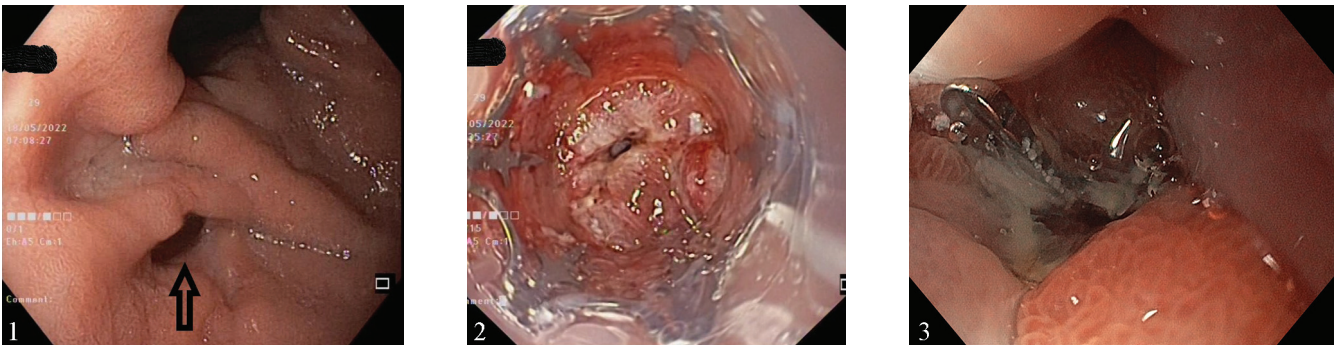


# Successful Closure of Gastric Fistulas Postlaparoscopic Sleeve Gastrectomy using Padlock Clips™

Monica Lacatus<sup>1,2</sup>, Carmen Monica Preda<sup>2,3</sup>, Ruxandra Ciocarlan<sup>3</sup>, Gabriel Constantinescu<sup>2,4</sup>, Ruxandra Oprita<sup>4</sup>

1) Fundeni Clinical Institute, Department of General Surgery; 2) Faculty of Medicine, Carol Davila University of Medicine and Pharmacy Bucharest; 3) Fundeni Clinical Institute, Department of Gastroenterology; 4) Gastroenterology Department, Clinical Emergency Hospital of Bucharest, Romania



A 28-year-old female with a recent laparoscopic sleeve gastrectomy (LSG) presents with persistent left flank pain, productive cough, chills and low appetite. Abdominal computed tomography revealed fluid collections and air bubbles around the pancreatic tail, splenic hilum, splenic flexure and two hypodense areas with air bubbles suggestive for splenic abscess.

The barium swallow test evidenced two gastric fistulas. The fistulas feed into the previous mentioned abdominal collections. Endoscopically two fistulous holes were detected: first one 8 mm in diameter with spontaneous exteriorization of purulent liquid (Fig. 1) and the second with a diameter of about 1.5 mm next to it. Revitalization of the fistulous orifice was carried out with the bipolar GoldProbe, then 1 Padlock Clip™ was mounted with the involvement of both fistulous orifices described previously (Fig. 2). The control barium swallow test demonstrated persistence of the second fistula. During a second endoscopy another Padlock Clip™ was mounted (Fig. 3), after which the barium swallow test showed no fistulous paths. The subsequent evolution was favorable under conservative treatment with the resumption of digestive tolerance and discharge soon after.

Sleeve gastrectomy is a restrictive procedure comprising of the laparoscopic resection of the greater curvature of the stomach, including most of the fundus and corpus. The most common chronic complications of LSG are gastroesophageal reflux disease and gastric stricture, while hemorrhage along the staple line (<5%) and gastric fistula formation (<2%) is the most prevalent acute adverse events [1].

Closure of fistulas remains a clinical challenge since fibrosis or necrotic and inflamed tissue surrounding lesions may cause clip failure. Over-the-scope clips are a less invasive endoscopic option for managing patients with gastrointestinal defects before a more invasive surgical approach is attempted. [2]. The novel over-the-scope Padlock Clip™ was reported to assist in the management of esophageal fistulas, refractory gastrointestinal bleeding, and defects closure [3]. This report shows the successful closure of a post sleeve gastrectomy fistula using the Padlock Clip™.

**Corresponding author:** Carmen Monica Preda,  
carmenmonica.preda@gmail.com

**Conflicts of interest:** None to declare.

## REFERENCES

1. Sabawi M, Alhasson A, Abualruz AR, Al-Taie AA. Gastrobronchial Fistula: A Rare Complication of Postlaparoscopic Sleeve Gastrectomy-A Case Report and Literature Review. *Case Rep Radiol* 2021;2021:6641319. doi:[10.1155/2021/6641319](https://doi.org/10.1155/2021/6641319)
2. Iabichino G, Eusebi LH, Palamara MA, et al. Performance of the over-the-scope clip system in the endoscopic closure of iatrogenic gastrointestinal perforations and post-surgical leaks and fistulas. *Minerva Gastroenterol Dietol* 2018;64:75-83. doi:[10.23736/S1121-421X.17.02439-4](https://doi.org/10.23736/S1121-421X.17.02439-4)
3. Mouchli MA, Chitnavis V. Another Use for Padlock Clip. *Cureus* 2020;12:e10656. doi:[10.7759/cureus.10656](https://doi.org/10.7759/cureus.10656)