A fish bone perforation of the esophagus

A 73-year-old man presented with odynophagia and retrosternal pain of 3 days’ duration following a fish meal. Physical examination disclosed normal vital signs and a temperature of 37.2°C. Laboratory studies showed elevated white blood cells of 13,900/μL and C-reactive protein of 14.8 mg/dL. A computed tomography (CT) of the chest revealed a suspicious fish bone that measured 3 cm in length and had perforated through the esophageal wall (Fig. 1 and Fig. 2). Three-dimensional CT showed the bone (blue matter) penetrating close to the left common carotid artery (Fig. 3). Subsequent upper endoscopy revealed only a small submucosal nodule, which was located at 19 cm from the incisors, not an impacted fish bone in the upper esophagus (Fig. 4). A tiny white linear scar (arrow) was observed on its top, suggesting the site of perforation (Fig. 5). Surgical exploration was performed via a lateral neck incision, and the fish bone was successfully retrieved. The postoperative course was uneventful.

Most ingested foreign bodies can pass through the gastrointestinal tract spontaneously. However, 10%–20% of such bodies require nonoperative intervention and 1% need surgery [1]. Based on a large-scale retrospective study including 316 cases of foreign bodies in the esophagus [2], the most common foreign bodies in the pharynx and the upper esophagus were fish bones. The risk of complications was increased with a longer duration of impaction (>24 hours), bone type, and longer bone length (>3 cm). The current case had all of these risk factors. As for endoscopic features of fish bones, most visible bodies can be retrieved by biopsy forceps [3]. Extremely rare cases with imbedded or perforating fish bones may present submucosal tumor-like nodules [4, 5], as in this case.

Endoscopy_UCTN_Code_CCL_1AB_2AC_3AH

Competing interests: None

Fig. 1 An axial computed tomography of the chest disclosed a suspicious fish bone that measured 3 cm in length (black arrow) and had perforated the esophagus (white arrow).

Fig. 2 A coronal computed tomography of the chest showed the bone (black arrow) and the esophagus (white arrow).

Fig. 3 Three-dimensional computed tomography showed the bone (blue matter) penetrating close to the left common carotid artery.

Fig. 4 Upper endoscopy showed only a small submucosal nodule in the upper esophagus not an impacted fish bone.

Fig. 5 A tiny white linear scar (arrow) was observed on the nodule, suggesting the site of perforation.

Akira Hokama1, Kayoko Uechi1, Eriko Takeshima2, Chiharu Kobashigawa3, Atsushi Iraha1, Tetsu Kinjo2, Kazuto Kishimoto1, Fukunori Kinjo2, Jiro Fujita1

1 Department of Infectious, Respiratory, and Digestive Medicine, University of the Ryukyus, Okinawa, Japan
2 Department of Endoscopy, University of the Ryukyus, Okinawa, Japan
References
4 Chu YC, Chiu HH. A completely imbedded fish bone presenting as an esophageal tumor-like lesion: an unusual presentation. Gastrointest Endosc 2008; 68: 1190–1191; discussion 1191

Bibliography
DOI http://dx.doi.org/10.1055/s-0034-1364952
Endoscopy 2014; 46: E216–E217
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
Akira Hokama, MD
Department of Infectious, Respiratory, and Digestive Medicine
University of the Ryukyus
207 Uehara, Nishihara
Okinawa 903-0215
Japan
Fax: +81-98-8951414
hokama-a@med.u-ryukyu.ac.jp