

Duodenal Ulcer after Roux-en-Y Gastric Bypass Surgery: the Value of Laparoscopic Transgastric Endoscopy

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INTRODUCTION

- Peptic ulcers after Roux-en-Y gastric bypass surgeries are most commonly found as marginal ulcers at the gastrojejunal anastomosis and amenable to standard endoscopy
- Peptic ulcers in the gastric remnant and duodenum are less common and pose significant diagnostic and therapeutic challenges due to their inability to be accessed by esophagogastroduodenoscopy (EGD)

CASE PRESENTATION

- A 53-year-old female who underwent a Roux-en-Y gastric bypass 9 years prior presented with 3 weeks of sharp post-prandial abdominal pain radiating to the back
- **CT imaging** of the abdomen was suspicious for gastric antral inflammation and a possible ulcer in the gastric remnant without any free air.
- The patient was placed on a proton pump inhibitor by gastroenterology and referred for surgical evaluation
- **After course of PPI therapy, taken to OR for:**
 - Laparoscopic lysis of adhesions, laparoscopic assisted endoscopy of gastric remnant and duodenum
 - Upper endoscopy of esophagus, gastric bypass, and roux limb.
- Duodenal ulcer discovered (**Figure 3**)
- Biopsies taken from the gastric antrum and duodenum were negative for *Helicobacter pylori* or malignancy

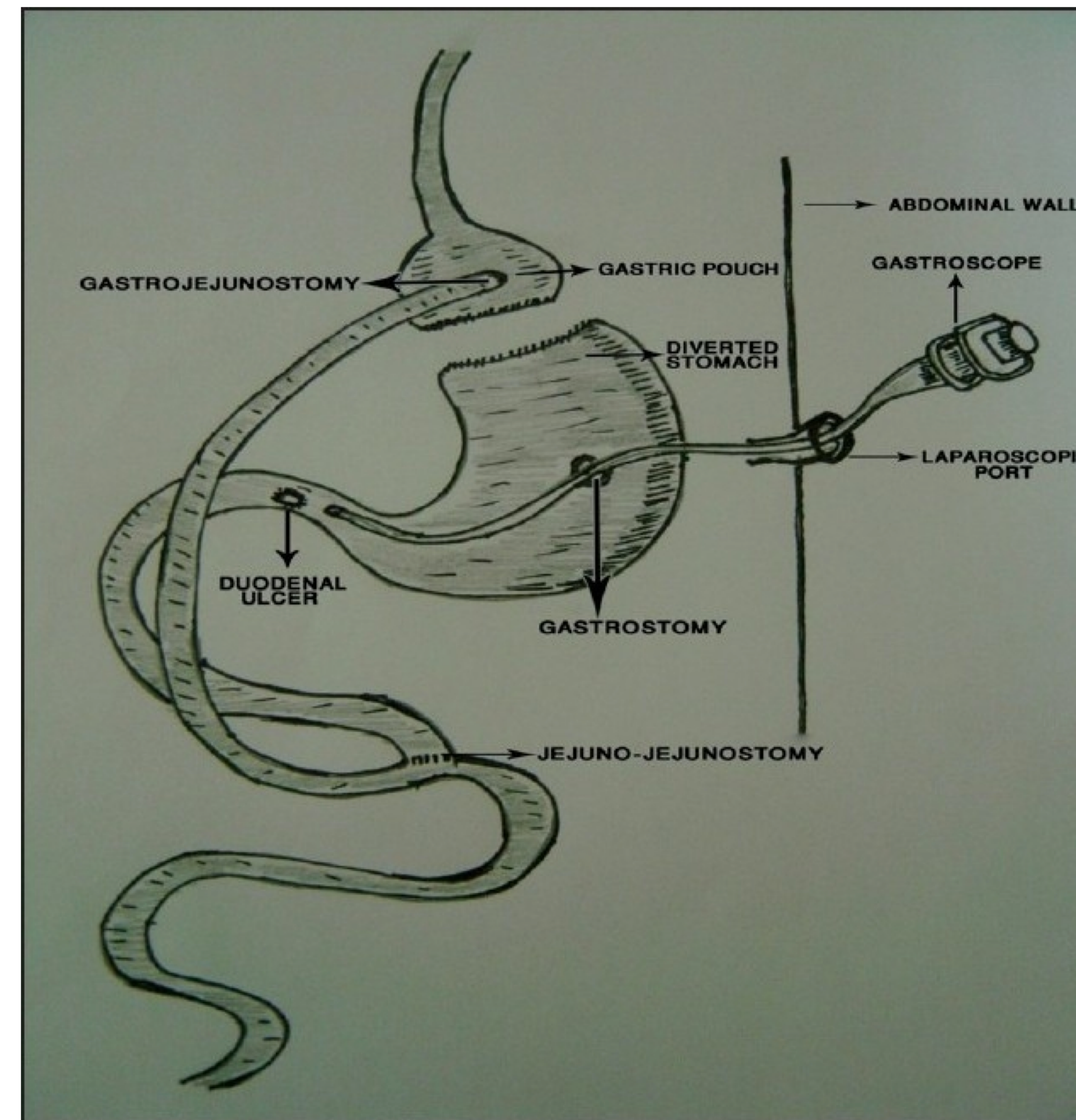


Figure 1: Diagrammatic representation of the laparoscopic endoscopy in our patient who had had Roux-en-Y gastric bypass (reference 1)

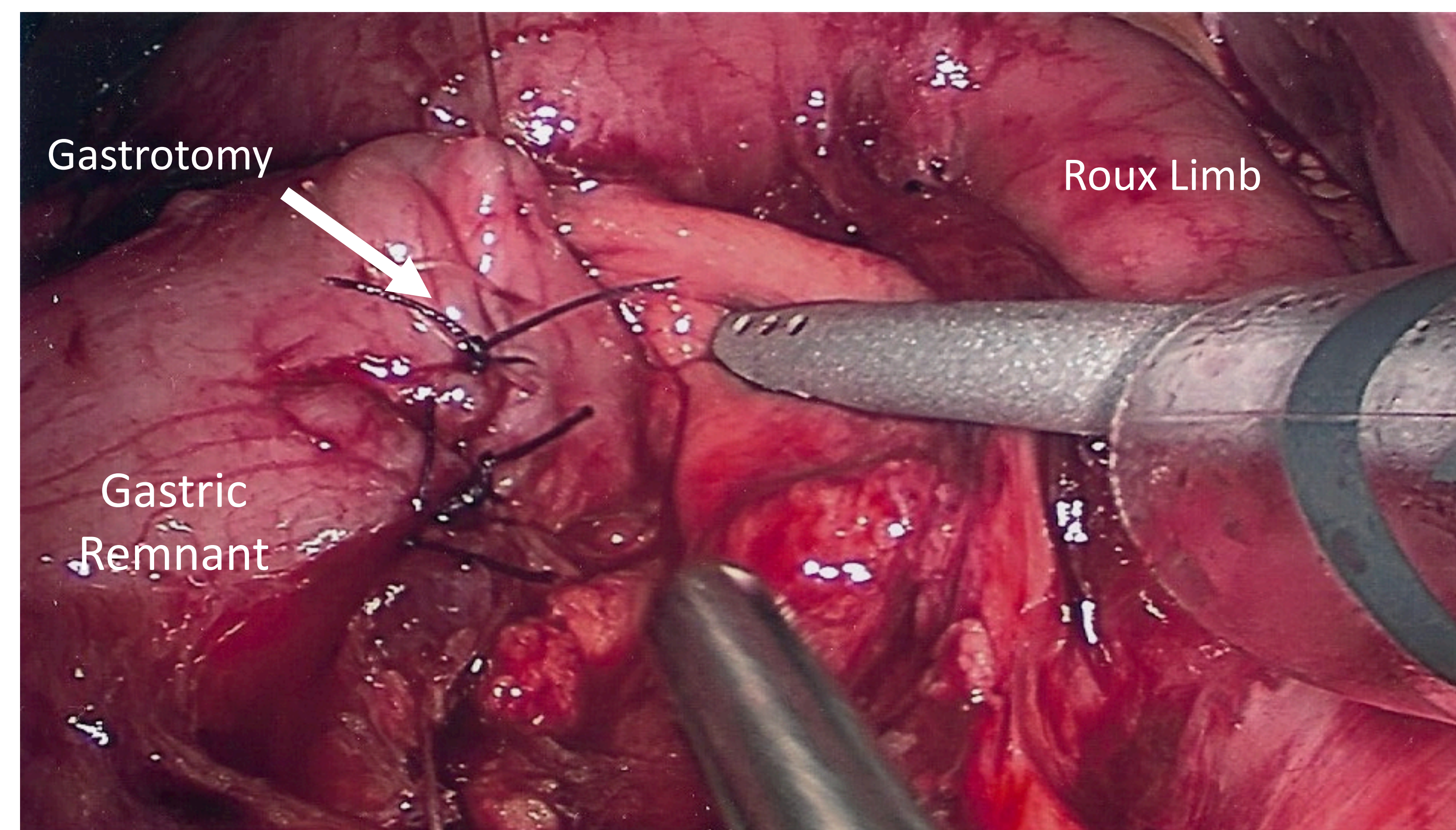


Figure 2: Closure of Gastrotomy

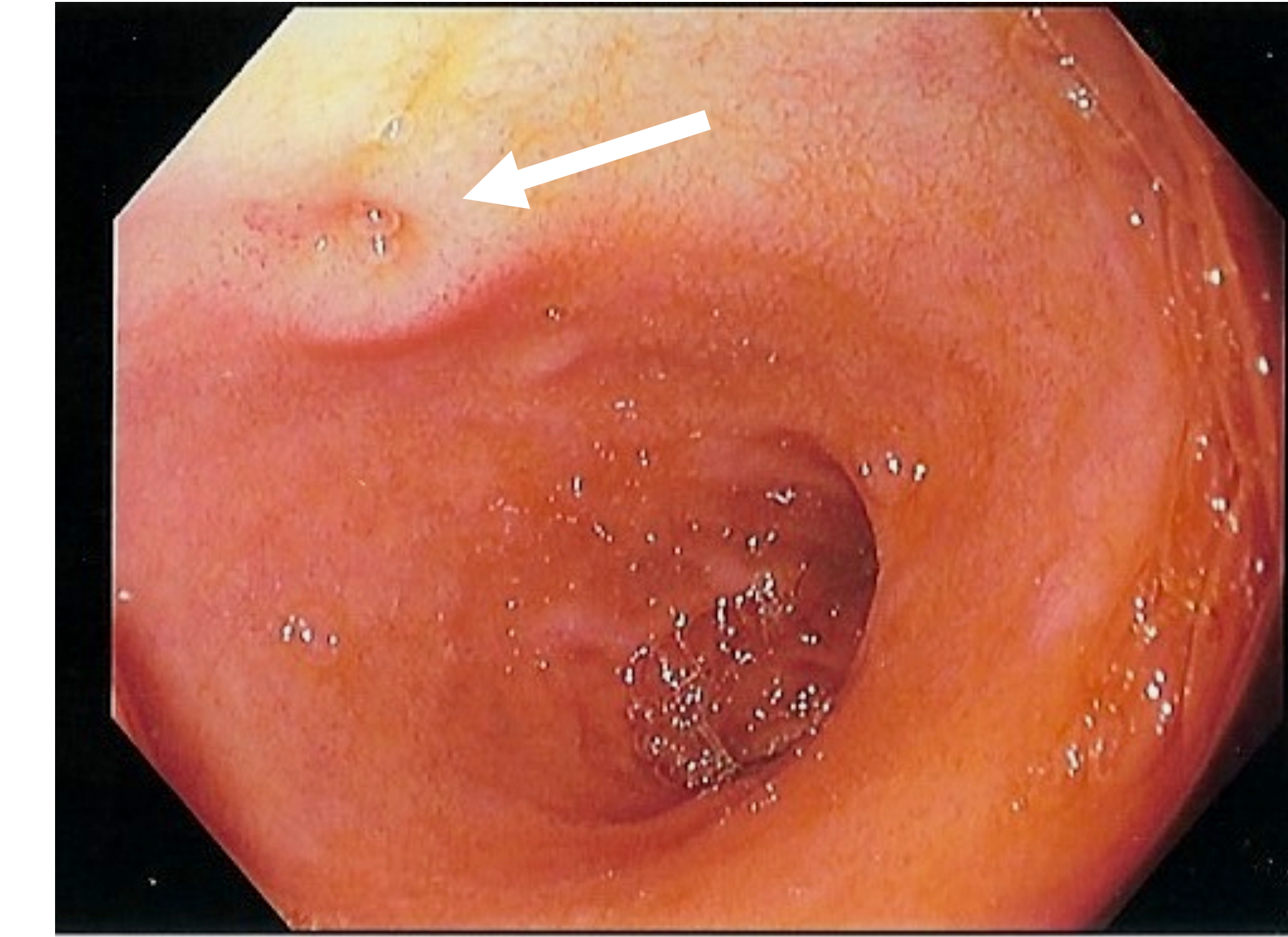


Figure 3: Duodenal Ulcer.

DISCUSSION

- Morbid obesity is a debilitating illness that has resulted in a growing volume of bariatric surgery
- Sleeve gastrectomy and Roux-en-Y gastric bypass are the two most predominate weight loss surgeries performed currently in the United States.
- Evaluating and treating complications of Roux-en-Y gastric bypass is vital for management of bariatric patients
- Peptic ulcers and other pathology in the gastric remnant and duodenum are life threatening complications
- Endoscopy evaluation of the gastric remnant and duodenum cannot be performed trans-orally.
- This case demonstrates a laparoscopic assisted trans-gastric access for endoscopic evaluation of the duodenum and gastric remnant for peptic ulcer disease.

SELECTED REFERENCES

1. Issa, H., O. Al-Saif, S. Al-Momen, B. Bseiso and A. Al-Salem (2010). "Bleeding duodenal ulcer after Roux-en-Y gastric bypass surgery: the value of laparoscopic gastroduodenoscopy." *Ann Saudi Med* 30(1): 67-69.
2. Peterli R, Wölnerhanssen BK, Peters T, et al. Effect of Laparoscopic Sleeve Gastrectomy vs Laparoscopic Roux-en-Y Gastric Bypass on Weight Loss in Patients With Morbid Obesity: The SM-BOSS Randomized Clinical Trial. *JAMA*. 2018;319(3):255-265. doi:10.1001/jama.2017.20897