Surgical and Oncological Outcomes from the Experience of 5,000 Pancreatectomies in Single Institution

Yoonhyeong BYUN¹,², Yoo Jin CHOI¹, Youngmin HAN¹, Jae Seung KANG¹, Hongbeom KIM¹, Wooil KWON¹, Jin-Young JANG¹

¹Department of surgery, Seoul National University hospital, Korea
²Department of surgery, Uijeongbu Eulji Medical Center, Korea

Introduction: Pancreatic resection is technically difficult and has higher postoperative mortality and morbidity rates than those of other abdominal operations. As the incidence of postoperative morbidity and mortality has gradually decreased, some centers have reported remarkable achievements by attempting minimally invasive surgery. This study was performed to investigate the chronological trends of pancreatectomies by analyzing a large-scale database.

Methods: The medical records of 5,175 patients who underwent pancreatic resection between 1961 and 2019 at a single institution were collected and reviewed. The chronological trend of surgical outcome was investigated by dividing the period into 5-year intervals. To investigate the chronological change in survival outcomes of periampullary cancer, the survival data of 3,108 patients were analyzed.

Results: Patient age and the proportion of pancreatic cancer have increased over time. Pancreatic cancer was most common (35.9%) in 2015–2019, followed by pancreatic cyst (24.8%), common bile duct cancer (13.4%), and ampulla of Vater cancer (10.1%). The incidence of postoperative complications tended to decrease over time (26.0% in 2000–2004 and 20.8% in 2015–2019). A comparison of survival outcomes of periampullary malignancies by period revealed that pancreatic cancer significantly improved (5-year survival rate: 14.4% before 2000 vs. 15.2% in 2000–2009 vs. 29.0% after 2009, p < 0.001).

Conclusions: Postoperative complication rate and duration of recovery have improved in pancreatic resection over time. The proportion of minimally invasive pancreatectomies is gradually increasing. To improve outcomes in the future, active multidisciplinary approach and postoperative management are needed.

Corresponding Author: Jin-Young JANG (jangjy4@snu.ac.kr)

Presenter: Yoonhyeong BYUN (yoonhyeong8726@gmail.com)