

## **A Solid Mass in the Head of the Pancreas with Intense <sup>18</sup>FDG Uptake: Intraductal Tubulopapillary Neoplasm**

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**Context** <sup>18</sup>FDG-PET/CT has emerged as a useful diagnostic modality for the staging of different malignancies. Its role in the characterization of both cystic and solid pancreatic tumors is debated, especially in the differential diagnosis between malignant and benign/borderline tumors. **Case report** A 66-year-old man complained of abdominal discomfort with no other symptoms. An abdominal US showed a solid mass in the head of the pancreas. He underwent contrast medium CT scan and MRI that showed a pseudonodular mass of 35x40 mm in the pancreatic head without dilatation of the common bile duct/main pancreatic duct. There was no infiltration of the surrounding pancreatic parenchyma, duodenum and peripancreatic vessels. Serum CA 19.9 was 795 U/mL. A <sup>18</sup>FDG PET/CT scan showed an intense uptake by the mass. He underwent pylorus-preserving pancreaticoduodenectomy. Macroscopic examination of the specimen revealed a 4 cm tumor with endocystic growth without infiltration of surrounding structures, including common bile duct and main pancreatic duct. Histologically the tumor was composed of cubic to

cylindrical well-differentiated cells, with low/intermediate grade atypia. Tumor cells formed tubulopapillae and contained little cytoplasmic mucin. Immunohistochemical profile showed positivity only for cytokeratin 7 and cytokeratin 19. Ki67 index was 25-30%. 37 lymph nodes were removed without metastases. A diagnosis of intraductal tubulopapillary neoplasm (ITPN) with low-grade/intermediate dysplasia was made. **Conclusion** ITPN is a rare primary pancreatic neoplasm accounting for less than 1% of all pancreatic exocrine neoplasms. ITPN can show a different biological behavior, from low-grade to high-grade dysplasia and invasive carcinoma. Presence of high proliferative index, high-grade atypia, and, obviously, infiltration of surrounding structures/lymph node metastases, indicate malignancy. Differential diagnosis include mainly solid-pseudopapillary tumor and acinar cell carcinoma. In this case intense <sup>18</sup>FDG uptake and high CA 19.9 level prompted for resection, although only low-grade/intermediate dysplasia was present.