

## **Preoperative and Intraoperative Evaluation of Pancreatic Cancer with Vascular Involvement**

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**Context** Pancreatic carcinoma, even though distant metastases are not detectable, extends directly into the retroperitoneal spaces and involves the superior mesenteric vein (SMV) or portal vein (PV) in 25% of cases. Evidences show that patients who underwent pancreatectomy with PV and/or SMV resection and those who underwent radical resection for localized tumors, may have a comparable long term survival. Multidetector computed tomography (CT) with three-dimensional (3-D) reconstruction is an essential tool to accurately stage the disease in an attempt to identify patients who would benefit from attempted curative resection. **Objective** The aim of this study is to compare the results of preoperative radiological (multislice CT) evaluation with the intraoperative and histopathological findings in terms of mesenteric vessels involvement. **Methods** Between 2006 and 2013 we performed 130 pancreatic resections. Preoperatively, all patients underwent clinical staging with multislice CT with contrast and multiplanar reconstruction (MPR). Radiological findings were compared with surgical and histopathological results. **Results** Twenty cases (15.4%) radiologically showed a vascular

involvement. However at laparotomy, a venous vascular resection was only performed in 10/20 cases (50%). As regard the vascular reconstruction, we performed in 3 cases a continuous suture after a tangential resection, in 7 cases a segmental resection with autologous graft interposition (with right internal jugular vein in 4 cases and with left renal vein in 1), and in 2 case a segmental resection with direct suture previous hepatic mobilization. The postoperative course had no major complications. Histological examination of resected vein wall showed: in 3 case a neoplastic infiltration limited to tunica adventitia, in 5 cases an involvement of tunica media, in 1 case an extension to intima and in 1 case there was no neoplastic infiltration. **Conclusions** When there are no distant metastasis, surgical radical resection provides the only chance for cure or long-term survival. In pancreatic tumors with PV/SMV involvement (borderline pancreatic cancers), oncologic radicality (negative resection margins: R0) must provide a vascular resection that actually have low morbidity and mortality. We also must consider that in more than 50% of patients the radiological vascular involvement is not confirmed at laparotomy.