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 Authors:
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Effective and alternative treatment of anastomotic leak after gastrojejunal bypass: endoluminal vacuum therapy

María De Armas Conde¹, Marta Rojas Estévez¹, Carmen Díaz López¹, Vanessa Concepción Martín¹, Rajesh Gianchandani Moorjani¹, María del Pilar Borque Barrera², Diana María García Romero², Modesto Enrique Moneva Arce¹

Services of ¹General and Digestive Diseases Surgery and ²Digestive Diseases. Hospital Universitario Nuestra Señora de la Candelaria. Santa Cruz de Tenerife, Islas Canarias. Spain

Correspondence: María De Armas Conde
e-mail: mariadearmasconde@gmail.com

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Dear Editor,

Anastomotic leak (AL) after Roux-en-Y gastric bypass (RYGB) has a morbidity rate of up to 53 % and it can be potentially lethal (mortality rate from 0.5 to 10 %) (1). In these cases, surgery is usually a challenge, so in recent years, minimally invasive endoscopic treatment is gaining ground. Endoluminal vacuum therapy (EVAC) is a promising treatment that is being used in esophagogastric and rectal surgery for the management of AL (1-3).

Case report
We present the case of a 56-year-old male with a body mass index (BMI) of 50, and a personal history of bariatric surgery (RYGB). He presented to the Emergency Unit on his fifth postoperative day due to sudden abdominal pain. Due to the clinical diagnosis of acute abdomen, a computed tomography (CT) scan was performed with the finding of dehiscence of gastrojejunostomy anastomosis (GJA).

An urgent laparoscopic intervention was decided, and the dehiscence was closed with a primary suture. However, the patient had a poor clinical evolution, thus he underwent surgery again. A laparotomy was performed by the bariatric surgery team, achieving a resection of the previous anastomosis and a new semimechanical and laterolateral antecolic GJA, with great technical difficulty.

Prior to start the oral diet, a control CT was performed, describing a new GJA leak. The patient was clinically stable, therefore EVAC management (ESO-Sponge®) was started, which was placed through the fistula by endoscopy. During endoscopy, a 6-mm mucosal defect without ischemia was evident (Fig. 1). Four ESO-Sponge® device changes were performed every 3-4 days, with a total treatment duration of 15 days. EVAC was removed when the defect was 1 mm in size. The patient was discharged 37 days after admission after improvement in septic parameters and tolerance of an oral diet.

**Discussion**

EVAC therapy is a continuous suction device with negative pressure to the wound. It allows active drainage of the leak while promoting blood flow and tissue granulation. Therefore, it reduces the size of the defect until its closure (2,3). Several published studies describe EVAC therapy for AL as successful, after esophagogastric surgery. EVAC presents even more favorable results than other minimally invasive endoscopic treatments such as endoluminal prosthesis (95 % success versus 63 %, respectively) (3-5). There are few reported studies and there is no data for RYGB surgery, which could open up a new field of research.

**References**


Fig. 1. Diagnostic endoscopy of a gastrojejunal anastomosis leak showing a 5-mm defect (white arrow) and fibrin.