

Technical Aspects of a Posterior Pancreatic Head Enucleation – An Organ-Sparing Alternative to Pancreatico-Duodenectomy for Benign and Low-Grade Malignant Pancreatic Tumors

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Abstract

From a technical point of view, enucleation can be challenging for a few locations with hard access, such as the posterior pancreatic head, particularly for deeply-located lesions, in close relationship with the main pancreatic duct (MPD). The risk of MPD injuries with secondary pancreatic fistula is high in these specific situations. Hereby we describe a technique of posterior pancreatic head enucleation in a 48-year-old male patient diagnosed with a deeply-located branch duct type intraductal papillary mucinous neoplasm (BD-IPMN). A posterior pancreatic head enucleation of the BD-IPMN was performed along with segmental resection of the MPD and end-to-end anastomosis, with protection by a plastic stent passing both through the MPD anastomosis and major duodenal papilla. No protective pancreatico-jejunostomy was necessary. A grade B pancreatic fistula complicated the postoperative course, and a grade A delayed gastric emptying, both conservatively managed. Enucleation of deeply-located tumors at the dorsal pancreatic head is challenging but feasible and safe. Segmental resection of the MPD with end-to-end anastomosis protected by a transpapillary plastic stent for injuries during enucleation can be safely performed. Thus, the operative time during enucleation is reduced, and the potential morbidity of a pancreatico-jejunostomy is eliminated.

Key words: cystic pancreatic neoplasm, intraductal papillary mucinous neoplasm, enucleation, main pancreatic duct, pancreatic fistula