

Pancreas – preserving duodenectomies not associated with FAP

Experience of 26 cases

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Background

Pancreas – preserving duodenectomies (PPDE) are uncommon procedures usually reserved for duodenal adenomas associated with familial adenomatous polyposis (FAP). PPDs performed for other entities are much more rare operations

Aim

To assess the efficacy of PPD for lesions not associated with FAP

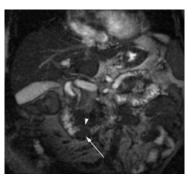
Method

Prospective analysis of 26 consecutive cases of PPD (2006 – 2015) with assessment of preoperative (US, CT, MRI, EUS) and pathohystological diagnosis, short- and long-term results, including QoL

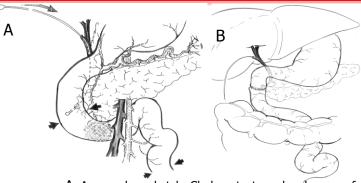
Procedures

Infrapapillary duodenectomy

13 cases



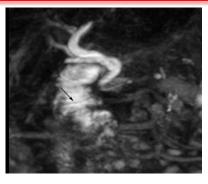
MRI (B-TFE): GIST is 6-7 cm below the tumor. horizontal part of the duodenum (long arrow) with uninvolved adventitia (arrowhead).



A. A procedure sketch. Cholecystectomy has been performed. The probe is introduced through the cystic duct stump to identify the main papilla location. The arrows outline the resection boundaries.

B. An infra-papillary duodenectomy was done.

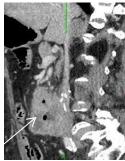
Duodenojejunostomy was performed 1 cm below the main

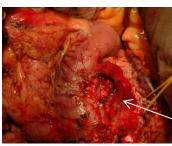


After surgery

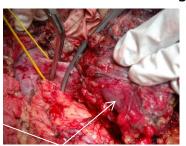
Case Infrapapillary duodenal, IVC (with cava- filter) and aorta resection for solitary endometrial cancer met. with aorto-duodenal fistula and 6 GI bleedings







papilla



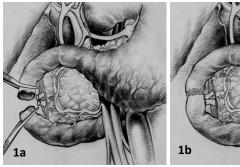


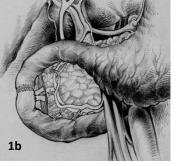
Tumor

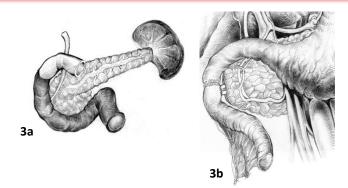
No distant and local relapses during the F/U in all 13 cases

Procedures

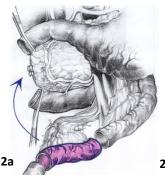
Pancreas-preserving duodenectomy for duodenal dystrophy (13 cases)

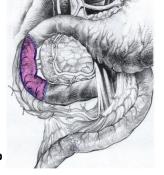






Duodenal resection with direct duodeno- duodenoanstomosis and replantation of both ducts



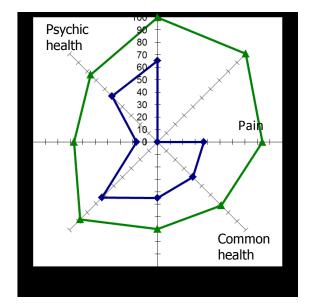


Subtotal duodenectomy with replantation of both ducts into neoduodenum. Removed area is shadowed

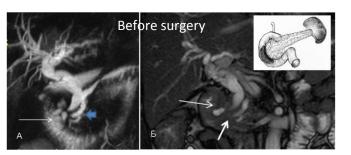
Duodenal resection with jejunal patch interposition and replantation of both ducts into neoduodenum

All variants of pancreas - preserving duodenal resections for DD are justified if the are no accompanied chronic pancreatitis in orthotopic gland

Long-term results of Pancreas-preserving duodenectomy for duodenal dystrophy (13 cases)

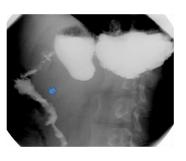


QoL before and after surgery



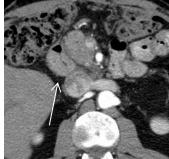


MRCP before and after the PPDR



X-ray with barium (A) and cholangiography (B) on the day 7 after the PPDR with jejunal interposition





CT before and after the procedure.

Duodenum before and "neoduodenum"
after the PPDR with jejunal interposition (arrows)

Results

Duodenal dystrophy in 13 cases, duodenal GIST in 10 cases, villous adenoma, gigantic leiomyosarcoma, paraganglioma and solitary endometrial cancer metastasis in 1 case each were met. In 23 cases the diagnosis was established before surgery. The most precise diagnostic modalities were CT and EUS.

The main symptoms were pain(13), GI bleeding(11) and vomiting(4). Infrapapillary duodenectomy(ID) was performed in 13 cases, one with aorta and inferior vena cava resections, and in 50% of cases duodenal resection with replantation of common bile and main pancreatic ducts in neoduodenum was performed.

Morbidity rate 29%. Patient with duodenal sarcoma died on 100th day after ID due to complications of pancreonecrosis and another one 94 days after surgery due to pseudomembranous colitis.

Other patients are alive demonstrating long-term overall and DF survival and good QoL.



Well-timed PPD is an efficient method of treatment as for benign so as for some malignant duodenal lesions and can be an alternative for pancreaticoduodenectomy.