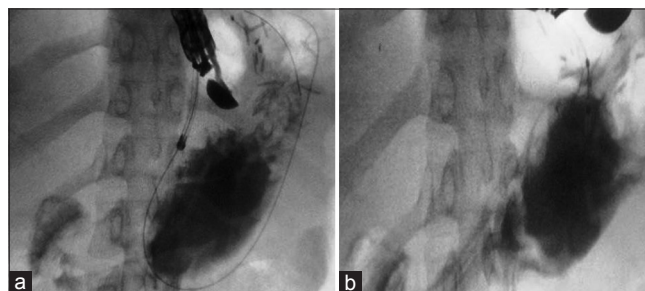


## Endoscopic ultrasound-guided drainage of pancreatic pseudocyst after gastrogastic anastomosis in patient with Roux-en-Y gastric bypass: The dream becomes reality!

Dear Editor,

A 33-year-old female with a previous bariatric surgery according to the Roux-en-Y gastric bypass (RYGB) was admitted to our hospital because of persistent abdominal pain. The presence of a cyst in 7 cm diameter in the pancreatic body was detected at computed tomography (CT). The endoscopic ultrasound (EUS) evaluation was performed to characterize the cystic lesion. From gastric stump, the cyst was observed, but the excluded gastric pouch was interposed. A fine-needle aspiration of the cyst with a 19 gauge needle (ECHO-19, Cook-Medical Inc., Bloomington, Indiana, USA) was performed from the gastric stump through the excluded pouch. The cytological analysis showed the absence of malignant cells while biochemical analyses documented elevated amylase (6785 U/mL) and carcinoembryonic antigen <5 ng/mL. Then, a therapeutic endoscopic approach was proposed. Initially, an EUS-guided puncture from the gastric stump with a 19 gauge needle was performed, and an access to excluded gastric lumen was obtained. Following contrast injection, a 0.035-guidewire was placed into the gastric pouch, and a gastrogastic fistula was created by pushing a 10 Fr cystotome (CST10, Cook-Medical, Bloomington, Indiana, USA) on the guidewire. Finally, a 2 cm/16 mm self-expandable metallic stent (SEMS) (Nagi-stent; Taewoong-Medical; Seoul, Korea) was left in place [Figure 1a and b]. However, 2 weeks later, it was impossible to pass through the gastrogastic anastomosis with a therapeutic echoendoscope (Pentax; Tokyo, Japan), so that the SEMS was substituted by



**Figure 1.** (a) The guidewire was pushed into the excluded gastric pouch and a 10 Fr cystenterostomy was pushed on the guidewire to create a gastrogastic fistula. (b) A transgastric 2 cm/16 mm self-expandable metallic stent to allow consolidation of the endoscopic fistula between the gastric walls was positioned

a 6 cm/20 mm enteral fully covered SEMS (Niti-S; Taewoong-Medical, Seoul, Korea). One week later, it was possible to reach the excluded gastric pouch with a therapeutic echoendoscope (Pentax; Tokyo, Japan) passing through the enteral stent that was removed. EUS-guided puncture from the gastric pouch with a 19-gauge needle was performed and a 0.035-guidewire was placed into the cyst, so that a gastrocystic fistula was created by pushing a 10 Fr cystotome on the guidewire. Finally, a 2 cm/16 mm SEMS (Nagi-stent; Taewoong-Medical; Seoul, Korea) was positioned. Passage of air in the peritoneal cavity occurred, which was successfully evacuated using percutaneously a 19 G needle under CT guidance. The patient was asymptomatic, and she was discharged 72 h later. Two months later, the CT showed complete cyst drainage.

Bariatric surgery is increasingly performed in world over due to the increased prevalence of obesity. Laparoscopic RYGB is one of the most frequent bariatric interventions.<sup>[1]</sup> The rapid weight loss after RYGB is a risk factor for the development of cholelithiasis with subsequent risk of gallstone pancreatitis. A pancreatic pseudocyst may occur in up to 10%–15% of patients with pancreatitis and requiring intervention in symptomatic individuals.<sup>[2,3]</sup> Endoscopic drainage is the current preferred method.<sup>[3]</sup> However, endoscopic approach for biliopancreatic diseases is particularly challenging or even prevented in patients with a prior RYGB due to the anatomical rearrangement. Multistep EUS-guided pancreatic pseudocyst drainage is a feasible, safe, and effective treatment in patients with a prior RYGB.

*Declaration of patient consent*

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understand that her name and initial will not be published and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

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*Conflicts of interest*

There are no conflicts of interest.

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