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.

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References

Bibliography
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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