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LETTER TO THE EDITOR

Endoscopic Abscess Septotomy for Management of Sleeve Gastrectomy Leak

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Surgical management continues to be the most effective treatment for morbid obesity. Laparoscopic sleeve gastrectomy (LSG) is the most common bariatric intervention performed worldwide [1] based on significant weight loss outcomes, improvement of comorbidities [2], and its association with low morbidity and mortality rates [3]. Although very effective, LSG is not exempt of complications. One of the major concerns is the development of a staple line leakage. Even though, the incidence of this complication is low (ranging from 1 to 6%), postoperative leaks represent a devastating condition for the patient often resulting in prolonged hospitalization, sepsis, and even death [4, 5].

The management of post-LSG leaks is aimed at defining the leak and controlling potential fluid collection and abscess formation through non-surgical and/or surgical interventions [6]. Endoscopy plays a valuable role for this purpose [7]. The use of stents placed endoscopically is the most popular treatment [5]. However, recent studies have reported variable outcomes in terms of efficacy [8–10] and complication rates [11]. Management algorithms have been developed by a few centers with the purpose of standardizing the treatment. As such, Nedelcu et al. [11] recommended an algorithm depending on the size of the fistula; Nimeri et al. [12] developed another algorithm based on the time of presentation of the leak, the presence of distal stomach stricture, nutritional status, and the presence of peritonitis. Both studies applied endoscopic approaches using stents, pigtail catheters, or clips for the treatment. Other studies reported the successful use of the over-the-scope clip (OTSC) system for the management of early leaks [13, 14]. Lastly, when all endoscopic treatments failed, surgical re-intervention to converting the gastric sleeve to a Roux-en-Y gastric bypass or a total gastrectomy has also been described [11, 15].

An abscess septotomy is a technique in which the septum separating the abscess cavity and the gastric lumen is incised and divided (Fig. 1) resulting in the complete exposure of the lumen of both cavities. By these means, redirection of the leak flow from the abscess cavity towards the gastric lumen favors the internal drainage and suppresses the accumulation of contents contributing to the abscess formation, therefore decreasing the expansion of the collection and providing tissue healing. This represents a feasible approach that has been studied and described for the past years by authors reporting good outcomes in terms of clinical and radiologic resolution of the leak. De Lima [16] shared his experience of ten cases of post-LSG early leaks, stating resolution of the complication, in addition to a reduction in the duration of hospital stay and need for reintervention. Additionally, studies reporting endoscopic septotomy in conjunction with pneumatic balloon dilation for the management of sleeve strictures [7, 17] concluded that addressing the distal stenosis of the sleeve results in decreased intraluminal pressure, hence favoring tissue healing.

In conclusion, based on published case series, endoscopic abscess septotomy offers a less invasive, safe, and effective alternative for the management of postoperative LSG leaks. The adoption of this technique reduces the need for additional surgical intervention.

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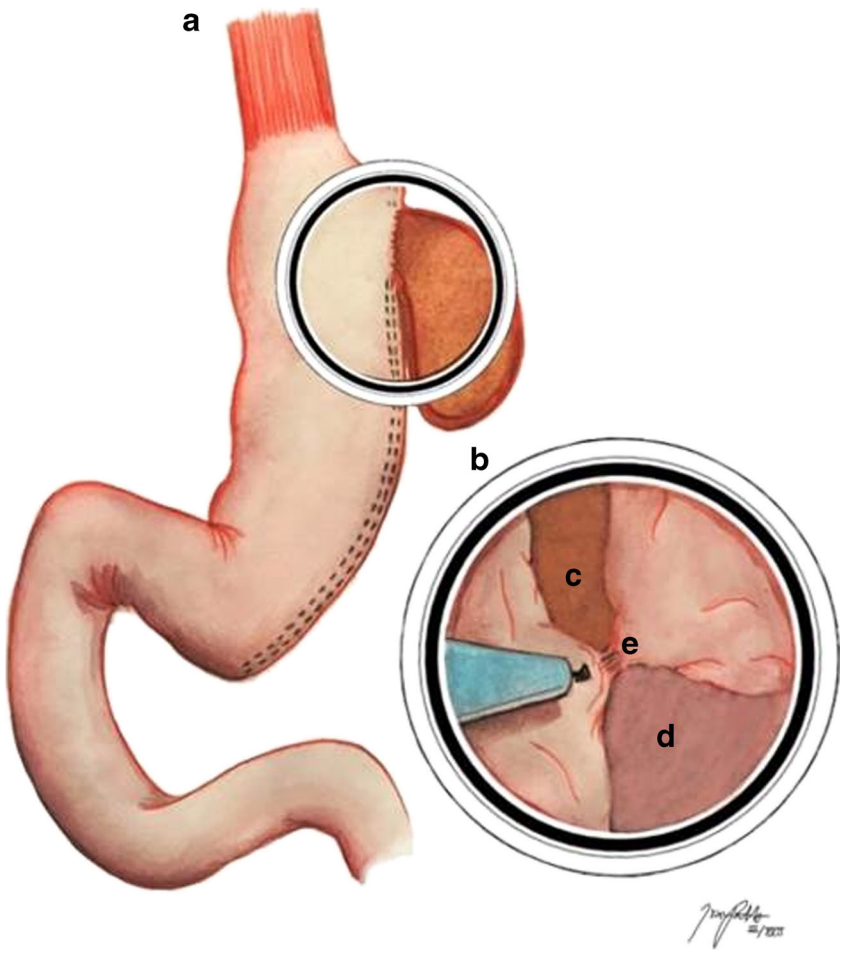

Fig. 1 **a** Anatomic representation of a sleeve gastrectomy with a perigastric abscess. **b** Endoscopic view representation showing **c** abscess cavity, **d** gastric sleeve lumen, and **e** septum dividing the cavities

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Compliance with Ethical Standards

Conflict of Interest Dana Portenier is a consultant for Medtronic/Covidien, Teleflex, Gore, Allergan, and Intuitive; additionally, he holds a Grant from Teleflex. Daniel Guerron and Camila Ortega have no conflicts of interest to declare.

Ethical Statement All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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