Staple-line leaks following laparoscopic sleeve gastrectomy occur in 1%–9% of patients being treated for morbid obesity [1, 2]. Superficial endoluminal suturing has shown limited efficacy, even in conjunction with other closure modalities [2, 3]. We report two cases of successful closure of staple-line leaks after laparoscopic sleeve gastrectomy using full-thickness endoscopic suturing.

A 50-year-old woman presented for management of a chronic 2-mm staple-line leak immediately below the esophagogastric junction 3 months after laparoscopic sleeve gastrectomy (Fig. 1 a, b). Primary surgical closure as well as diversion using a fully covered self-expandable esophageal metallic stent (SEMS) had previously failed to achieve closure. Therefore, primary closure of the chronic leak was performed using a full-thickness endoluminal suturing device (OverStitch, Apollo Endosurgery, Austin, Texas, United States). The leak site was treated with argon plasma...
We demonstrate a novel method of endoscopic closure of both a small, chronic and a large, acute staple-line leak following laparoscopic sleeve gastrectomy. Full-thickness suturing alone appears to be sufficient in treating small leaks; however, larger leaks likely require adjunctive techniques including diversion therapy with a fully-covered SEMS. As there is no stricture present, the risk of stent migration is high and we advocate securing the stent in position using endoscopic suturing [4,5].

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Jennifer X. Cai, Mouen A. Khashab, Patrick I. Okolo, Anthony N. Kalloo, Vivek Kumbhari
Department of Medicine and Division of Gastroenterology and Hepatology, The Johns Hopkins Medical Institutions, Baltimore, MD, USA

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**Corresponding author**

Vivek Kumbhari, MD
Johns Hopkins Hospital
1800 Orleans St, Suite 2058 B
Baltimore
MD 21205
USA
Fax: +1-443-683-8335
vkumbhari@gmail.com