Endoscopic Management of Post Laparoscopic Sleeve Gastrectomy Stenosis

Authors: Deslauriers Valerie, Beauchamp Amélie, Fabio Garofalo, Henri Atlas, Ronald Denis, Pierre Garneau, Radu Pescarus

<u>Abstract:</u>

BACKGROUND

Laparoscopic sleeve gastrectomy (LSG) is the most popular bariatric surgery worldwide. Gastric sleeve stenosis is the most common postoperative complication, occurring in up to 3.9% of the cases. Current treatment options include endoscopic treatments, such as dilatations and stent placement as well as surgical revisions such as laparoscopic Roux-en-Y gastric bypass (LRYGB), wedge gastrectomy or seromyotomy.

METHODS:

A retrospective analysis of our prospectively collected therapeutical endoscopy database was performed between January 2014 and February 2017. We included all cases of axial deviation or stenosis post LSG that were treated endoscopically. Patients with concomitant sleeve leaks were excluded. Endoscopic interventions were performed under general anesthesia and fluoroscopic assistance when needed. Sequential treatment with CRE balloons, achalasia balloons (30-40mm) and fully covered stent placement for refractory cases was performed.

RESULTS:

A total of 1332 LSG were performed. Overall, 27/1332 patients (2 %) developed a gastric stenosis. All patients presented an axial deviation at the incisura angularis and 26% had a concomitant proximal stenosis. Successful endoscopic treatments were performed in 56% (15/27) of patients. 73% of the successful patients underwent a single dilatation procedure. All successful cases had a maximum of 3 interventions. The unsuccessful cases (44%) underwent LRYGB. Mean time between the primary surgery and the diagnosis of the stenosis was 10.3 months. Mean follow-up after the endoscopic treatment was 11.5 months. A stent migration was the only complication (3.7%) recorded.

CONCLUSIONS:

Endoscopic treatment appears to be effective in 56% of patients with post LSG stenosis. Only one session of achalasia balloon dilatation is necessary in 73% of successful cases. Pneumatic balloon dilatation seems to be a safe procedure in this patient population. Surgical revision into a RYGB offers good outcomes in patients that have failed 3 consecutive endoscopic treatments.