

## AB059. P031. Outcomes of pylorus-preserving versus conventional pancreaticoduodenectomy in the era of enhanced recovery: a single-institution experience

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**Background:** Recent randomized trials and meta-analysis have demonstrated an increased incidence of delayed gastric emptying (DGE) with pylorus preserving pancreaticoduodenectomy (PP) compared to conventional Whipple (CW). At our high-volume referral center, both techniques are performed according to individual surgeon preference, with perioperative care standardized by an enhanced recovery [Electronic Residency Application Service (ERAS)] protocol—a setup akin to an expertise-based trial. We therefore set out to compare the morbidity experience of patients undergoing PP and CW at our institution.

**Methods:** Following IRB approval, we accessed our prospectively collected complications database for patients undergoing PP and CW after the institution of our ERAS protocol. This protocol included routine use of epidural analgesia, limited opioids, early ambulation and no routine

nasogastric tubes. We compared their preoperative characteristics and postoperative complications using student t-tests, chi-square tests, Wilcoxon rank-sum test, and univariate logistic regression to identify variables associated with DGE. We performed a multivariate logistic regression to adjust for confounding variables and isolate the effect of pylorus preservation on DGE.

**Results:** In total, 133 CW and 147 PP were identified during the study period. Their preoperative characteristics were similar, but more patients in the CW group underwent a portal vein resection (24.8% *vs.* 14.3% for CW and PP respectively,  $P=0.026$ ). Moreover, 21.7% and 17.7% of patients developed DGE in the CW and PP groups respectively ( $P=0.457$ ). DGE was associated with diabetes (OR, 2.9; 95% CI, 1.43–6.06;  $P=0.03$ ) but not body mass index (BMI) (OR, 1.04; 95% CI, 0.98–1.11;  $P=0.177$ ) at univariate logistic regression. Patients that developed a pancreatic fistula had higher odds of DGE (OR, 2.9; 95% CI, 1.58–5.46;  $P=0.001$ ). At Multivariate Logistic Regression, there remained no association between PP and DGE.

**Conclusions:** The morbidity of patients undergoing CW and PP by expert surgeons under an ERAS protocol was similar at our institution.

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