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

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 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 electroincision 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.

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Competing interests

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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.