

Abstract

COMPLICATIONS OF PANCREATICODUODENECTOMIES AND DISTAL PANCREATECTOMIES

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Background: The number of pancreaticoduodenectomies (PD) and distal pancreatectomies (DP) performed for malignancies continues to increase. We sought to evaluate and compare the complications of these two operations.

Method: The National Surgery Quality Improvement Program (NSQIP) database was queried for codes describing PD or DP procedures (CPT 48150 and 48140). Malignancies were selected based upon ICD.9 codes.

Results: Between 2005 and 2010 a total of 3,189 patients underwent PD and 1,660 patients underwent DP. Patients undergoing PD were more likely to be male (53% vs. 43%), older (65 vs. 63 years) had more superficial surgical site infection (10% vs. 5%), abscesses (2.5% vs. 1%), and wound disruptions (2.2% vs. 0.7%). The PD group also had a higher incidence of sepsis (11% vs. 7%), septic shock (5% vs. 2%), re-intubation (5.5% vs. 2.3%) and prolonged mechanical ventilation (7% vs. 3%). Patients undergoing PD were more likely to receive transfusion (9% vs. 5%), return to the operating room (8% vs. 4%), had a longer hospital stay (14 vs. 8 days), total operative time (391 vs 246), and higher 30 day mortality (2.6% vs. 1.4 %). All these differences were statistically significant ($P < 0.05$).

Conclusion: PD performed for malignancy has a higher incidence of complications and mortality than DP. This may be a direct result of increased operative time and complexity. The NSQIP database lacks information on pancreatectomy specific complications (fistula formation, etc.) which limits our analysis. We advocate for introducing such outcome measures in the NSQIP database.