

Spiral Enteroscopy for Therapeutic ERCP in Patients with Roux-en-Y Gastric Bypass

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Abstract

Purpose: Cholelithiasis occurs in up to 38% of gastric bypass patients within 6 months of surgery. Cholecystectomy is not routinely performed in asymptomatic individuals with gallstones, leaving choledocolithiasis as a potential complication following gastric bypass. Because of the length of the Roux limb and the acute angle of the jejunal-jejunal anastomosis, ERCP is especially challenging and may not be feasible with standard equipment. Wire guided passage of a duodenoscope has a demonstrated cannulation success rate of only 67%. Invasive techniques such as percutaneous gastrostomy tube placement and transhepatic access may carry additional risk and comorbidity. Here we report our experience with Spiral enteroscopy for ERCP in patients with a Roux-en-Y gastric bypass.

Methods: All Spiral ERCP procedures attempted over a 6-month interval in patients with Roux-en-Y gastric bypass were retrospectively reviewed. All procedures were performed by the authors. A Discovery SB over-tube (Spirus Medical, Inc., Stoughton, MA) was used with a standard 9.2 mm diameter enteroscope with a 2.8 mm working channel. Patients were sedated with monitored anesthesia. Cannulation was performed using a double lumen sphincterotome. Sphincterotomy, when performed, was achieved using a needle-knife technique over a plastic biliary stent. Endoscopic and fluoroscopic findings were recorded.

Results: Both patients were female with an average age of 59. Roux limb length was on average 100 cm with an additional 75 cm to the gastric remnant. Biliary access was successful in both patients, and therapeutic interventions were performed including sphincterotomy, balloon dilation of prior sphincterotomy, and large stone retrieval. There were no complications such as pancreatitis, mucosal tear, bleeding, or infection associated with the procedure.

Conclusion: In these individuals with Roux-en-Y gastric bypass, the papilla was reached using Spiral ERCP in both cases. Cannulation was achieved using standard technique and therapeutic interventions were successfully performed. The use of the Discovery SB over-tube in gastric bypass patients appears to be safe and effective for advanced biliary therapeutic techniques and can potentially avoid more invasive surgical interventions. Larger studies are needed to confirm our early experience.