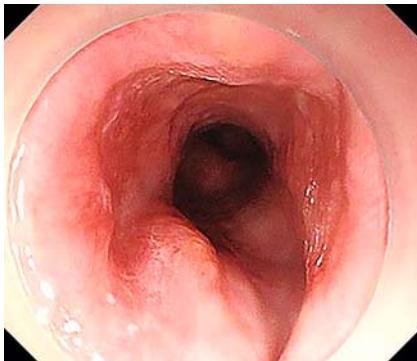


Endoscopic removal of an embedded esophageal fishbone with rat tooth forceps

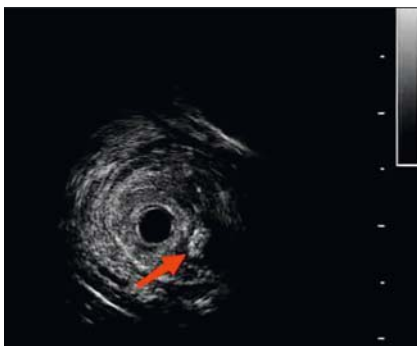
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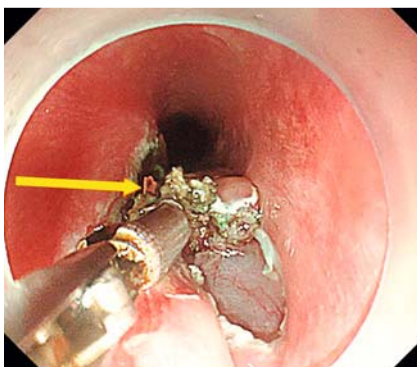
► **Fig. 1** Oval-shaped submucosal bulge in the esophageal mucosa of a 56-year-old woman: the fishbone cannot be seen.



► **Video 1** Endoscopic removal of an embedded esophageal fishbone with rat tooth forceps.



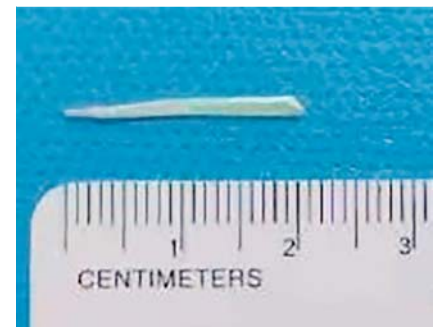
► **Fig. 2** Endoscopic ultrasonography revealed the location and depth of the fishbone.



► **Fig. 3** The fishbone was successfully found using a rat tooth forceps.

A 56-year-old woman presented to our hospital with a sore throat after having eaten a fish 15 days earlier. Computed tomography (CT) revealed a strip of high-density shadow embedded in the anterior wall of the proximal esophagus. Endoscopy only demonstrated a localized bulge of the esophagus with smooth mucosa (► **Fig. 1**). Endoscopic ultrasonography suggested a hyperechoic lesion in the esophageal submucosa with posterior shadowing (► **Fig. 2**). Based on these examinations, a diagnosis of fishbone invasion into the esophageal submucosa was considered, so we performed an endoscopic submucosal dissection (ESD) but failed to find the fishbone. We therefore attempted to find the fishbone using a rat tooth forceps, and this was successful (► **Fig. 3**). A 2-cm-long fishbone was extracted with the forceps (► **Fig. 4**) and the wound was clamped closed with several metal clips (► **Video 1**).

A fishbone invading the submucosa and intrinsic muscular layer of the esophagus is rare. Endoscopy commonly suggests a submucosal bulge, which is easily misdiagnosed as a malignant tumor [1]. To



► **Fig. 4** The fishbone.

manage such cases, ESD after the foreign body has been accurately located under EUS guidance is usually effective [2]. However, in our case, ESD failed to find the fishbone under EUS guidance; instead, the fishbone was found and smoothly removed using the rat tooth forceps.

In conclusion, rat tooth forceps may be a good choice to find a fishbone that remains hidden after ESD.

Endoscopy_UCTN_Code_CCL_1AB_2AZ

Competing interests

The authors declare that they have no conflict of interest.

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References

- [1] Wang XM, Shan Y, Chen X et al. Successful endoscopic extraction of a proximal esophageal foreign body following accurate localization using endoscopic ultrasound: A case report. *World J Clin Cases* 2019; 7: 1230–1233
- [2] Birk M, Bauerfeind P, Deprez PH et al. Removal of foreign bodies in the upper gastrointestinal tract in adults: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy* 2016; 48: 489–496

Bibliography

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