AB120. P096. A new pancreatojejunostomy of duct-to-mucosa combining “back-to-back” cross horizontal mattress anastomosis reduce postoperative pancreatic fistula

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Background: Postoperative pancreatic fistula (POPF), the main complication after pancreaticoduodenectomy (PD), is always related to the morbidity and mortality. Too large potential clearance of anastomotic stoma (needle stitch clearance and peripheral suture clearance), destruction of suture shear force to pancreatic tissue upon knotting and delayed healing of the PA are possible factors resulting in the POPF. Aiming at above factors, we design a duct-to-mucosa combining “back-to-back” cross horizontal mattress anastomosis. In this method, we take the way of pancreas—jejunum end-to-side anastomosis, and suture by cross horizontal mattress way at the anterior and posterior walls of the pancreas and the jejunum, to eliminate the needle stitch clearance; as the pancreas has a large thrust face which is inapropriate to be incised, apply the interrupted suture way for the pancreas mucosa to jejunum mucosa; after anastomosis, the pancreas remnant will get into the jejunum serosa about 1cm, making the pancreas—jejunum in “back-to-back”. The objective of our study was to evaluate the safety and efficiency of the novel anastomotic method that termed duct-to-mucosa combining with “back-to-back” cross horizontal mattress inserting pancreatojejunostomy.

Methods: We investigated the postoperative recovery and complications of 102 patients who underwent pancreaticoduodenectomy from October 2015 to October 2017 retrospectively. The new technique was used in 52 patients, and was compared with the classical method of invagination anastomosis technique in 50 patients as controls. We collected the general characteristics of patients, the postoperative complications, hospital stays and hospitalization expenses, etc. We use the statistical software SPSS19.0 to analyze the data. We chose the methods of Chi-square test, independent sample t-test, rank-sum test depend on the data type.

Results: The duct-to-mucosa combining “back-to-back” cross horizontal mattress method significantly reduced the postoperative pancreatic fistula rate (9.6% vs. 30%, P=0.010). The mean drainage amylase level of “back-to-back” group is lower than invagination group at POD3. However, the operation time in “back to back” group is longer than in the invagination group (327.69±90.49 vs. 217.80±41.47 min, P=0.000).

Conclusions: Duct-to-mucosa combining with “back-to-back” cross horizontal mattress inserting pancreatojejunostomy reduced the incidence of POPF effectively in our study.

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