Symposium 4

Laparoscopic Pancreaticoduodenectomy: Experience in AMC

Department of HBP Surgery, Asan Medical Center

Song Cheol Kim

There have been only a few reports on laparoscopic pylorus-preserving pancreaticoduodenectomy (LPD) from experienced centers. Clinical outcomes still has been remained undetermined.

One hundred patients with benign or malignant lesions in the pancreatic head underwent laparoscopic pylorus-preserving pancreaticoduodenectomy (LPPPD) between 2005 to 2011. We analyzed overall clinical outcomes and changes of clinical outcomes by learning period to assess the feasibility and safety of this procedure as a single institutional study.

The mean age of the patients was 50.3 years, and there were 46 men and 54 women. Pancreas pathologic examinations revealed 38 patients with intraductal papillary mucinous neoplasms (IPMNs), 16 solid pseudopapillary tumors, 15 neuroendocrine tumors, 7 serous cystic neoplasms, 6 pancreatic ductal adenocarcinomas, 3 ampulla of Vater cancers and duodenal gastrointestinal stromal tumors, 2 patient with a mucinous cystic neoplasms and other benign cysts, 1 of metastatic renal cell cancer.

There was one operative mortality from postoperative bleeding. Median operative time was 7.9 hours, which was decreased according to accumulation of experience from 8.5 hours in first 30 cases and 6.3 hours in last 40 cases. Main complications developed in 27% comprising of 6 (6.0%) of bile leak, and 5 instances of pancreatic fistula. Five patients experienced ileus after operation. There were 4 cases of postoperative bleeding and 3 of wound infection. Complication rate was also decreased from 40% in first 30 cases to and 15% in last 40 cases. The median duration of hospital stay was 11 days (range 7-40 days), which was also decreased from 17 days in first 30 cases, to 10 days (range 7-40) in 40 cases. In 12 patients with invasive malignant disease, median tumor size was 2.8 cm, and median number of lymph node harvested was 13. All patients had margin negative R0 resection.

LPPPD is technically safe and feasible with acceptable morbidity and other clinical outcomes in benign or malignant diseases. Clinical outcomes after learning curve could be improved with the potential benefit of laparoscopic procedure. Well controlled trials are needed to investigate these possible clinical advantages and oncologic equalities.