

Reinforcement of pancreaticojejunostomy using polyglycolic acid mesh and fibrin glue sealant.

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Abstract:

Objectives: To examine whether pressure-tight reinforcement of pancreaticojejunostomy (PJ) using polyglycolic acid (PGA) mesh and fibrin glue sealant can reduce the incidence of postoperative pancreatic fistula (POPF). **Methods:** The study population included 128 consecutive patients who underwent pancreaticoduodenectomy between September 2006 and January 2010. Postoperative mortality and morbidity among 50 patients who underwent reinforcement of PJ anastomosis using PGA mesh and fibrin glue were compared with 78 patients (historical controls). **Results:** The 2 groups demonstrated no significant differences in frequencies of overall or septic complications, reoperation, or in-hospital death. No significant difference in the frequency of POPF, delayed gastric emptying, or intra-abdominal abscess was found between groups. There was no difference between the 2 groups in the number of necessary interventions, and no bleeding complications or POPF-related mortality occurred. The median length of postoperative in-hospital stay between the 2 groups was similar: 13 days (range, 8-101 days) versus 14 days (range, 8-61 days). Similar findings were observed in a subgroup analysis consisting of patients with a pancreatic duct diameter smaller than 3 mm. **CONCLUSION:** This retrospective single-center study showed that reinforcement of PJ anastomosis using PGA mesh and fibrin glue provided no significant benefit in reducing the frequency of POPF. Copyright © 2011 by Lippincott Williams & Wilkins.