Is there a future for Laparoscopic Gastric Greater curvature plication (LGGCP)? A Review of 44 patients

Abstract

Background: Laparoscopic Gastric Greater curvature plication (LGGCP) is a new restrictive weight loss procedure.

Methods: Between February 2011 and June 2012, 57 patients underwent LGGCP. 13 had it associated with a lap band and were excluded from the study. Data was collected through routine follow-up. Demographics, complications, and percentage of excess weight loss (% EWL) were determined.

Results: 44 patients underwent LGGCP, 40 women and 4 men with a mean age of 40 years (range 18 to 72), a mean body mass index (BMI) of 38 kg/m² (range 35 to 46). Comorbidities included 2 diabetes mellitus, 11 hypertension, 8 hyperlipidaemia and 8 obstructive sleep apnea. The mean operative time was 106 min (range 60 to 180) and mean duration of hospital stay was 18 hours (range 12 to 168). Operative complications included one subphrenic abscess, one gastro-gastric hernia and one acute respiratory distress syndrome. 35 patients experienced strong restriction with nausea and vomiting for the first 10 days (79.5%). 11 patients (25.0%) came back with intractable nausea and vomiting, and were hospitalized, or had their hospital stay prolonged. 4 patients needed early reversal of gastric plication (9%). There was no postoperative death. The mean postoperative % EWL was 30.6% (n=40), 57.0% (n=24), 50.7% (n=13), at 1, 6, 12 months respectively.

Conclusion: LGGCP yields an acceptable weight loss compared to other restrictive procedures, but with a higher readmission rate for postoperative nausea and vomiting, or even reversal of plication. We advocate more studies to evaluate safety and effectiveness.