Endoscopic Placement of a Lumen-Apposing Metal Stent for a Persistent Gastrojejunal Anastomotic Stricture after Roux-en-Y Gastric Bypass

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Gastrojejunal anastomotic stricture formation is a common late adverse event following Roux-en-Y gastric bypass (RYGB) [1]. Endoscopic treatment traditionally involves serial dilations. Enteral stenting has been investigated in refractory cases but its applicability has been limited by the risk of stent migration [2,3]. We present the case of a refractory gastrojejunal anastomotic stricture treated effectively with a lumen-apposing metal stent (LAMS) (Axios, Boston Scientific, Marlborough, MA).

A 67-year-old woman with RYGB presented for the management of a symptomatic gastrojejunal anastomotic stricture. The patient had been previously treated with four sessions of endoscopic balloon dilation with minimal relief after one year. A severe 4-mm stomal stricture was noted on endoscopy (Figure 1). Using a therapeutic linear echoendoscope, the sheath of a 19-gauge fine-needle aspiration needle was advanced across the gastrojejunostomy under endoscopic and fluoroscopic guidance (Figure 2). A 0.025 inch guide wire (VisiGlide, Olympus America, USA) was advanced into the efferent jejunal limb followed by the successful deployment of a 15-mm LAMS across the stricture (Figure 3). Patient’s symptoms improved and a two month follow-up esophagogastroduodenoscopy revealed a patent stent in adequate position.

A feared complication of Roux-en-Y gastric bypass surgery is the formation of an anastomotic stricture, typically presenting with symptoms of dysphagia, nausea, epigastric pain, and gastroesophageal reflux three to six weeks following surgery. Indeed, in a large prospective study of 379 morbidly obese patients who underwent RNYGB, 4.1% developed an anastomotic stricture [4]. The potential etiology is most likely multifactorial, encompassing patient non-adherence to post-operative nutritional recommendations, anastomotic dehiscence, and localized ischemia [2]. While most of these strictures can be safely treated with endoscopic balloon dilation; serial dilations are often necessary with a low yet real increased risk of perforation. Cases refractory to balloon dilation may benefit from enteral stenting although its application has been limited by the high risk of endoprosthesis migration, which has been reported to be as high as 23% [2].

The use of LAMS for the management of enteral strictures has been limited to only a few case reports [5,6]. This fully-covered large caliber metal stent has a unique lumen-apposing “barbell-shaped” design with wide proximal and distal anchoring flanges,
which may potentially limit migration when compared to other tubular metal stents. Several studies have already alluded to its safety and efficacy for the endoscopic drainage of pancreatic fluid collections [3]. Future larger studies are needed to evaluate its role for the treatment of refractory enteral strictures.

References


