

High-risk Pancreatic Anastomosis Vs. Total Pancreatectomy After Pancreatoduodenectomy: Postoperative Outcomes And Quality Of Life Analysis

Giampaolo PERRI^{*1}, Giovanni MARCHEGIANI¹, Anna BURELLI¹, Claudio BASSI¹, Roberto SALVIA¹

¹General And Pancreatic Surgery, Verona University Hospital, ITALY

Background : Postoperative outcomes and quality of life (QoL) after high-risk pancreaticoduodenectomy (PD) and total pancreatectomy (TP) have never been compared. We sought to evaluate TP as an alternative to PD in patients at high-risk for postoperative pancreatic fistula POPF.

Methods : All patients who underwent PD or TP at Verona University Hospital between July 2017 and December 2019 were identified. High-risk PD (HR-PD) was defined according to the alternative Fistula Risk Score. Patients who underwent HR-PD or planned PD that was intraoperatively converted to TP (C-TP) with at least 12 months of follow-up were enrolled in this cross-sectional study of QoL.

Results : A total of 566 patients underwent PD and 136 underwent TP during the study period. One hundred one (18%) PD patients underwent HR-PD, while 86 (63%) TP patients underwent C-TP. Postoperatively, the patients in the C-TP group exhibited lower rates of post-pancreatectomy hemorrhage (15% vs 28%), delayed gastric emptying (16% vs 34%), sepsis (10% vs 31%), and Clavien-Dindo ≥ 3 morbidity (19% vs 31%) and had shorter median lengths of hospital stay (10 vs 21 days) (all $p < 0.05$). The rates of POPF in the HR-PD group were 39%. Mortality was comparable between the two groups (3% vs 4%). Although general, cancer- and pancreas-specific QoL were comparable between the HR-PD and C-TP groups, endocrine insufficiency occurred in all the C-TP patients, compared to only 13% of the HR-PD patients, and was associated with worse diabetes-specific QoL.

Conclusions : C-TP may be considered rather than HR-PD in few selected cases and after adequate counselling.

Corresponding Author : **Giampaolo PERRI** (giamperr@gmail.com)