

# **Laparoscopic sleeve gastrectomy: efficacy of fibrin sealant in reducing postoperative bleeding. A randomized controlled trial.**

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## **Abstract:**

Staple line leakage and bleeding are worrisome complications of laparoscopic sleeve gastrectomy (LSG). Solutions such as buttressing, oversewing or roofing the staple line with gelatin matrix have been proposed with controversial results. Because the use of fibrin sealant has shown a possible benefit in reducing the reoperation rate due to early complication in patients (pts) undergoing laparoscopic Roux-en-Y gastric bypass (LRYGBP), this solution has been tested in 100 consecutive pts undergoing LSG. A clinical trial has been performed on 100 consecutive pts. Exclusion criteria from the study were considered ASA IV pts, treated or untreated malignancies at any stage, steroids or FANS assumption, previous sovramesocolic surgery and conversion to open surgery. All pts were randomized to receive (group A, 50 pts) or to not receive (group B, 50 pts) 4 ml of human fibrin sealant (TisseelTM, Baxter() Deerfield, IL, USA) sprayed along the suture line. Primary endpoint was the incidence of postoperative complications: leaks, bleeding of the staple line or stenosis of the gastric remnant. Significance was assigned at a p level <0.05. By considering pts in group A vs. pts in group B our results shown no significant difference in fistulas or strictures occurrence (p = 0.2). Bleeding was significantly higher in patients not sprayed with sealant (group A vs. group B, 1/7, p = 0.03). This randomized trial has so far shown the use of fibrin sealant in LSG to significantly reduce postoperative bleeding. Although a trend in reducing leak occurrence emerges, it does not reach statistical significance.