Endoscopic management of acute leak after sleeve gastrectomy: principles and techniques

Although laparoscopic sleeve gastrectomy (LSG) is the most commonly performed bariatric surgery worldwide, postsleeve leaks may occur in up to 5.3% of patients [1]. More recently, novel endoscopic draining therapies including endoscopic vacuum therapy, septotomy, and the use of endoluminal double-pigtail stents (DPS) have been deployed [2–4]. In this video, we describe successful endoscopic internal drainage of a perigastric sleeve leak using DPS (▶ Video 1). A 35-year-old woman presented to our institution 1 week after LSG with abdominal pain and fever. Initial endoscopy and fluoroscopy revealed an acute post-LSG leak in the residual fundus with purulent drainage and an associated large fluid collection (▶ Fig. 1, ▶ Fig. 2). Given these findings, the decision was made to place two DPS (7 Fr × 9 cm) to achieve successful endoscopic internal drainage (▶ Fig. 3). The patient was discharged 3 days later without complications receiving a full liquid diet and a course of oral antibiotics. The DPS were removed 1 month after the procedure. At that same time, as sleeve stenosis was observed and pneumatic balloon dilation (30 mm) performed until the radiological “waist” was disrupted (▶ Fig. 4). At the same time, a sleeve stenosis was observed and pneumatic balloon dilation (30 mm) performed until the radiological “waist” was disrupted (▶ Fig. 4).
Approximately 2 months later, the patient remained asymptomatic with the diet advanced without any problems. In summary, endoscopic techniques to treat complications following bariatric surgery are feasible, safe, and effective when the correct approach is selected. In this video, we review principles and techniques of sleeve leaks and describe successful endoscopic management of an acute leak 1 week after LSG. Ultimately, endoscopic internal drainage is a well-tolerated option to achieve complete drainage of acute post-LSG leaks and collections and is associated with reduced morbidity, high success rates, shorter hospital stay, and a low rate of adverse events [5].

Competing interests

The authors declare that they have no conflict of interest.

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Fig. 4 Fluoroscopic imaging after removal of the double-pigtail stents, demonstrating complete resolution of the sleeve leak and associated fluid collection.

Fig. 5 Pneumatic balloon dilation of the sleeve stenosis showing the disruption of the “radiological waist.”