

Blumgart-style laparoscopic pancreatico-jejunostomy using barbed sutures

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Background : Blumgart style pancreaticojejunostomy is a useful anastomosis method that can maximize pancreas invagination by pulling the jejunum for outer layers. However, when applied in laparoscopy, general threads have difficulty in getting close to the pancreas cut surface – jejunum distance until a knot is made. We performed pancreaticojejunostomy using barbed sutures to narrow the distance between the pancreas cut surface – jejunum.

Methods : A 74-year-old male was diagnosed with an ampulla of Vater cancer. The patient is placed in a french position with five ports placed. The operator used umbilicus 12mm and RUQ 5mm on the patient's right side, scopist used RLQ 12mm, We used three 3-0 barbed absorbable (V-lock™) with trans-pancreatic manner as a posterior outer layer, six 5-0 absorbable monofilament (PDS) for duct to mucosa, and one 4-0 barbed suture with continuous manner as an anterior outer layer.

Results : The pancreas was soft, and the size of duct was 3.5mm. Total operative time was 785 min, pancreaticojejunostomy took 88 min. There was a biochemical leak in the post-operative period. He drank water the next day after surgery. He ate a clear liquid diet well from POD 8 and a soft diet on POD 11 and was discharged from POD15. Pathology showed T1bN0 of the ampulla of Vater cancer.

Conclusions : The overall operation time and anastomosis time were relatively long. If the personal learning curve is overcome, Blumgart style laparoscopic pancreaticojejunostomy using barbed sutures can be a safe option for pancreaticojejunostomy reconstruction.

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