# Incidence of gastrojejunostomy stricture in laparoscopic Roux-en-Y gastric bypass using an autologous fibrin sealant.

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## Abstract:

Background: Anastomotic leak at the gastrojejunostomy is a life-threatening complication of laparoscopic Roux-en-Y gastric bypass (LRYGB). Fibrin sealants have been used as topical adjuncts to reduce leaks at the gastrojejunostomy. Our clinical observations suggest that an unintended consequence may be the promotion of anastomotic stricture. We hypothesized that the use of fibrin sealant at the gastrojejunostomy in patients undergoing LRYGB decreases the incidence of anastomotic leak but increases the incidence of clinically significant stricture. Methods: Following institutional review board approval, medical records of patients undergoing LRYGB by two surgeons at a single institution over a 5-year period were retrospectively reviewed. Preoperative demographics and postoperative complication rates including incidence of gastrojejunostomy leak and endoscopically diagnosed stricture requiring dilation within 1 year of surgery were recorded. Results: Four hundred twenty-five patients had fibrin sealant routinely applied to their gastrojejunostomy site and 104 did not. Four leaks occurred in the sealant group and two leaks occurred in the control group (p=0.2). Of patients who received sealant, 1.6 % needed postoperative blood transfusion compared to those 1.6 % of patient who did not receive sealant (p=0.05). There was a significantly increased rate of strictures requiring dilation in the sealant group (11.3 % compared to 4.8 % stricture rate in patients who did not receive sealant, p=0.04). Conclusions: In our experience, the use of fibrin sealant at linear stapled gastrojejunostomy site during LRYGB increases the incidence of clinically significant postoperative stricture and does not reduce the incidence of anastomotic leak. 