Snapper fishbone esophageal perforation closed with an over-the-scope-clip

Alexandre Oliveira Ferreira,^{1,2} João Lopes,² José Velosa²

¹Department of Gastroenterology and Hepatology, Centro Hospitalar do Algarve, Portimão, Portugal
²Department of Gastroenterology and Hepatology, Hospital de Santa Maria, Lisbon, Portugal

Correspondence to

Dr Alexandre Oliveira Ferreira,
alex.fsof@gmail.com

An 85-year-old man with type 2 diabetes presented to a secondary hospital emergency room with a 2-day course of vomiting and epigastric pain, which started after a snapper fish meal.

The patient was alert, tachycardic, tachypneic and with intense abdominal pain. He had leukocytosis and a C reactive protein of 23.3 mg/dL. There was no evidence of organ failure. Both abdominal and chest roentgenograms showed a small amount of intraperitoneal gas which was confirmed by an abdominal CT scan. Exploratory laparotomy was negative for an abdominal visceral perforation. It did however raise the suspicion for an oesophageal perforation since there were signs of emphysema at the esophagogastric junction. The patient was then transferred to a tertiary-care centre.

An upper gastrointestinal endoscopy was performed and a 3 cm length fishbone (figure 1A) was identified on the distal oesophagus. The foreign

body was gently extracted and a 10 mm perforation documented (figure 1B). Owing to poor performance status a minimally invasive approach was undertaken. The defect was successfully closed with a 10.5 mm over-the-scope-clip (OTSC) (Ovesco Endoscopy GmbH, Tübingen, Germany; figure 1C), as assessed by fluoroscopy (figure 1D). There was no need for the anchor or twin grasper.

The patient was kept on antibiotherapy. Liquid diet was started following an unremarkable oesophageal series on day 2 (figure 2). He was discharged after 3 weeks, and was asymptomatic on 3-month follow-up.

The OTSC has been used increasingly since 2007¹ as a safe and effective method for the closure of gastrointestinal wall defects,² with few applications in the oesophagus being reported and most in the context of postsurgical management.³

Figure 1 (A) Snapper fishbone lodged in the distal oesophagus; (B) perforation in the distal oesophagus with 10 mm longitudinal diameter; (C) defect closure with the over-the-scope-clip; (D) fluoroscopy image showing the clip immediately after the application.

CrossMark

To cite: Ferreira AO, Lopes J, Velosa J. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2013-201614

Figure 2 Oesophagus transit 2 days after the endoscopic procedure; (A) radioscapy image of the oesophagus before swallowing of the oral contrast, where it can be easily identified the over-the-scope-clip in place; (B) oesophageal series image confirming the closure of the defect.

Learning points

- The value of a detailed clinical history and to have a high degree of suspicion for a late manifestation of a perforation due to a fishbone.
- Impaction of foreign bodies is usually at the cricopharyngeal level (70%) and seldom at the lower oesophageal sphincter (10%).
- Fishbone has a low calcium content which renders it hard to see on the roentgenogram.
- Successful over-the-scope-clip usage for the (late) management of an oesophageal perforation in a septic octogenarian.

Contributors AOF, JL and JE contributed significantly towards the case report and approved the final version of the manuscript to be published.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 Kirschniak A, Kratt T, Stüker Königsrainer A, *et al.* A new endoscopic over-the-scope clip system for treatment of lesions and bleeding in the GI tract: first clinical experiences. *Gastrointest Endosc* 2007;66:162–7.
- 2 Kirschniak A, Subotova N, Zieker D, *et al.* The over-the-scope clip (OTSC) for the treatment of gastrointestinal bleeding, perforations, and fistulas. *Surg Endosc* 2011;25:2901–5.
- 3 Noronha Ferreira C, Ribeiro LC, Velosa J, *et al.* Total gastrectomy in an elderly patient complicated by esophageal fistula: rescue by the over-the-scope clip. *Gastrointest Endosc* 2013;77:497–8.

Copyright 2013 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit <http://group.bmj.com/group/rights-licensing/permissions>.
BMJ Case Report Fellows may re-use this article for personal use and teaching without any further permission.

Become a Fellow of BMJ Case Reports today and you can:

- Submit as many cases as you like
- Enjoy fast sympathetic peer review and rapid publication of accepted articles
- Access all the published articles
- Re-use any of the published material for personal use and teaching without further permission

For information on Institutional Fellowships contact consortiasales@bmjgroup.com

Visit casereports.bmj.com for more articles like this and to become a Fellow