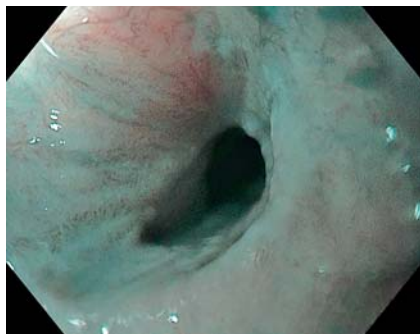


Use of a bougie-shaped cap for dilation with direct visual control for an esophageal stricture induced by radiation therapy

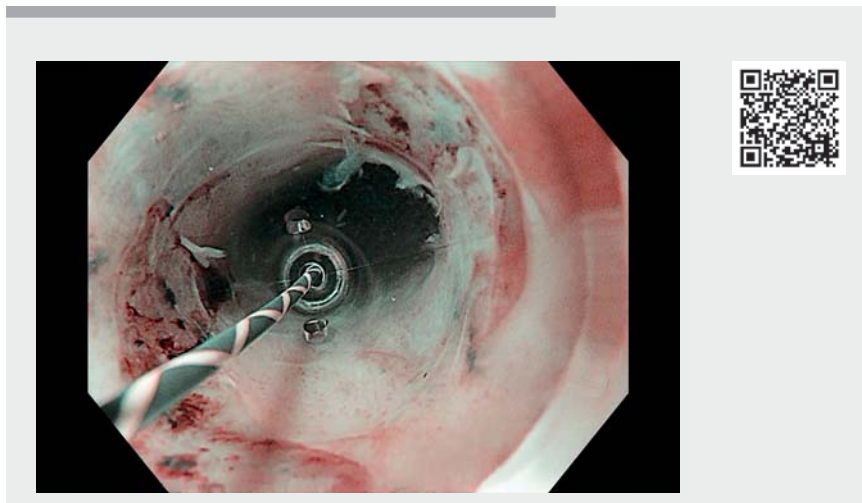


► **Fig. 1** Endoscopic view of the stricture in the lower third of the esophagus (narrow-band imaging).



► **Fig. 2** The 12 mm BougieCap device (Ovesco, Tübingen, Germany) attached to a GIF-HQ190 gastroscopie tip (outer diameter 9.9 mm; Olympus, Tokyo, Japan).

Bougies and balloons are two instruments commonly used for endoscopic dilation of benign strictures in the upper gastrointestinal tract, with similar efficacy [1]. However, these invasive strategies do not allow visual control of the operation during dilation of the stricture, and bleeding caused by the treat-



► **Video 1** Use of a bougie-shaped cap for dilation with direct visual control for an esophageal stricture induced by radiation therapy.

ment itself prevents proper examination of the esophageal mucosa after the procedure. The BougieCap (Ovesco, Tübingen, Germany) is a recently developed dilation device that allows successful and safe endoscopic treatment of benign strictures [2].

We herein report the case of a 64-year-old patient admitted for treatment of an esophageal stricture induced by radiation therapy following treatment for squamous cell carcinoma, with the need for repeated dilations. After visualization of the stricture in the lower third of the esophagus, which could not be crossed by the gastroscopie, a 12 mm BougieCap was attached to the GIF-HQ190 gastroscopie tip (outer diameter 9.9 mm; Olympus, Tokyo, Japan) and positioned proximally to the stricture (► **Fig. 1**, ► **Fig. 2**). A guidewire was pushed through the cap beyond the stricture. The stricture was then carefully passed with the transparent cap by advancing the scope, allowing visualization of the tension on the tissue and avoiding overstretching. A careful ex-

amination of the esophageal mucosa using chromoendoscopy (narrow-band imaging, Lugol) did not reveal any squamous lesions. No immediate or delayed severe adverse events were reported (► **Video 1**).


The BougieCap dilation device allows direct visual control during the procedure. Mucosal examination is further improved by the compression of the vessels by the device, resulting in less mucosal bleeding. Furthermore, from an ecological perspective, the use of this technique significantly reduces plastic waste by over 99% (3 g of plastic waste vs. 480 g for single-use balloon dilation) [3].

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Competing interests

The authors declare that they have no conflict of interest.

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