

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/ μ L 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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Competing interests: None

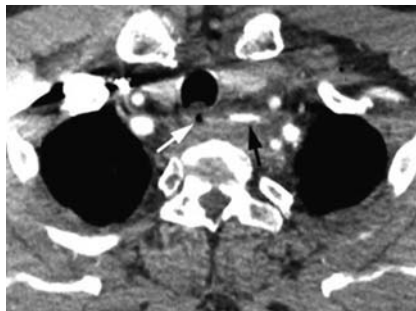


Fig. 1 An axial computed tomography of the chest disclosed a suspicious fish bone that measured 3 cm in length (black arrow) and had perforated the esophagus (white arrow).

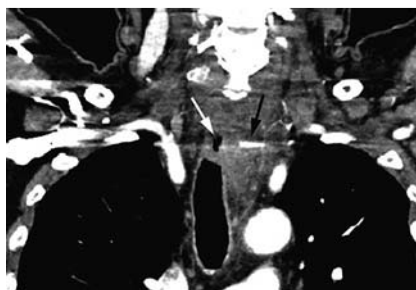


Fig. 2 A coronal computed tomography of the chest showed the bone (black arrow) and the esophagus (white arrow).



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

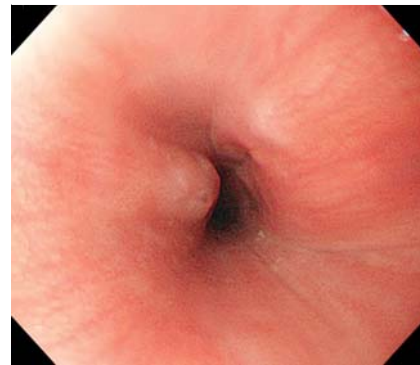


Fig. 4 Upper endoscopy showed only a small submucosal nodule in the upper esophagus not an impacted fish bone.

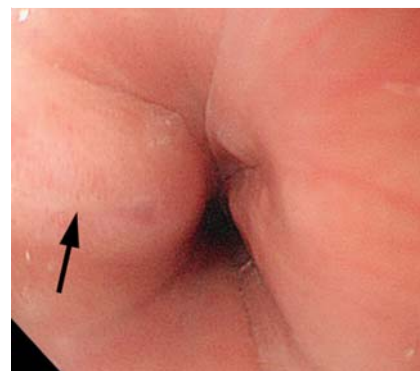


Fig. 5 A tiny white linear scar (arrow) was observed on the nodule, suggesting the site of perforation.

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