

Effect of fibrin glue on small and large bowel anastomoses in the rat.

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Abstract:

Fibrin glue has been used as a hemostatic and adhesive agent for many years, but its efficacy in digestive surgery is still controversial. In this study, we evaluated the effect of fibrin glue on the healing of the small and large bowel anastomotic portions by measurement of the anastomotic bursting pressure. Further, the efficacy of fibrin glue in preventing intra-abdominal adhesion formation was assessed. Our results indicated that fibrin glue enhanced the resistance towards an elevation of intraluminal pressure in small bowel, but not in large bowel. Concomitantly, the glue did not significantly attenuate postoperative adhesion formation. A sealing action of fibrin glue might protect against bleeding and microleakage, resulting in beneficial effects on small bowel anastomosis.