Demonsation of Ingested Fish Bone Embedding at Upper Esophagus by CT 3D Reconstruction

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Case 1: A 28-year-old male presenting with odynophagia and dysphagia after swallowing a fish bone. A suspected opaque elongation of fish bone was seen at the upper esophagus level C5-6 (Fig 1A). CT 3D reconstruction at upper esophagus revealed a thin elongated opaque foreign body embedding into the upper esophagus (Fig 1B, 1C). The dislodged fish bone was discovered during the endoscopic examination. The patient recovered after conservative treatment.

Case 2: 17-year-old female presented with dysphagia after ingesting a fish bone. The plain film lateral neck and CT 3D reconstruction demonstrated an opaque fish bone embedding at the upper esophagus (Fig. 2A, 2B). Endoscopic retrieval of the fish bone is shown in Figure 2C. The patient made a full recovery afterwards.
An ingested foreign body can penetrate into the esophagus. The most commonly occurring foreign bodies are fish bones, followed by chicken bones. The history of fish bone ingestion with dysphagia symptoms was studied. The most common cause of dysphagia that physicians need to definitively rule out is usually a fish bone embedded in the esophagus. In some cases, the foreign body may dislodge before or during the endoscopic procedure (see Case 1). But sometimes the fish bone remains as an obstruction (see Case 2). This condition may develop into life-threatening complications if the diagnosis is missed or delayed. In cases of suspected fish bone embedded at the upper esophagus, a plain film of the neck region may not be adequate or if examined by a less experienced radiologist as the lesion may be overlooked. Barium swallowing study including barium coating thin cotton also seems to be ineffective in detecting an ingested fish bone. A neck CT and 3D reconstruction of the upper esophagus is a straightforward and reliable method to detect foreign bodies.

References