SAGES 2021

Incidence and Risk Factors for Early Gastrojejunostomy Anastomotic Stricture requiring Endoscopic Intervention following Laparoscopic Roux-En-Y Gastric Bypass: A MBSAQIP Analysis

Usah Khrucharoen, MD[1, 2, 3], Zachary N. Weitzner, MD[1, 2, 3], Yijun Chen, MD[1, 2], Erik P. Dutson, MD, FACS[1, 2, 3]

[1] Section of Minimally Invasive and Bariatric Surgery, Department of Surgery, David Geffen School of Medicine at University of California, Los Angeles, California

[2] UCLA Center for Obesity and METabolic Health (COMET) [3] UCLA Center for Advanced Surgical & Interventional Technology (CASIT)

Background:

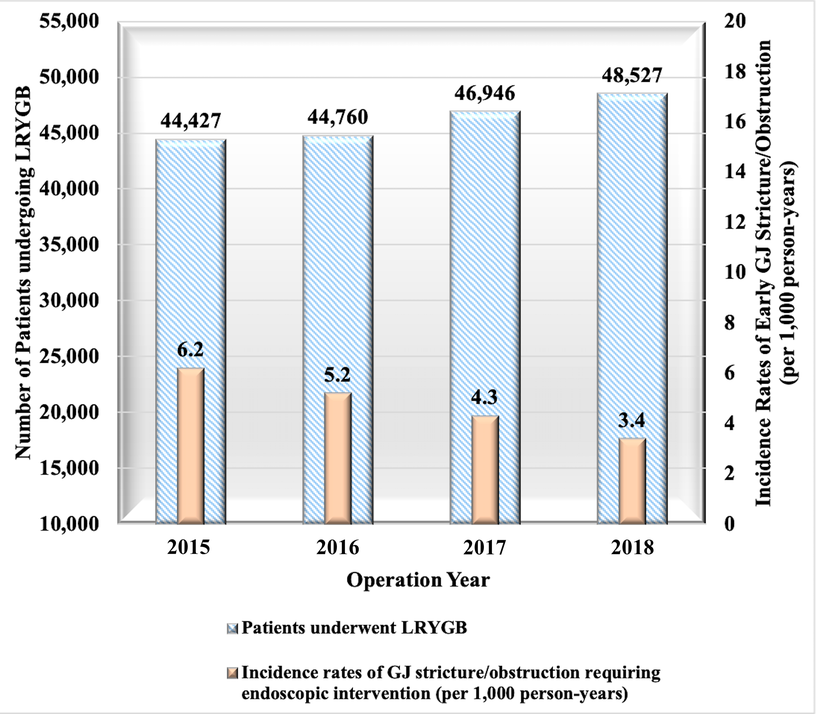
- Gastrojejunal (GJ) anastomotic stricture is one of the most commonly recognized complications following laparoscopic LRYGB.
- The risks involving the formation of early GJ stomal stenosis are largely unknown.
- The aims of this study are to evaluate the rate and risk factors associated with GJ stricture in patients requiring endoscopic intervention within 30 days after LRYGB.

Study design:

- This is a retrospective study of patients who underwent EGD for GJ stricture following LRYGB. Data were retrieved from MBSAQIP database from 2015-2018.
- Descriptive, bivariate, and logistic regression analyses were performed.
- Those who had reoperation, readmission, and intervention for other indications rather than GJ stricture were excluded from the risk factor analysis.

Results:

- 760,076 patients underwent bariatric surgery.
- Of these, 184,660 (24.3%) underwent LRYGB and 875 had GJ stricture within 30 days postoperatively.
- The overall incidence of early GJ stricture after LRYGB was 4.7 per 1,000 person-years.
- The incidence decreased from 6.2 to 3.4 per 1,000 person-years during the 4-year period.
- 85% of patients with GJ stricture required therapeutic intervention.
- Median (IQR) day to the first endoscopic intervention was 25 (21-28) days.
- The overall 30-day readmission rate was 40%.
- The 30-day reoperation rate due to GJ stricture was 5.6%.
- No 30-day mortality occurred.
- Factors independently associated with an increased risk for early GJ stricture include concurrent hiatal hernia repair (Adjusted Odds Ratio - AOR 1.8, 95% CI 1.5-2.2), revision case (AOR 1.4, 95% CI 1.1-1.6), African American (AOR 1.4, 95% CI 1.2-1.7), gastroesophageal reflux disease – GERD (AOR 1.4, 95% CI 1.2-1.5), drain placement (AOR 1.3, 95% CI1.1-1.4), and routine postoperative swallow study (AOR 1.3, 95% CI 1.1-1.50).



Conclusion: The incidence of early GJ stricture following LRYGB decreased at MBSAQIP-accredited centers over the review period. Patients having complex operation and/or additional manipulation at or around GJ were at risk of developing early GJ stricture after LRYGB.

Conflicts of Interest:

Drs. Usah Khrucharoen, Zachary Weitzner, Yijun Chen, and Erik Dutson have no conflicts of interest or financial ties to disclose.

Corresponding Author: Erik P. Dutson, MD, FACS, Clinical Professor of Surgery
Chief, UCLA Section of Minimally Invasive and Bariatric Surgery
Surgical Director, COMET; Executive Director, CASIT
E-mail address: edutson@mednet.ucla.edu