopically.

20-year-old man was admitted to the emergency department with dysphagia, sialor-rhea and foreign body sensation after inadvertently swallowing a metal bottle cap. He had no other diseases on previous medical history. Physical examination was unre-markable. Laboratory values were normal. Computed tomography (CT) and 3-dimentional CT revealed a foreign body (a metal cap) in the upper part of the esoph-agus (Figure 1A and 1B). The patient underwent endoscopy within two hours, and the metal bottle cap was seen in the proximal esophagus. During endoscopy proce-dure foreign body fell to the stomach and then the foreign body was safely with-drawn using alligator jaw grasping forceps from the stomach. The foreign body was a metal cap of soda bottle (Figure 2A and 2B). After removal of the metal bottle cap, the control endoscopy revealed no sign of complications related to foreign body, and endoscopic treatment.

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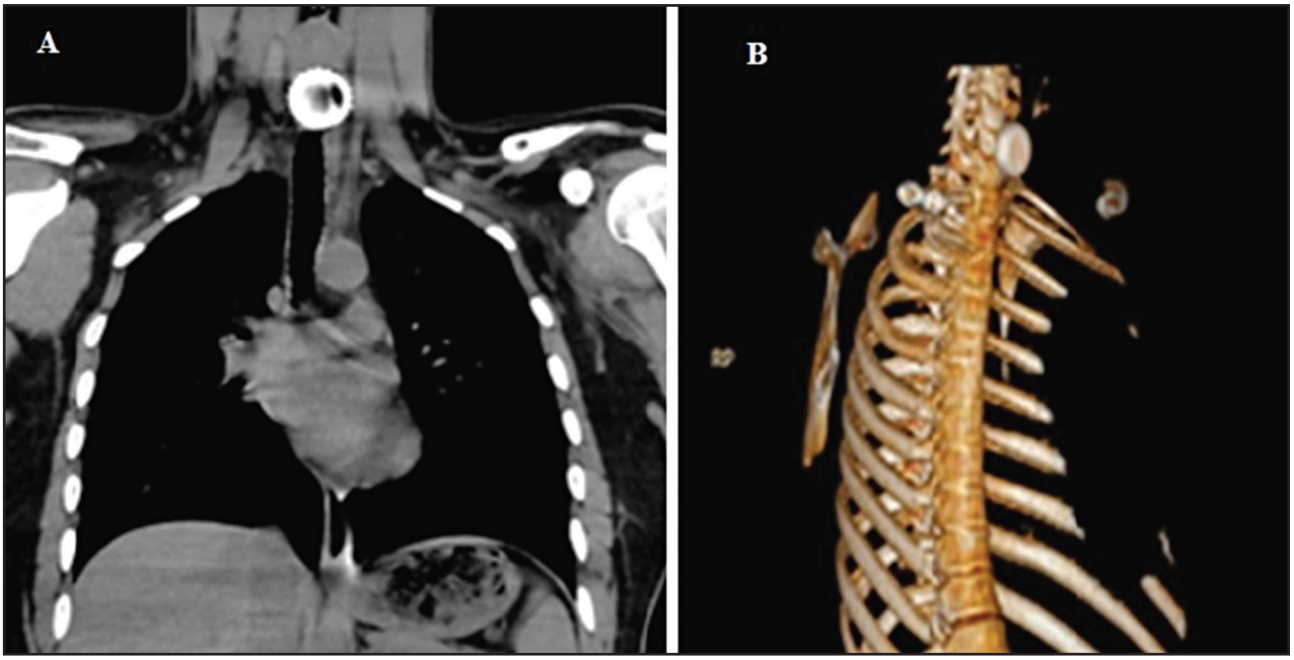


**Figure 1** CT images showing foreign metallic body (metal bottle cap) in the upper esophagus (**A.** Coronal section of foreign body, **B.** 3D image).

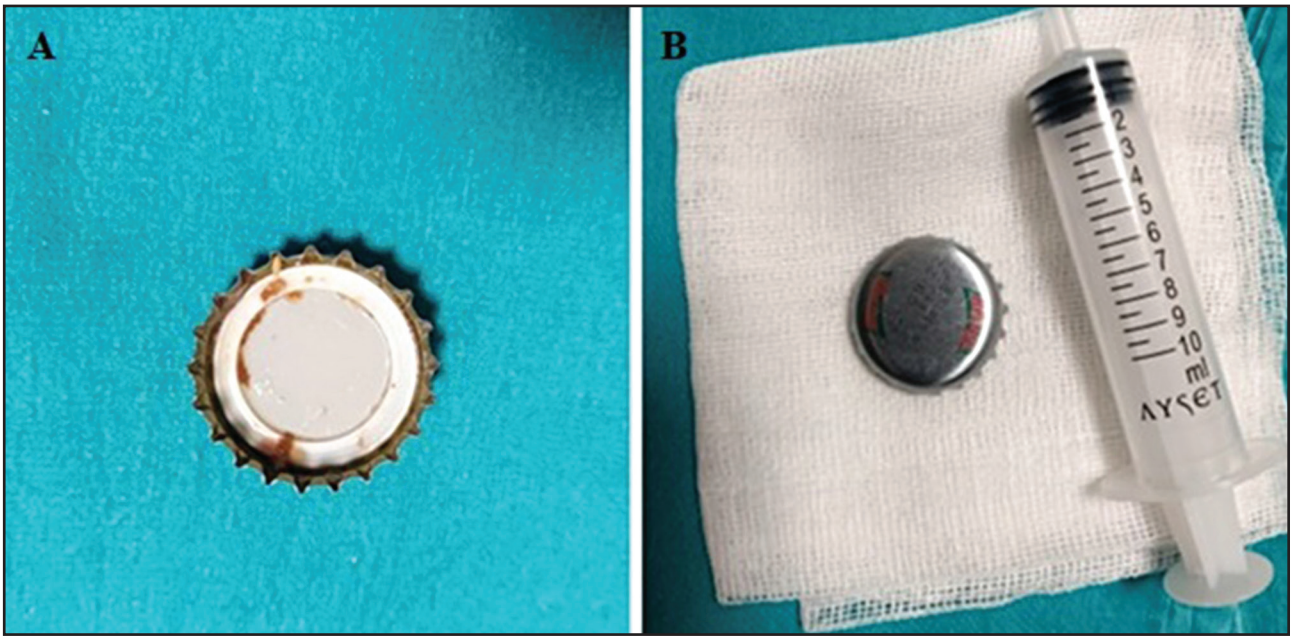


**Figure 2** Removed metal bottle cap (**A.** Image from downside, **B.** Image from upside).

His complaints were resolved and was discharged with full recovery. The patient gave written consent regarding this article.

Foreign body impaction was observed commonly (4) and often occur in the esopha-gus (4,5). Most of the esophageal FB are impacted at the upper

esophagus at the nar-rowest part which was surrounded by cricopharyngeus muscle (5). To make a diag-nosis of esophageal FB, the patient's history, symptoms, and physical examinations are important (1). The most common symptoms in patients with a foreign FB in the esophagus are foreign body sensation and dysphagia. Hypersalivation, retrosternal fullness, choking, hiccups and retching, odynophagia are other symptoms related to FB (6).

Radiological and computed tomographic (CT) evaluation is not routinely recom-mended in the diagnosis of FB ingestion. However, radiological and CT evaluation can be used to evaluate the location, size, shape, and number of foreign bodies and to reveal the presence of complications such as perforation10. Particularly when 3-dimensional reconstruction with I.V. contrast is performed, with a high sensitivity and specificity for detection of a FB. In our patient, both CT and 3-D CT examina-tions had been performed in the emergency department. CT showed a FB (a metal cap) in the upper esophagus, but no FB related perforation was detected.

Flexible endoscopy is the most used method in the diagnosis and removal of esoph-ageal FB with low risk of complications. Endoscopy may also reveal underlying esophageal diseases such as cancer and strictures Guidelines recommends emergency endoscopy within two hours preferably or in six hours at latest in food bolus impac-tions and FB in patients with evidence of complete esophageal obstruction, for sharp-pointed objects and disk batteries (1).

Foreign body in the cervical esophagus more difficult than other locations and prone to complications (1). Since esophagus wall is thin and there are physiological stric-tures such as cricopharyngeal sphincter. Besides, limited working space of cervical esophagus makes endoscopic removal of the serrated edges of metal bottle tops pose a hazard of luminal injury and hinder passage through narrower spaces like the esophagus or pylorus. Since metal bottle cap is sharp object, endoscopic treatment should be done quickly. In our case, endoscopic procedure was performed in two hours after consultation from emergency department.

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