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## Early Experience of Binding Pancreaticojejunostomy and its Comparison with Dunking Pancreaticojejunostomy

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**Purpose:** Pancreatic fistula has been a leading cause of mortality and morbidity following pancreaticoduodenectomy. The objective of this study was to evaluate the possibility of controlling it by introduction of binding pancreaticojejunostomy proposed by Peng into the operative procedure.

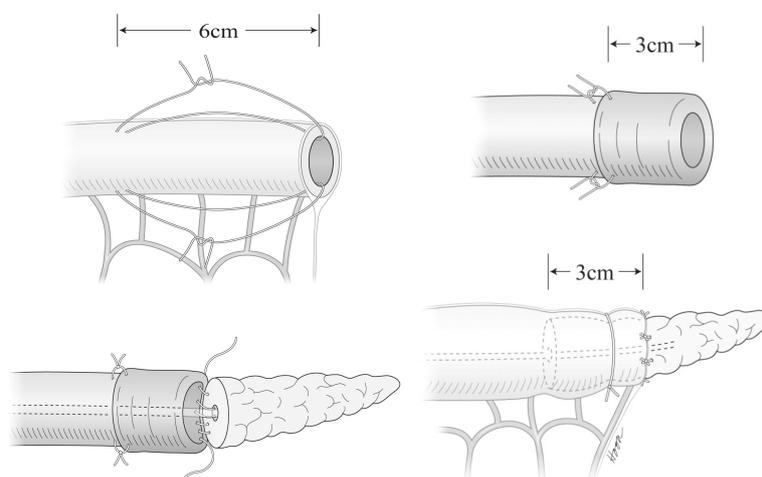
**Methods:** Prospectively collected data of patients undergone pancreaticoduodenectomy at the Department of Surgery, Daejeon St. Mary's hospital between April 2007 and May 2009 were analyzed retrospectively. Total 31 patients were included. Of them, 16 patients underwent dunking pancreaticojejunostomy and 15 patients received a special technique proposed by Peng called binding pancreaticojejunostomy which results in about 3 cm invagination of pancreatic remnant by the jejunal segment bearing electrically destroyed mucosa reinforced by inner and outer sutures.

**Results:** The 2 groups were comparable in demographic data, preoperative characteristics, underlying pathologies, pancreatic textures, and the duct diameters. Mean operative time showed insignificant difference ( $388 \pm 29$  min vs  $459 \pm 21$  min,  $p=0.060$ ). No difference was found in the postoperative course except for the degree of complications. In contrast to dunking group where 2 cases of grade III/V pancreatic fistula occurred, binding group exhibited no severe complication. In addition, transformation data of amylase measured from Jackson-Pratt drains into natural logarithm demonstrated significant differences on postoperative 1, 3 and 7 days between two groups (POD1  $6.97 \pm 0.41$  vs  $6.10 \pm 0.44$  [ $p=0.037$ ]; POD3  $6.97 \pm 0.41$  vs  $6.10 \pm 0.44$  [ $p=0.032$ ]; POD7  $4.69 \pm 0.35$  vs  $3.88 \pm 0.25$  [ $p=0.034$ ]).

**Conclusion:** Binding pancreaticojejunostomy can be considered equivalent to dunking pancreaticojejunostomy in terms of operative difficulties and more effective in preventing complications related with pancreatic fistula.

**Key words:** Pancreaticoduodenectomy, pancreatic fistula, dunking pancreaticojejunostomy, binding pancreaticojejunostomy

### Illustration of Binding pancreaticojejunostomy



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