

Fibrin sealant with PGA felt for prevention of bile leakage after liver resection.

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Abstract:

Background/Aims: Fibrin sealing are used to prevent postoperative hemorrhage and biliary leakage. However, the use of fibrin sealant alone is insufficient, thus requiring a kind of supportive material. Polyglycolic acid (PGA) felt was developed as a synthetic material to cover tissue defects. We performed preliminary evaluation of fibrin sealing combined with PGA felt (PGA-FS) as hemostat and to prevent biliary leakage, in comparison with the conventional fibrin-coated collagen fleece (FC-CF), retrospectively. Methodology: Between 2007 and 2008, PGA-FS was used in 34 patients, while FC-CF in 39 patients. We compared the incidence of biliary leakage, postoperative hemorrhage, surgical site infection, volume of ascites and the duration of hospital stay between the groups. Biliary leakage was diagnosed when the drain fluid/serum bilirubin ratio was >5 . Results: There were no significant differences of the patients' characteristics between the groups except for the surgical procedure. None of the patients experienced postoperative hemorrhage. Biliary leakage was noted in 4 of 39 patients with FC-CF but in none of the PGA-FS group ($p < 0.05$). Various other postoperative parameters were similar in the two groups. Conclusions: The results showed that the PGA-FS would be effective in preventing biliary leakage, compared with the FC-CF. © H.G.E. Update Medical Publishing S.A.