Mixed Exocrine-Endocrine Tumors of the Pancreas

Anna C Milanetto¹, Valbona Liço¹, Lucia Moletta¹, Rita Alaggio², Cosimo Sperti¹, Sergio Pedrazzoli¹, Claudio Pasquali¹

¹Pancreatic and Digestive Endocrine Surgical Unit, Fourth Surgical Clinic and ²Department of Pathology, University of Padua, Padua, Italy

Context Mixed exocrine-endocrine pancreatic tumors are extremely rare representing only 0.2% of all pancreatic tumors. They are characterized by the association of an exocrine (ductal or acinar) with an endocrine component with positive immunostaining for endocrine markers in >30% of the tumor cells. Mixed pancreatic carcinomas are usually large tumors, located in the head of the pancreas (60%), occurring mostly in middle aged patients.

Objective To evaluate clinical presentation, surgical therapy, histological features, outcome and follow up of mixed exocrine/endocrine tumors observed in the last 10 years.

Methods We reviewed the clinical records of 6 patients affected by mixed exocrine-endocrine tumors of the pancreas, admitted in our Unit from June 2002 to December 2011. Results Out of six patients enrolled in the study (3 females and 3 males averaging 67.5 years) 2 were asymptomatic, 3 had jaundice, and 1 had hypoglycemia. Five were in the head and 1 in the whole pancreas, with 2 cases of hepatic and peritoneal metastases. The size of the primary tumor ranged 1.4-10.0 cm. Three cases expressed exocrine serum tumor markers (CA 19-9, aFP, CEA, CA 125), and 1 neuroendocrine markers. We performed 2 pancreaticoduodenectomy, 1 bypass surgery for vascular involvement and 1 enucleation. Two cases had only pancreatic/hepatic percutaneous biopsy. Post-operative mortality was nil and morbidity was 2/4: 1 abdominal fluid collection and 1 asymptomatic pseudocyst. Histological features: 2 acinar cell carcinomas with neuroendocrine component, 2 ductal adenocarcinomas with neuroendocrine component, 2 neuroendocrine tumors with a ductal carcinoma component. Mean follow up was 28.8 months (range: 3-114 months; in 5/6 cases with at least 3 months of follow up). In 2/5 cases who had primary tumor resection DFS was 17 and 114 months. In 2/5 cases with peritoneal metastatic disease survival was 3 and 6 months.

Conclusion The prognosis of pancreatic tumor with mixed exocrine/endocrine cells is strongly conditioned by the behavior of the exocrine component. In most cases the histological diagnosis is known only postoperatively and the therapeutic approach is not changed by the final diagnosis.