Pancreatogastrostomy Versus Pancreatojejunostomy for RECOnstruction After PANCreatoduodenectomy (RECOPANC, DRKS 00000767): Perioperative and Longterm Results of a Multicenter Randomized Controlled Trial.

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OBJECTIVES:

To assess pancreatic fistula rate and secondary endpoints after pancreatogastrostomy (PG) versus pancreatojejunostomy (PJ) for reconstruction in pancreatoduodenectomy in the setting of a multicenter randomized controlled trial.

BACKGROUND:

PJ and PG are established methods for reconstruction in pancreatoduodenectomy. Recent prospective trials suggest superiority of the PG regarding perioperative complications.

METHODS:

A multicenter prospective randomized controlled trial comparing PG with PJ was conducted involving 14 German high-volume academic centers for pancreatic surgery. The primary endpoint was clinically relevant postoperative pancreatic fistula. Secondary endpoints comprised perioperative outcome and pancreatic function and quality of life measured at 6 and 12 months of follow-up.

RESULTS:

From May 2011 to December 2012, 440 patients were randomized, and 320 were included in the intention-to-treat analysis. There was no significant difference in the rate of grade B/C fistula after PG versus PJ (20% vs 22%, P = 0.617). The overall incidence of grade B/C fistula was 21%, and the in-hospital mortality was 6%. Multivariate analysis of the primary endpoint disclosed soft pancreatic texture (odds ratio: 2.1, P = 0.016) as the only independent risk factor. Compared with PJ, PG was associated with an increased rate of grade A/B bleeding events, perioperative stroke, less enzyme supplementation at 6 months, and improved results in some quality of life parameters.

CONCLUSIONS:

The rate of grade B/C fistula after PG versus PJ was not different. There were more postoperative bleeding events with PG. Perioperative morbidity and mortality of pancreatoduodenectomy seem to be underestimated, even in the high-volume center setting.