

Laparoscopic Pancreaticoduodenectomy - Initial Experience in a Hepatopancreatobiliary High-Volume Center

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Abstract

Introduction: Pancreaticoduodenectomy is a complex surgical procedure involving meticulous resection and reconstruction steps.

Materials and Methods: We analyzed the first 15 laparoscopic pancreaticoduodenectomies performed for ampullary, periampullary, and cephalic pancreatic tumors at the Fundeni Clinical Institute, Bucharest, a high-volume center with extensive expertise in hepatopancreatobiliary surgery. Patient demographics, medical history, intraoperative parameters, early postoperative outcomes, and oncological results regarding radical resection were evaluated.

Results: The mean patient age was 59.4 years, with 53.33% males. Cardiovascular comorbidities were present in 60% of patients, while 26.66% had controlled type 2 diabetes mellitus. Previous cholecystectomy was noted in 46.66% of cases, and 60% presented with jaundice at diagnosis. The mean operative time was 360 minutes. Pancreaticogastrostomy was performed in 66.66% of cases and pancreaticojejunostomy in 33.33%, with 26.66% of procedures being fully laparoscopic. Biochemical leakage occurred in 13.33% of cases, while grade B pancreatic fistula developed in 6.67% of cases and was managed conservatively. Moderate biliary fistula occurred in 13.3% of the patients, with remission under conservative treatment. All resections achieved negative margins (R0). The mean number of retrieved lymph nodes was 15.6, and the average hospital stay was 18.7 days.

Discussions: Laparoscopic pancreaticoduodenectomy provides oncological outcomes comparable to the open approach and may improve postoperative recovery in experienced centers.

Conclusions: Our results are encouraging, with potential for further improvement through careful patient selection and refinement of surgical technique.

Keywords: laparoscopy, pancreatic cancer, periampullary tumors