

Spiral Enteroscopy-Assisted ERCP in Patients with Long Limb Surgical Biliary Bypass

R. J. Shah*¹

¹*Gastroenterology and Hepatology, University of Colorado Denver, Aurora, United States*

Abstract

INTRODUCTION: BACKGROUND: Limited data exists on the use of enteroscopy to perform ERCP in patients with altered surgical anatomy. Prior reports utilizing single or double balloon enteroscopy have varied definitions as to what constitutes a successful procedure (e.g. access for cannulation or obtaining a diagnosis or completing the intended maneuvers) and vary from 50% - 65%.

AIMS & METHODS: OBJECTIVE: 1) Evaluate consecutive patients with altered surgical anatomy undergoing ERCP facilitated by the Spirus over-tube, 2) Assess technical success and safety. METHODS: Prospective collection of patients at a tertiary care referral institution who underwent ERCP using a small bowel enteroscope (Olympus SIFQ180) and Spirus over-tube by a single endoscopist. Enteroscopy Success: access the biliary-enteric anastomosis or papilla. Technical Success: completing the intended intervention.

RESULTS: From 9/08 to 6/09, 13 patients (6M, 7F; mean 49 years old) underwent 15 Spirus-assisted ERCP's. Post-surgical anatomy included Roux-Y: gastric bypass (N=6), liver transplant (LT; live-donor, N=4 and cadaveric, N=2), hepaticojejunostomy post liver resection (N=1). Indications: Elevated hepatic enzymes in LT (N=6) or associated with pain (N=5), bile leak (N=1), and pain with filling defect on MRCP (N=1). Enteroscopy Success in 11/13 patients (85%) and Technical Success by intention to treat in 9/13 (62%) and in those who had Enteroscopy Success 9/11 (82%). Interventions by patients included sphincterotomy (N=6; 2 pre-cut needle-knife), stricturoplasty in live donor LT (N=3), direct cholangioscopy (N=2), 7F stents (N=5) and cytology/histology (N=2). Diagnoses in patients with Technical Success: papillary stenosis (N=2), suspected choledochal cyst (N=1), anastomotic stenoses in LT (N=4), bile leak (N=1), recurrent PSC (N=1). Complications: pancreatitis (N=1 mild) and self-limited hypopharyngeal trauma (N=1).

CONCLUSION: Spirus enteroscopy reaches the biliary-enteric anastomosis or papilla in most patients with altered surgical anatomy. Spirus-assisted ERCP is associated with technical success in the majority of patients in whom access to the afferent limb is achieved. Modification of enteroscope-length ERCP accessories may improve success.