

Endoscopic reversal of vertical banded gastroplasty: a novel use of electroincision



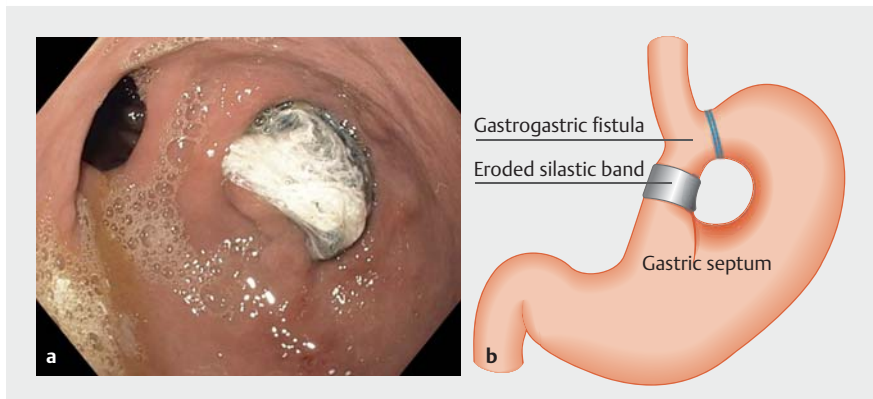
► **Fig. 1** Computed tomography demonstrated postoperative changes to the gastroesophageal junction and a hiatal hernia, but no obstruction.

Vertical banded gastroplasty (VBG) was introduced in 1982 as a restrictive form of weight loss surgery through the creation of a pouch using a vertical staple line and outlet restriction with a silastic band [1]. However, the popularity of VBG has waned due to high adverse event rates and the need for surgical revision [2]. We present the case of an endoscopic reversal of a VBG using electroincision (► **Video 1**).

A 49-year-old woman with a history of VBG presented with nausea, episodic vomiting, and dysphagia. A computed tomography scan revealed no signs of obstruction (► **Fig. 1**). Upper endoscopy demonstrated a large gastrogastric fistula at the staple line with the silastic band eroding into the lumen (► **Fig. 2**). Between the gastrogastric fistula and the eroded band, there was a septum of gastric tissue. The tissue pedicles holding the silastic band were incised using an endoscopic submucosal dissection knife, and the band was removed (► **Fig. 3 a**). The decision was made to reverse the VBG given the patient's symptoms and that the size of the gastrogastric fistula precluded successful endoscopic closure. The gastric septum was then divided (► **Fig. 3 b**). Hemoclips were placed in areas of mild bleeding. Repeat endoscopic examination 2 months later revealed a healed resection



► **Video 1** Endoscopic reversal of a vertical banded gastroplasty using electroincision.



► **Fig. 2** Endoscopic findings. **a** Endoscopy revealed an eroded silastic band on the right and a gastrogastric fistula on the left. **b** Diagram of the endoscopic findings in relationship to surgical anatomy.

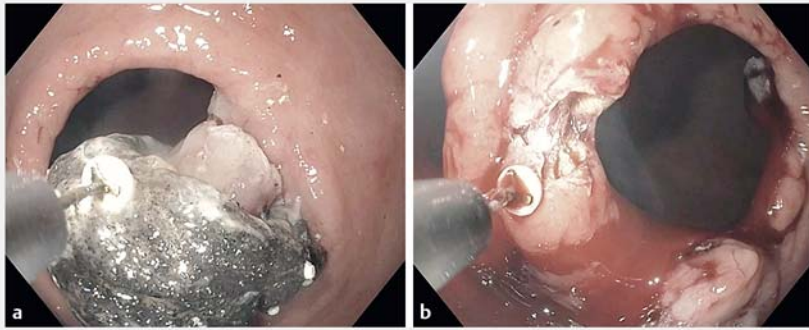
site with complete reversal of her prior VBG anatomy (► **Fig. 4**). The patient had complete resolution of all symptoms. VBGs are associated with high rates of long-term failure due to band erosions, gastric outlet stenosis, and inadequate weight loss [3]. Specifically, band erosions may occur after 1%–3% of VBGs [4]. Methods for removal of eroded bands include the use of Nd:YAG laser, electroincision, and electrosurgical scissors [5]. In our case, we used electroinci-

sion to remove the eroded band and also reverse the VBG, resulting in durable symptom control. In conclusion, endoscopic reversal of VBG can be considered in patients with similar presentations.

Endoscopy_UCTN_Code_CPL_1AM_2AF

Competing interests

Ryan Law: Olympus America-Consultant.



► **Fig. 3** Endoscopic treatment using an electroincision knife. **a** The eroded silastic band was removed by excising the supporting tissue pedicles using an electroincision knife. **b** Division of the gastrogastric fistula using an electroincision knife.



► **Fig. 4** Repeat endoscopy at 2 months post-procedure demonstrated reversed vertical banded gastroplasty anatomy.

The authors

Jessica X. Yu, Arpan Patel, Ryan Law

Division of Gastroenterology and Hepatology,
University of Michigan, Ann Arbor, Michigan,
United States

Corresponding author

Jessica X. Yu, MD, MS

Division of Gastroenterology and
Hepatology, University of Michigan,
1500 E. Medical Center Dr., 3912 Taubman
Center, Ann Arbor, MI 48109-5362,
United States
Fax: +1-734-936-7392
jxyu@umich.edu

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