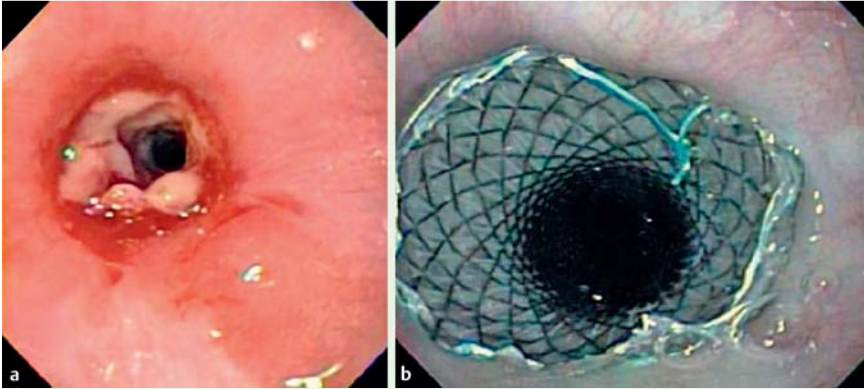


## Novel use of a self-expanding metal stent for an esophageal stricture after radiofrequency ablation treatment of Barrett's esophagus



**Fig. 1** Endoscopic images showing: **a** a tight stricture with circumferential ulceration at the proximal end of the area of Barrett's epithelium that had been treated by radiofrequency ablation (RFA); **b** a fully covered metal esophageal stent deployed in the esophagus.



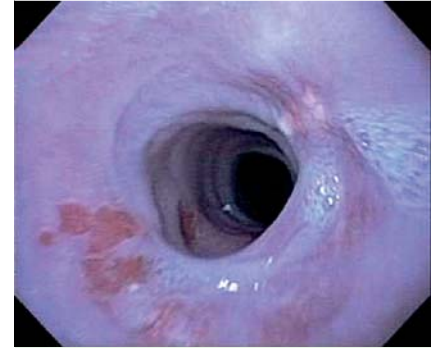
**Fig. 2** Radiographic image following injection of contrast showing a waist in the mid-portion of the stent, with free flow of contrast into the stomach.



**Fig. 3** Endoscopic view of the esophagus following removal of the stent 2 months later.



**Fig. 4** The fully covered, 23 x 105-mm, esophageal self-expanding metal stent (SEMS).



**Fig. 5** Endoscopic appearance 6 months later showing a well-healed fibrotic stricture.

Radiofrequency ablation (RFA) is effective and safe in the treatment of Barrett's esophagus [1]. The incidence of esophageal stricture after RFA treatment is reported to be up to 8% [2]. Stricture rates may be increased with RFA of long-segment Barrett's esophagus. Strictures are treated endoscopically with balloons or Savary dilators; however, there is a risk of perforation with these treatments. We report on the successful treatment of a patient with a stricture following RFA using a self-expanding metal stent (SEMS). A 71-year old man with long-segment Barrett's esophagus (C7M7) and low-grade dysplasia underwent circumferential RFA. A month later he reported dysphagia and odynophagia, and endoscopy revealed a tight stricture with circumferential ulceration at the proximal end of the RFA-treated area of Barrett's epithelium (● Fig. 1 a).

A gastroscope with a 5.9-mm diameter was advanced to the proximal end of the stricture; however, the distal end of the stricture could not be traversed. A gastroscop with an 8.8-mm diameter was therefore inserted and a 9–12-mm extraction balloon (Extractor Pro RX; Boston Scientific, Natick, Massachusetts, USA) was introduced. Injection of contrast revealed a 4–5 cm long stricture in the mid-esophagus. A stent introducer was passed over a 450-cm, 0.035-inch guidewire (Dreamwire; Boston Scientific), which had been passed through the stricture under fluoroscopic guidance. A fully covered metal esophageal stent (23 x 105 mm,

WallFlex; Boston Scientific) was deployed (● Fig. 1 b). A further attempt to pass the 5.9 mm gastroscope through the stricture was unsuccessful. The extraction balloon was reintroduced and injection of contrast showed a waist in the mid-portion of the stent, but with free flow of contrast into the stomach (● Fig. 2).

The stent was removed 2 months later (● Fig. 3 and ● Fig. 4) and after 6 months, the patient had no symptoms of dysphagia and was found to have a well-healed fibrotic stricture on endoscopy (● Fig. 5).

To our knowledge, this is the first case of an esophageal stricture occurring after RFA that was successfully treated by placement of a fully covered removable metal stent. Use of a self-expandable metal stent has also been reported for a stricture occurring after photodynamic therapy for Barrett's esophagus [3]. Treatment of tight strictures with metal stents may be a cost-effective treatment as it avoids the need for repeated dilations and the possible subsequent complications [4].

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**Competing interests:** None

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#### References

- 1 *Shaheen N, Sharma P, Overholt B et al.* Radiofrequency ablation in Barrett's esophagus with dysplasia. *N Engl J Med* 2009; 360: 2277–2288
- 2 *Garman K, Shaheen N.* Ablative therapies for Barrett's esophagus. *Curr Gastroenterol Rep* 2011; 13: 226–239
- 3 *Cheon YK.* Metal stenting to resolve post-photodynamic therapy stricture in early esophageal cancer. *World J Gastroenterol* 2011; 17: 1379–1382
- 4 *Van Halsema E, Wong Kee Song L, Baron T et al.* Safety of endoscopic removal of self-expandable stents after treatment of benign esophageal diseases. *Gastrointest Endosc* 2013; 77: 18–28

#### Bibliography

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