



Laparoscopic versus Open Distal Pancreatectomy – A Single-Institution Experience

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BACKGROUND

Laparoscopic distal pancreatectomy is a minimally invasive surgical approach for treating tumors in the distal pancreas.

AIM

This study aimed to compare this technique with the traditional open procedure.

METHODS

We retrospectively analyzed a prospectively maintained database that included 400 pancreatectomies. The laparoscopic distal pancreatectomy group (LDP) was compared to the open distal pancreatectomy group (ODP), employing propensity score matching (PSM) for analysis.

RESULTS

Between 2016 and 2023, a total of 108 distal pancreatectomies were performed: 19 (17.6%) laparoscopically and 89 (82.4%) openly, with a conversion rate of 13.6%. Severe morbidity rates were 28.1% in the ODP group, 47.4% in the LDP group, and 15.8% in the ODP-PSM group. The difference in severe morbidity rates between the LDP and ODP-

PSM groups was statistically significant ($p = 0.034$), largely due to a high rate of Clavien–Dindo grade 3a complications, which were 42.1% in the LDP group compared to 10.5% in the ODP-PSM group ($p = 0.042$). The 90-day mortality rates were 3.3% in the ODP group and 5.3% in the LDP and ODP-PSM groups. The LDP group exhibited a shorter duration of intravenous narcotic analgesia, averaging 5 days compared to 7 days in the ODP group ($p = 0.041$). The groups had no significant differences in R0 resection rates or postoperative pancreatic fistula rates.

CONCLUSIONS

Our findings highlight the importance of preventing postoperative complications. Oncological outcomes between the two techniques are already comparable, and postoperative pain management appears to be more favorable with the laparoscopic approach.