

Early Experiences Of Minimally Invasive Pancreaticoduodenectomy

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Background : It is difficult to apply minimally invasive pancreaticoduodenectomy (MIPD) to inexperienced hepatobiliary and pancreatic surgeons due to several causes, including a long operative time, technical difficulties performing the dissection arising from the proximity of large vessels, complex reconstruction procedures, and perceived inappropriateness of this intervention for patients with highly advanced malignant disease.

Methods : 12 cases of MIPD were performed by single inexperienced HBP surgeon from March 2019 to September 2021.

Results : MIPD was performed in 1 patient in 2019, 3 patients in 2020, and 8 patients in 2021. Disease distribution is as follows; 4 ampulla of Vater cancer, 3 intraductal papillary mucinous neoplasm, 2 bile duct cancer, 2 duodenal cancer, 1 gastrointestinal stromal tumor. Open conversion was performed in 1 out of 12 patients (8.3%), and severe duodenitis with hardly LN enlargement at right side of the superior mesenteric artery was the reason. Median operative time was 427 minutes (Interquartile range: 369~474), Median age was 68, BMI was 23.8, and lengths of hospital stays were 9 days. Complication was in 3 patients, with clinically relevant postoperative pancreatic fistula in 1 patient, Chyle in 1 patient, and hepaticojejunostomy leakage in 1 patient. HJ leakage patients were included in Clavien-Dindo classification phase IIIa. The count of median harvest lymph node was 19 (IQR: 17~21). R0 resection was performed in all of them.

Conclusions : MIPD is challenging for inexperienced HBP surgeon. However, continuous efforts to overcome the learning curve will be required to realize the improvement of the potential benefit of laparoscopic surgery.

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