

REINFORCED CIRCULAR STAPLES IN BARIATRIC SURGERY: IS THERE ANY BENEFIT?

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Background: With the increasing prevalence of morbid obesity, a growing demand for bariatric surgery exists. Roux-en-Y gastric bypass (RYGBP) is the most common procedure, but has multiple complications. This study evaluates the use of the reinforced circular stapler and its effects on reducing gastrojejunal anastomotic complications.

Methods: Data were obtained using retrospective chart review between January 2007 and November 2008 from a single institution. During this time period, 287 laparoscopic RYGBP were performed. Comparison was made between 2 groups. The nonreinforced circular stapler (NRCS) group consisted of 182 patients, and the reinforced circular stapler (RCS) group consisted of 105 patients. Perioperative complications and postoperative complications were compared between both the RCS and NRCS groups.

Results: Complications from gastrojejunal anastomosis were found in 44 patients (15.33%). There were 10 (9.52%) patients from the RCS group and 34 (18.68%) patients from the NRCS group with anastomotic complications ($P=0.0381$). Neither group had anastomotic leaks. The bleeding rate was 4.90% in the RCS group vs. 6.49% in the NRCS group. The stricture rate was 1.96% in the RCS group vs. 6.49% in the NRCS group. Ulcer formation occurred in 2.86% of the RCS group vs. 6.04% of the NRCS group.

Conclusions: The application of RCS reduced the incidence of gastrojejunal anastomotic complications. Therefore, it is beneficial to utilize reinforced circular staplers for the gastrojejunal anastomosis in laparoscopic RYGBP procedures. Patients are 2.182 times more likely to develop complications when no RCS device is used.