

## Have BMI an Impact in Short- and Long-Term Outcome After Pancreaticoduodenectomies?

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**Context** Increased BMI is generally considered a risk factor for postoperative complications after pancreaticoduodenectomy (PD). In contrast, data are scarce regarding BMI as long term prognostic factor.

**Objective** To evaluate the impact of BMI on short and long term results after PD. **Methods** Patients undergone PD 2004-2010 was retrieved from our prospective database. Demographics, peri-operative data, morbidity, mortality, pancreatic fistula (PF) rate, length of stay (LOS), and survival were analyzed. The cohort was divided by BMI into overweight/obese (O; BMI  $\geq 25$  kg/m<sup>2</sup>) and controls (C; BMI  $<25$  kg/m<sup>2</sup>).

**Results** A total of 367 PDs were included (O=141/C=226). No significant differences were found between O and C regarding demographics, peri-

operative data, morbidity (O 47% vs. C 54%) or mortality (O 3.4% vs. C 3.5%). O had a significantly higher rate of PF (O 20% vs. C 9.5%; P=0.006) and longer LOS (O 18 days vs. C 15 days; P=0.05) compared to C. An increasing risk for PF was observed with increasing BMI: underweight 0%, normal-weight 10%, overweight 16%, and obese 32% PF rate, respectively. A similar 1-, 3- and 5-year survival rate was observed for O and C both in pancreatic ductal adenocarcinoma, and in other periampullary cancers. **Conclusion** Overweight/obesity increases the risk for PF and thus LOS, but do not otherwise alter short term outcome or survival rate after oncological PD for pancreatic or periampullary cancer.