INSIDE VIEW

Endoscopic therapy for upper gastrointestinal bleeding: less is more?

CASE

An elderly patient with a known symptomatic oesophageal radiation stricture had endoscopic dilatation to 15 mm to good effect. The stricture developed as a consequence of radical chemoradiotherapy for unresectable lung cancer more than 7 years ago. Repeat biopsies did not reveal dysplasia or malignancy.

Four months later, a CT was performed as part of lung cancer follow-up. It did not show evidence of cancer recurrence; however, a small asymptomatic mid-oesophageal perforation was identified. This was managed conservatively by nasojejunal feeding. Repeat CT with oral contrast showed no evidence of contrast extravasation. After multidisciplinary discussion, fibrin sealant was applied endoscopically over the oesophageal mucosal defect. The patient was discharged, but presented 3 weeks later with haematemesis.

On admission, the patient was haemodynamically stable with a haemoglobin level of 66 g/L. Coagulation, platelet count and liver function tests were unremarkable. Blood transfusion was administered. Planned endoscopy the following morning showed a

Figure 1 Mucosal defect at the level of oesophageal stricture 27 cm from the incisors.

benign-appearing, non-traversable mid-oesophageal stricture. No dilatation was undertaken, but a paediatric endoscope was then used to safely pass this. A mucosal defect was identified at the oesophageal stricture ([figure 1](#)). Large blood clots were seen in the stomach, but no gastric or duodenal bleeding source was identified.

QUESTION

What is the next step of management?

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INSIDE VIEW

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ANSWER

No endoscopic intervention was undertaken. An urgent CT angiogram was performed. This showed a descending aorta false aneurysm, which was in

Figure 2 CT angiogram demonstrating an aorto-oesophageal fistula (AOF).

communication with a gas collection secondary to the perforation at the mid-oesophageal stricture. Findings were consistent with an aorto-oesophageal fistula (AOF; [figure 2](#)).

The patient was immediately transferred to the vascular theatre for an aortic stent graft to be inserted by the interventional radiologists and vascular surgeons. A 28 mm × 15 cm stent was deployed in the descending aorta covering the AOF ([figure 3](#)). The patient had no further bleeding and was discharged 6 days later.

AOF is a rare cause of haematemesis. The outcome is uniformly fatal in untreated cases. The localised

Figure 3 Endovascular aortic stent graft was inserted (left) and deployed in the descending aorta to cover the aorto-oesophageal fistula (right).

oesophageal perforation and subsequent AOF was probably caused by dilatation of the radiation stricture. Although fibrin sealant has previously been shown to successfully manage postoperative digestive fistulae, it was not effective in this case.¹ Aggressive endoscopic intervention would have triggered lethal haemorrhage.

Despite the high technical success of stent graft placement, mortality due to delayed bleeding or chronic sepsis is common. Thirty-day mortality after stent graft management of AOF has been reported to be as high as 40%.²

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