

WORLD CONGRESS OF GASTROENTEROLOGY AND DIGESTIVE DISEASES



Rohith Kodali

All India Institute of Medical Sciences, India

Comparison of Open and Laparoscopic assisted Pancreaticoduodenectomy for periampullary carcinoma – A Propensity score-matched analysis

Abstract:

Background & Aim: The safety and efficacy of total laparoscopic pancreaticoduodenectomy (TLPD) for patients with periampullary carcinoma is still a matter of debate with the major concern being clinically relevant post-operative pancreatic fistula (POPF). Despite the surgeon's experience pancreatojejunostomy performed laparoscopically could not match with the open technique regarding needle handling and precision of performing anastomosis which showed an increased rate of POPF in TLPD. Laparoscopic-assisted pancreaticoduodenectomy (LAPD), a hybrid procedure combining laparoscopic resection and reconstruction with a small incision may be an alternative selection. The present study aims to compare short-term outcomes and oncological efficacy between LAPD and Open pancreaticoduodenectomy (OPD).

Methods: The data of patients who underwent LAPD or OPD for periampullary carcinoma at All India Institute of Medical Sciences, Patna, India from July 2019 to August 2022 were analyzed. Thirty LAPD were performed and were compared with 30 OPD after 1:1 propensity score matching. Demographic data, intraoperative and postoperative data (30-day), and pathological data have been compared.

Results: A total of 93 patients were included in the study, 30 patients underwent LAPD, and 62 patients underwent OPD. After propensity-matched scoring 30 patients in the LAPD group and 30 in the OPD group were included in the matched cohort. No difference was observed in demographics between the two groups. Regarding the operative procedure, operative time was more with the LAPD group vs OPD group $463.8 (\pm 40.94)$ vs $356.29 (\pm 40.3)$ (P value < 0.001). There was a significant difference between the length of the incision (6 vs 17 cm), postoperative pain (VAS Score 5 vs 7), the start of early oral intake (5 vs 6 days), and the length of hospital stay (8 vs 10 days) in the LAPD group (P value < 0.001). The two groups did not see any difference between blood loss, ICU care stay, short-term complications, lymph node retrieval, pathological outcome, R0 resection, and early (30-day mortality).

Conclusion: LAPD has the same safety, technical feasibility, and short-term oncological efficacy compared with OPD.