

Hill procedure for recurrent GERD post-Roux-en-Y gastric bypass

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Abstract

Background Roux-en-Y gastric bypass (RYGB) is considered to be an optimal surgical treatment option for GERD in the morbidly obese patient. Nevertheless, a subgroup of patients suffer from recurrent or persistent GERD after their gastric bypass. Unfortunately, limited treatment options are available in these patients. Fundoplication via mobilization of the remnant stomach and

radiofrequency treatment of the lower esophageal sphincter have been described with some success. Our objective is to illustrate a safe and durable surgical option in the treatment of patients with medically refractory GERD post-RYGB.

Methods After placing five trocars in the usual position for a foregut laparoscopic surgery, a lysis of adhesions and standard dissection of the hiatus is performed. The anterior and posterior vagal nerves associated phrenoesophageal tissue bundles are identified. A primary crural repair with interrupted nonabsorbable sutures is performed. Four full-length nonabsorbable sutures are placed sequentially through the anterior and posterior phrenoesophageal bundle, posterior fundus and finally through the pre-aortic fascia. The repair is calibrated on a 44 French bougie. The sutures are tied from medial to lateral in the order of their placement under endoscopic guidance.

Results No peri-procedural complications were encountered. Standard post-antireflux surgery clinical follow-up with the patient completing a validated GERD clinical questionnaire at 1 and 6 months after the surgery demonstrated excellent GERD symptom control without any dysphagia. A pH study and EGD performed at 6 months post-Hill procedure show the absence of pathological reflux with an intact Hill mechanism.

Conclusion The Hill procedure is a valid treatment for the post-bariatric surgical patient with GERD in which the gastric fundus is absent or inaccessible thus eliminating standard fundoplication as a reasonable option. This also represents a safe and durable treatment of GERD in this uniquely challenging patient population.

Keywords Hill procedure · GEJ reconstruction · GERD · Antireflux surgery · Post-RYGB · Post-fundectomy · Short esophagus

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Compliance with ethical standards

Disclosures Radu Pescarus, Ahmed M. Sharata, Christy M. Dunst, Eran Shlomovitz, Lee L. Swanström and Kevin M. Reavis have no conflicts of interest or financial ties to disclose.