

Effectiveness of fibrin tissue adhesive for colocolic anastomosis reliability. [Turkish]

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Abstract:

Leakage from a colonic anastomosis remains a major complication of surgery for colon emergencies and is associated with a significant increase in postoperative hospital stay and mortality rate. The purpose of our study was to investigate whether fibrin sealant, a well known tissue adhesive, will augment healing of bowel anastomosis in an experimental peritonitis model. Forty-eight male Sprague-Dawley rats were randomized into four groups. All rats underwent conventional sutured colo-colic anastomosis. The rats in group 3 and 4 had been exposed peritonitis before that procedure. In groups 2 and 4 fibrin sealant was added to the suture line. The measurements of bursting pressure and histopathological evaluations of suture lines revealed that peritonitis was deleterious to healing of colonic anastomosis. It was also seen that fibrin sealant augments healing of colonic anastomosis both in normal and peritonitis models.