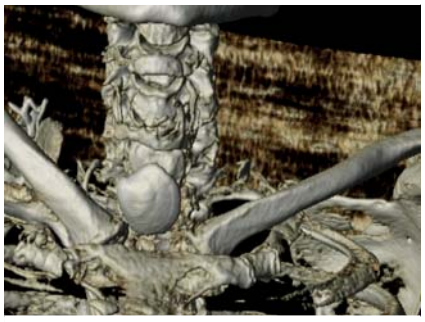
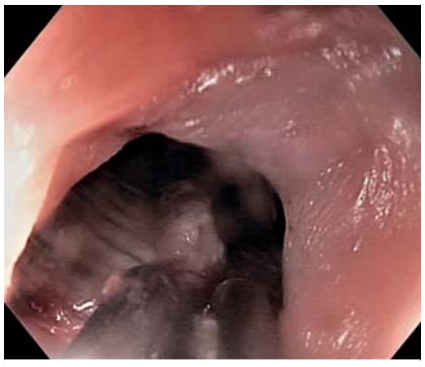
Extraction of a large mollusc shell impacted in the cervical esophagus: a twin-grasping approach could be the answer



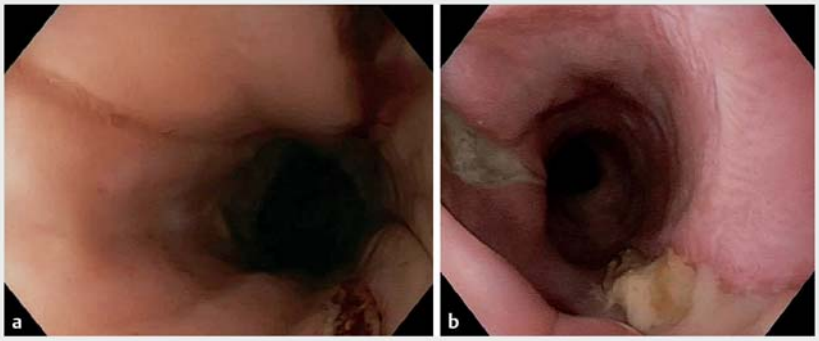
▶ **Fig. 1** Radiological (computed tomography scan) findings before endoscopy. Three-dimensional reconstruction of the anatomical location of the foreign body and its relationship with adjacent structures.



▶ **Fig. 2** Foreign body extraction with a double-channel gastroscope. Capture of the mollusc with the rat-tooth and alligator-tooth forceps.

▶ **Fig. 3** The extracted 36-mm mollusc shell.

Video 1 Extraction of a large mollusc shell impacted in the cervical esophagus using twin grasping with two foreign body forceps.



▶ **Fig. 4** Endoscopic review. **a** Two mucosal tears in the cervical esophagus after shell extraction. **b** Cervical esophagus 3 days after extraction.

A 57-year-old man with a history of bipolar disorder presented to the emergency room with a 48-hour history of aphagia without dyspnea. A chest X-ray revealed a calcium-dense foreign body in the cervical esophagus. Given the long symptom duration, a chest computed tomography scan was performed, ruling out complications (▶ **Fig. 1**). In accordance with European Society of Gastrointestinal Endoscopy recommendations [1], we performed an emergency therapeutic endoscopy within 2 hours after admission.

A large mollusc shell was observed tightly impacted in the upper esophagus (▶ **Video 1**). Endoscopic extraction with a conventional gastroscope and diverse forceps/devices was attempted without success, despite correct grasping, due to slippage against the anchored shell. A second endoscopy was performed the following morning. We decided to switch

to a therapeutic double-channel gastroscope (Olympus Evis Exera II GIF-2TH180; Olympus, Tokyo, Japan) and used two foreign body forceps (alligator- and rat-tooth forceps) simultaneously and in parallel, in an attempt to achieve a better grasping force (▶ **Fig. 2**). After a few attempts with the two forceps, which were handled by two assistants performing continuous but low-power traction, a 36-mm mollusc shell was extracted (▶ **Fig. 3**). Endoscopic review following extraction showed two deep mucosal tears in the cervical esophagus (▶ **Fig. 4a**). Given no local complication was identified, no further treatment was performed. In a follow-up endoscopy before discharge, mucosal healing without stenosis was confirmed (▶ **Fig. 4b**).

Foreign body ingestion and food bolus impaction are commonly encountered in clinical practice, and approximately 10 %–20 % of cases require endoscopic removal [1]. Working with two parallel foreign body forceps on the same axis as the gastroscope allows a more consistent and better distributed traction force in the correct direction over two points, which also prevents slippage [2, 3].

Endoscopy_UCTN_Code_TTT_1AO_2AL

Competing interests

The authors declare that they have no conflict of interest.

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Bibliography

Endoscopy 2022; 54: E445–E446
DOI 10.1055/a-1625-3337
ISSN 0013-726X
published online 17.9.2021

Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany