

AGGRESSIVE PANCREATIC RESECTION FOR BENIGN AND MALIGNANT PANCREATIC NEUROENDOCRINE TUMOR. IS IT JUSTIFIABLE?

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Introduction. Benign and malignant pancreatic neuroendocrine tumors are rare and the long term outcomes are generally poor without surgical intervention. The aim of the study is to assess the whether aggressive pancreatic resection is justifiable for patients with pancreatic neuroendocrine tumor.

Methods. All consecutive patients that had undergone major pancreatic resection from Jan 1997 to Jan 2005 were reviewed and analyzed.

Results. There were 33 patients (16 M, 17 F) with mean age of 53 year old. Five patients had multiple endocrine neoplasms syndrome and 1 patient had von Hippel-Lindau syndrome. There were 20 benign (9 functional) and 13 malignant (6 functional) neoplasms. The mean tumor size was 4.2 cm with multiple tumors noted in 10 patients. Eight patients (25%) had pancreaticoduodenectomy and 25 patients (76%) had distal pancreatectomy (extended distal pancreatectomy in 4 and splenectomy in 20 patients). Regional lymph node involvement was present in 10 patients (30%) and 6 patients (18%) had liver metastasis. Four patients (12%) had concurrent resection of other organ due to disease extension. The median intra-operative blood loss was 500 ml. Perioperative morbidity was 36% and mortality was 3 %. Symptomatic palliation was complete in 93% (14/15 patients) and partial in 1 patient due to non resectable hepatic disease. The median hospital stays was 11.5 days. After a median follow up of 36 months, there were no local recurrences. The 1, 3, 5 year overall survival for benign and malignant neoplasm were 100% vs 92%, 89% vs 64%, 89 % vs 36% (p=0.01), respectively. The 1, 3, 5 years disease progression for the malignant neoplasm were 13%, 63% and 100% respectively (p<0.0001).

Conclusions. Aggressive pancreatic resection for PNET can be performed with low perioperative mortality and morbidity. Unlike available non-operative therapy this approach offers an excellent means of symptomatic palliation and local disease control. In malignant PNET metastatic recurrence is not uncommon and will usually require additional multimodality therapy. When possible an aggressive approach to PNET is justified to optimize palliation and survival