Endoscopic suturing for refractory bilious reflux after gastroduodenostomy and gastrojejunostomy

A 35-year-old woman who had undergone previous multiple abdominal surgeries, including Billroth I gastrectomy with gastrojejunostomy and gastroduodenostomy, presented with a 6-month history of regurgitation and bilious vomiting. These symptoms were refractory to proton pump inhibitors, prokinetics, and lifestyle modification. Contrast study (▶ Fig. 1a) revealed a patent gastrojejunostomy with flow of contrast into the duodenal loop and no distal obstruction. Endoscopy revealed significant bilious secretions in the stomach with a patent gastrojejunostomy and gastroduodenostomy.

To close the gastroduodenostomy stoma, we first applied argon plasma coagulation to the margins to promote subsequent cicatrization. We then approximated the margins of the wall defect by placing two layers of sutures using the Overstitch Endoscopic Suturing System (Apollo Endosurgery, Austin, Texas, USA) as shown in ▶ Video 1. A post-procedure contrast study showed no contrast flow across the gastroduodenostomy stoma (▶ Fig. 1b).

The management of high volume bilious reflux is challenging in cases refractory to lifestyle modification and medications [1]. Gastroduodenostomy increases the risk of bilious reflux, dumping syndrome, and malabsorption. The management of gastroduodenostomy-related refractory bile reflux consists of surgical therapies such as dismantling the gastroduodenostomy and creation of a jejuno-jejunostomy. In this case, we used an endoscopic suturing device to close the stoma to alleviate the symptoms related to bilious reflux. A large multicenter experience with endoscopic suturing for gastrointestinal defects showed 97.5% technical success and 78.9% achieved long term clinical success [2]. Although clinical success for anastomotic leak closure was only 27%, it was 93% for perforation and 80% for fistula [2]. The long term success can be achieved with endoscopic suturing, thereby circumventing the need for surgery [3,4].

Endoscopy_UCTN_Code_CPL_1AN_2AG

Competing interests

None

The authors

Nitin Jagtap¹, Rakesh Kalapala¹, G. Venkat Rao², D. Nageshwar Reddy¹

1 Department of Medical Gastroenterology, Asian Institute of Gastroenterology, Hyderabad, India
2 Department of Surgical Gastroenterology, Asian Institute of Gastroenterology, Hyderabad, India

Jagtap Nitin et al. Endoscopic suturing for gastroduodenostomy... Endoscopy
Corresponding author

Nitin Jagtap, MD, DNB
Department of Medical Gastroenterology,
Asian Institute of Gastroenterology, 6-3-661
Somajiguda, Hyderabad 500-082, India
Fax: +91-40-23324255
docnits13@gmail.com

References

[1] Sifrim D. Management of bile reflux. Gas-
troenterol Hepatol (N Y) 2013; 9: 179–180

A large multicenter experience with endo-
scopic suturing for management of gastro-
testinal defects and stent anchorage in 122 patients: a retrospective review. J Clin
Gastroenterol 2016; 50: 388–392

full-thickness gastrointestinal defects: avail-
able applications and emerging innovations.
Clin Endosc 2016; 49: 438–443

Safety and efficacy of fistula closure by
endoscopic suturing: a multi-center study.
Endoscopy 2016; 48: 1023–1028

Bibliography

DOI https://doi.org/10.1055/a-1063-6251
Published online: 2019
Endoscopy
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X