

Pancreaticojejunostomy by reinforcing the pancreas without covering the anastomotic line reduces pancreatic fistula.

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Abstract:

Background/objective: Postoperative pancreatic fistula (POPF) is the most common and an intractable complication after pancreaticoduodenectomy (PD). Many efforts have been made to lessen POPF, but nevertheless its incidence still remains high. The aim of this study was to evaluate the efficacy of reinforcing the pancreatic remnant, but the non-reinforcement of the anastomotic line, by using a modified polyethylene glycolic acid (PGA) felt pasting method after PD, especially in cases with a soft pancreas. Methods: Pancreaticojejunostomy (PJ) anastomosis was performed with the end-to-side 2-layer manner in which the cut end of the pancreatic remnant was pasted with PGA felts using a fibrin sealant in 31 patients (PGA group). The postoperative outcome was then compared with historical control subjects (control group, 33 patients). Results: Incidences of overall, Grade A and Grade B of POPF in the PGA group were 29.0, 22.6 and 6.5%, respectively, and tended to be lower than that in the control group (48.5, 33.3 and 15.2%), although no statistical significance was observed. There was no Grade C of POPF in this study. Referring only to the soft pancreas, however, the overall incidence of POPF in the PGA group was significantly lower than that in the control group (39.1 vs. 70.0%, $p=0.042$). Conclusion: Applying PGA felt pasting to PJ anastomosis could be one effective measure for reducing POPF after PD. © 2013 Surgical Associates Ltd.