

Pancreatectomy with Major Arterial Resection

**Francesca Costa¹, Nelide De Lio¹, Mario Antonio Belluomini¹,
Stefano Signori¹, Fabio Vistoli¹, Franco Mosca², Ugo Boggi¹**

¹Division of General and Transplant Surgery, and ²First Division of General Surgery, University of Pisa.
Pisa, Italy

Context Major arterial involvement is considered an absolute contraindication to resection in pancreatic cancer (PDAC). **Objective** We herein report our experience with 27 patients undergoing pancreatectomy plus resection of a segment of major peripancreatic arteries. **Methods** Between January 1993 and March 2012, 27 patients were selected. **Results** Twelve out of 27 patients were males; mean age was 64 years. Two total pancreatectomies were performed, 6 pancreaticoduodenectomy and 19 distal spleno-pancreatectomy. Celiac axis (CA) was resected in 14 patients, hepatic artery (HA) in 9, CA+HA in 3, and superior mesenteric artery in 1. Arterial reconstruction was required in 9. In-hospital-mortality was 3.7%, and overall-morbidity was 54.2%. Two out of 27 patients underwent neoadjuvant chemotherapy and 17 completed the adjuvant chemotherapy. Final pathology disclosed PDAC in 18 patients. All resections were R0. Arterial

involvement was proven in 10 patients: tumor reached the adventitia in 4, the media in 4, and the intima in 2. After a mean follow-up period of 115 months, median-overall-survival was 22 months (range: 1-232 months). Survival at 1, 3, and 5 years was 66.7%, 29.6%, and 10%, respectively. All patients died from distant metastasis without local recurrence. Twenty-five percent of the PDAC patients was alive at 3 years-after-surgery and one at 5 year (median survival 22.5 months). Median-survival of the 17 patients without infiltration was 22 months as compared with 19.5 in patients with infiltration (P NS). Equivalent figures for PADC patients were 22 months vs. 24 months (P NS). **Conclusion** Resection remains key to achieve long-term survival. The isolated involvement of CA and/or HA may reflect tumor location rather than tumor biology. Under this rare circumstances resection may be pursued especially in the modern era of neoadjuvant therapies.