

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

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Abstract:

Introduction: 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 promote healing and reduce leaks at the gastrojejunostomy. Our clinical observations suggest that an unintended consequence of sealant use may be the promotion of anastomotic stricture. We hypothesized that use of fibrin sealants at the gastrojejunostomy in patients undergoing LRGYB decreases the incidence of anastomotic leak but increases the incidence of clinically significant stricture at the gastrojejunostomy. Methods: The medical records of 529 patients undergoing LRYGB by two surgeons at a single institution over a five year period were retrospectively reviewed. Patient age, gender, preoperative BMI, the incidence of gastrojejunostomy leak and endoscopically diagnosed stricture requiring dilation within one year of surgery were recorded. Results: Four hundred twenty five patients had fibrin sealant routinely applied to their gastrojejunostomy and 104 did not have any. Four leaks occurred in the sealant group and 2 leaks occurred in the control group. ($p = 0.19$). Forty-eight strictures requiring dilation occurred in the sealant group while 6 occurred in the control group. There was a significantly increased stricture rate in the sealant group (11.3% compared to a 5.8% stricture rate in patients who did not receive sealant, $p=0.048$). Conclusions: In our clinical experience the use of fibrin sealant at linear stapled gastrojejunostomy during LRYGB increases the incidence of clinically significant postoperative stricture and does not reduce the incidence of anastomotic leak.