

ORIGINAL ARTICLES

Clinical Outcomes After Total Pancreatectomy

A Prospective Multicenter Pan-European Snapshot Study

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Annals of Surgery 276(5):p e536-e543, November 2022. | DOI: 10.1097/SLA.0000000000004551

Abstract

Objective:

To assess outcomes among patients undergoing total pancreatectomy (TP) including predictors for complications and in-hospital mortality.

Background:

Current studies on TP mostly originate from high-volume centers and span long time periods and therefore may not reflect daily practice.

Methods:

This prospective pan-European snapshot study included patients who underwent elective (primary or completion) TP in 43 centers in 16 European countries (June 2018–June 2019). Subgroup analysis included cutoff values for annual volume of pancreatoduodenectomies (<60 vs ≥60).

Predictors for major complications and in-hospital mortality were assessed in multivariable logistic regression.

Results:

In total, 277 patients underwent TP, mostly for malignant disease (73%). Major postoperative complications occurred in 70 patients (25%). Median hospital stay was 12 days (IQR 9–18) and 40 patients were readmitted (15%). In-hospital mortality was 5% and 90-day mortality 8%. In the subgroup analysis, in-hospital mortality was lower in patients operated in centers with ≥ 60 pancreatoduodenectomies compared < 60 (4% vs 10%, $P = 0.046$). In multivariable analysis, annual volume < 60 pancreatoduodenectomies (OR 3.78, 95% CI 1.18–12.16, $P = 0.026$), age (OR 1.07, 95% CI 1.01–1.14, $P = 0.046$), and estimated blood loss $\geq 2L$ (OR 11.89, 95% CI 2.64–53.61, $P = 0.001$) were associated with in-hospital mortality. ASA ≥ 3 (OR 2.87, 95% CI 1.56–5.26, $P = 0.001$) and estimated blood loss $\geq 2L$ (OR 3.52, 95% CI 1.25–9.90, $P = 0.017$) were associated with major complications.

Conclusion:

This pan-European prospective snapshot study found a 5% inhospital mortality after TP. The identified predictors for mortality, including low-volume centers, age, and increased blood loss, may be used to improve outcomes.

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