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Wasted variceal banding cap-assisted removal of embedded esophageal chicken bone: a simple and inexpensive method

Dear Editor,

A 31-year-old man presented with dysphagia, hoarseness, and pain in the cervical region after the ingestion of Turkish chicken doner kebab (a traditional vertical rotisserie). Findings of initial investigations for perforation and other complications were unremarkable. At endoscopy, a thick and gnarled chicken bone located in the cervical esophagus was observed to be embedded in the esophageal wall from both sides. Under moderate sedation, an initial attempt was made using grasping forceps (FG-45U-1, Olympus, Japan); however, it was unsuccessful (Figure 1 a-c). At that moment, we thought of a simple, innovative, and inexpensive idea of installing a wasted variceal banding cap (Boston Scientific, Marlborough, Massachusetts, USA) at the endoscope tip. Then, the embedded chicken bone was pulled into this cap using grasping forceps and was extracted easily and safely without any complication (Figure 2 a-d).

The ingestion of sharp and pointed objects may cause a series of major complications (up to 35%), and such objects must therefore be removed using a protecting device within 2 or 6 hours, according to the European Society of Gastrointestinal Endoscopy (ESGE) guide (1). The guide also suggests the use of a transparent cap that is commonly used by expert endoscopists working at a small number of tertiary reference centers for endoscopic submucosal dissection. Consequently, such transparent caps may not be available in all clinics that do not deal with complicated endoscopic procedures such as mucosal resection and submucosal dissection.

To address this problem, we administered a mini-questionnaire about the extraction of foreign bodies with a high risk of perforation. A total 17 units were included in this survey. Only 2 of the 17 units had used a suitable transparent cap for this procedure. It was also noted that on an average, 82.3% of such cases had to be sent to other reference centers. Our solution is very simple and inexpensive to address this issue because almost every endoscopy unit has many wasted variceal banding caps for ligation and such caps could also be used for this procedure without additional payment.

On the other hand, in this guide and in the literature, there is no clear recommendation or a brilliant idea for objects embedded in the esophageal wall from both ends without causing perforation (1). A different approach from the manual one was adopted at the same time by Disibeyaz and Mahajan et al. using a large (15 mm or 30 mm) CRE balloon dilator to drop the object along the long axis into the lumen (2,3). However, this method requires skilled experience and fluoroscopic guidance and poses the risk of iatrogenic esophageal injury.

In the case of sharp and pointed objects embedded in the esophageal wall without causing perforation, removal with the help of a wasted variceal banding cap should first be kept in mind and can be adopted

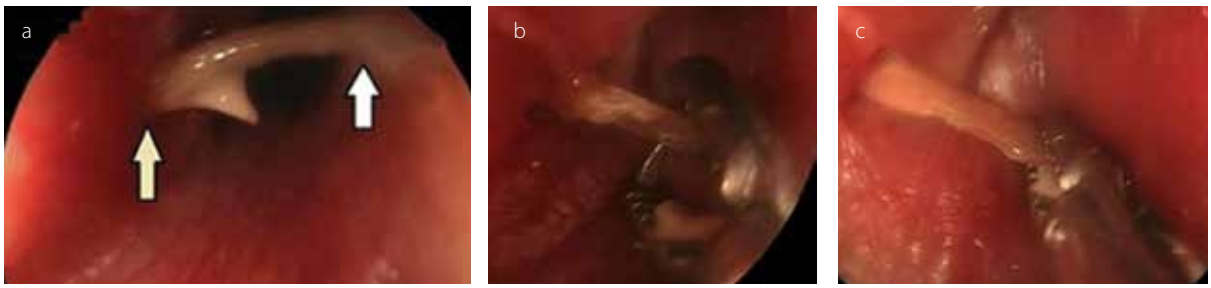

Figure 1. a-c. Embedded chicken bone in the esophagus; (a) the chicken bone-embedded esophagus wall from both ends, (b) attempt to remove using grasping forceps. (c) failure to remove the bone

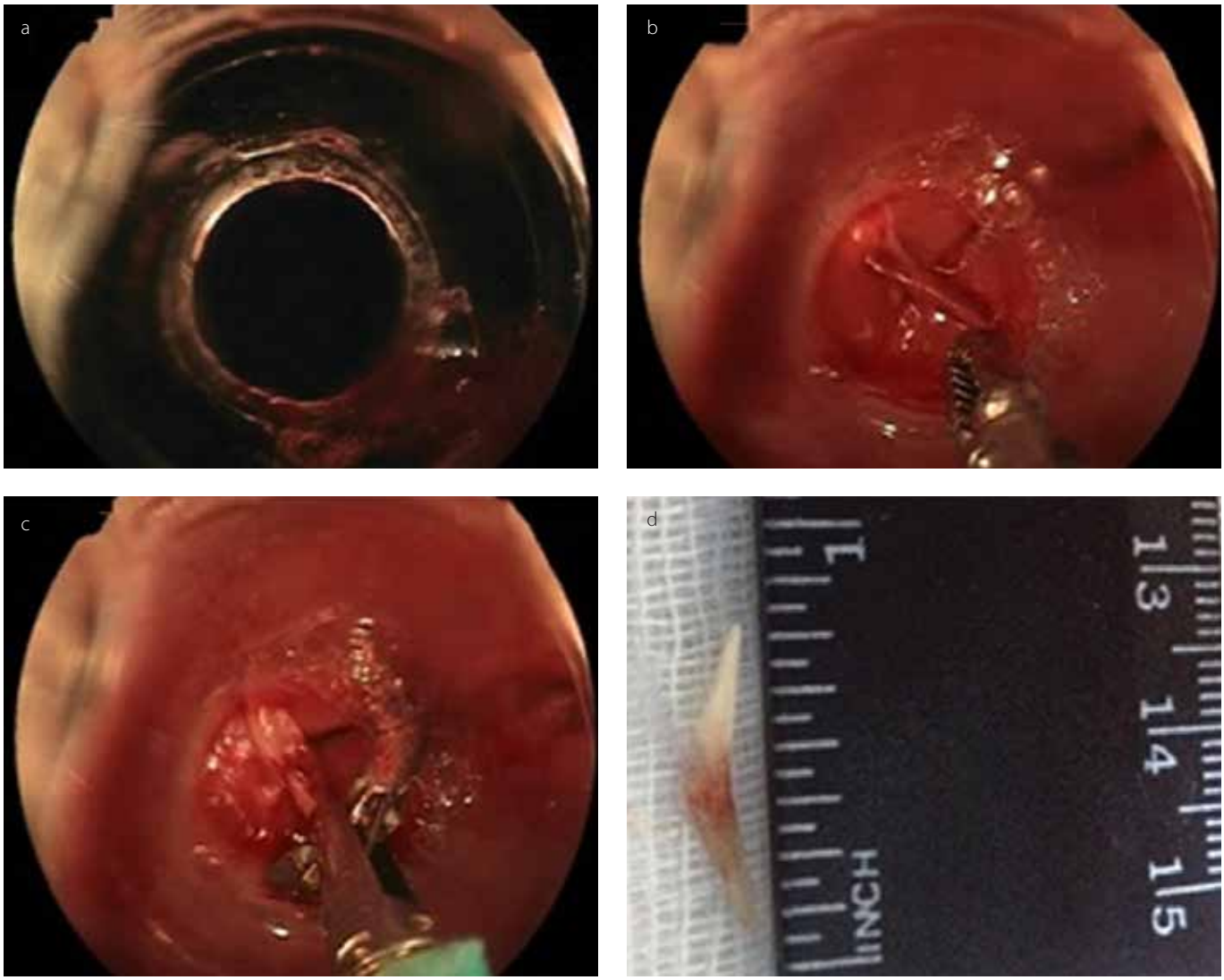

Figure 2. a-d. Wasted variceal banding cap-assisted removal of embedded esophageal chicken bone; (a) a wasted banding cap attached to a gastroscope, (b, c) the chicken bone was pulled into the cap using grasping forceps as two partially broken pieces, (d) the removed chicken bone in the form of two partially broken pieces was approximately 3 cm

as a very simple, inexpensive and easy method for all inexperienced endoscopists and units.

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REFERENCES

1. 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: 489-96. [CrossRef]
2. Disibeyaz S, Oztas E, Kuzu UB, Ozdemir M. Large balloon dilation treatment for retrieval of embedded sharp-pointed objects in the esophagus: a new technique. Surg Laparosc Endosc Percutan Tech 2016; 26: e103-e4. [CrossRef]
3. Mahajan M, Spaander VM, van Lanschot JJ. Esophageal fishbone impaction as a result of ingestion of "trapoen" (Surinamese dried fish). Endoscopy 2016; 48(Suppl 1) UCTN:E3.

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