Novel Bariatric Concept:Laparoscopic Adjustable Gastric Banded Plication (LAGBP)

1E-Da Bariatric & Metabolic International Surgery Center, Taiwan Chi-Hsien Lol, Chi-Kun Huang1

Background: Laparoscopic adjustable gastric band has been widely accepted as one of the safest bariatric surgeries for treating morbid obesity. However, because it produces variations in results and complications from port adjustment, alternative procedures are necessary. Objectives: We developed a novel technique, laparoscopic adjustable gastric banded plication (LAGBP), to improve the weight loss effect and decrease adjustment frequency of gastric band. Methods: After getting IRB approval, we enrolled 33 patients in this study between May 2009 and October 2010. LAGBP was performed with 5-port surgery. We placed the Swedish band using the par flaccida method, divided the greater omentum, and carried out gastric plication below the band until 3 cm from the pylorus with one-row continuous suture. We collected and analyzed pre- and post-operative data.Results: The mean operation time was 88.7 min, without intra-operative complications. Post-operative hospitalization was 1.33 days in average. Mean excess weight loss (%) at 1, 6, 9, 12, and 18 months after surgery was 20.4%, 42.3 %, 52.8 %, 57.9%, and 70.3% respectively. The gastric band adjustment rate was 1.8 times per patient during first year. Four complications (12.1%) developed in this series, a gastro-gastric intussusceptions, a tube kinking at the subcutaneous layer, gastric band leakage and a delayed gastric perforation. All these cases could be corrected by reoperation. There was no mortality. Conclusions: LAGBP provides excellent weight loss because of the adjustable and added plication effect. But long-term follow-up for this procedure is necessary.