

## Bariatric gastric band removal using a gastric mural erosion technique induced with a fully covered self-expandable metal stent

Laparoscopic removal of non-eroded bariatric gastric bands may lead to major complications [1]. A minimally invasive approach involving endoscopic removal is a less risky option [2]. The stent-induced mural erosion technique using self-expandable plastic stents has been reported a few times [3–5]. The use of a fully covered self-expandable metal stent (FCSEMS) is anecdotally reported [1].

A 53-year-old woman with a history of morbid obesity who had undergone bariatric surgery using a nonadjustable banded vertical gastroplasty 20 years previously presented with daily repeated vomiting and gastroesophageal reflux disease. Upper gastrointestinal (GI) endoscopy revealed the proximal stomach (above the gastric band), which was deformed by excessive dilation, and a concentric ring secondary to band compression, without endoscopic exteriorization, and covered by preserved mucosa.

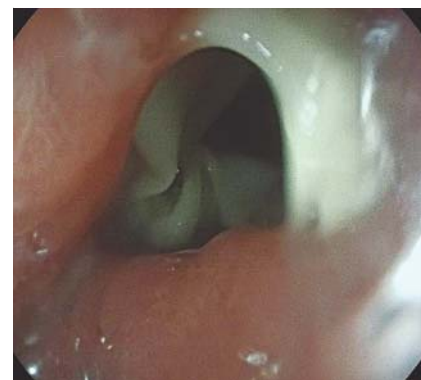
Endoscopic removal of the gastric band was planned. In the first step, an esophageal FCSEMS (155 × 23 mm; WallFlex) was successfully placed, with the proximal end deployed above the gastric band compression and the distal end of the stent released 5 cm distally to the ring (► Fig. 1 and ► Fig. 2). In the second step performed after 2 weeks, a second upper GI endoscopy was scheduled to retrieve the FCSEMS and for en bloc removal of the band. The intra-stent endoscopic view allowed visualization of the white band, which was already visible because of erosion of the gastric wall induced by the stent. Removal of the FCSEMS using a grasping foreign body forceps (Rat Tooth/Alligator Grasping Forceps; Rescue Combo, Boston Scientific) and guided by fluoroscopy and endoscopy was performed without incident. The subsequent endoscopic view showed a total and surprising visualization of the nonadjustable bariatric band, externalized to the gastric cavity, which therefore allowed its en bloc removal using the



► Fig. 1 Endoscopic image of the gastric ring related to the gastric band compression.



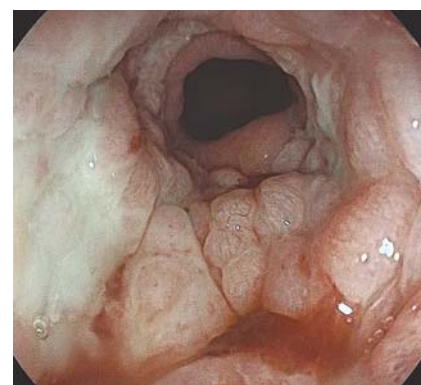
► Fig. 2 Fluoroscopic image of the deployed fully covered self-expandable metal stent showing an hourglass shape due to the gastric band compression.



► Fig. 3 Endoscopic view of the gastric band identified after retrieval of the fully covered self-expandable metal stent.



► Fig. 4 The nonadjustable gastric band after its removal using the fully covered self-expandable metal stent-induced erosion technique.



► Fig. 5 Endoscopic view showing the stenotic area left after en bloc removal of the gastric band.

same grasping forceps without any adverse events (► Fig. 3, ► Fig. 4 and ► Fig. 5; ► Video 1).

Endoscopic removal of a nonadjustable bariatric band using an esophageal FCSEMS-induced gastric mural erosion technique seems to be feasible and effective, and could allow easier extraction of the band than using a plastic stent.

Endoscopy\_UCTN\_Code\_CPL\_1AH\_2AK



**Video 1** Removal of a bariatric band using a gastric mural erosion technique induced with a fully covered self-expandable metal stent.

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*Endoscopy* 2021; 53: E77–E78

DOI 10.1055/a-1195-2191

ISSN 0013-726X

published online 26.6.2020

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Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

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## Competing interests

J. B. Gornals is a consultant for Boston Scientific. The remaining authors declare that they have no conflict of interest.

## The authors

**Julio G. Velasquez-Rodriguez<sup>1</sup>, Amador Garcia Ruiz de Gordejuela<sup>1,2</sup>, Joan B. Gornals<sup>1,3</sup>**

- 1 Endoscopy Unit, Department of Digestive Diseases, Hospital Universitari de Bellvitge-IDIBELL, University of Barcelona, Barcelona, Spain
- 2 Surgical Department, Hospital Universitari de Vall d'Hebron, Universitat Autònoma de Barcelona, Barcelona, Spain
- 3 Faculty of Health Sciences, Universitat Oberta de Catalunya, Barcelona, Spain

## Corresponding author

**Joan B. Gornals, MD, PhD**

Endoscopy Unit, Dept. of Digestive Diseases, Hospital Universitari de Bellvitge-IDIBELL (Bellvitge Biomedical Research Institute), Feixa Llarga s/n, 08907 L'Hospitalet de Llobregat, Barcelona, Catalonia, Spain  
Fax: +34-93-2607681  
jgornals@bellvitgehospital.cat

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