A Case of Intraductal Tubulopapillary Neoplasm: A Five Year Journey from Initial Presentation to Surgical Intervention

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Introduction

- Intraductal Tubulopapillary Neoplasm (ITPN) = rare, non-mucinous pancreatic tumor usually involving pancreatic head/body
- <1% pancreatic exocrine masses. Often misdiagnosed as pancreatic ductal adenocarcinoma (PDAC) or IPMN, but with significantly better 5-year survival rates compared to PDAC (80% vs 9%).

Presentation

- Meet our patient: 53 year old female that presented in 2018 with nausea, vomiting, epigastric pain and 30lb weight loss over the previous 5 weeks
- CT in 2018: 8.5 x 4.7 x 4.8cm pancreatic head mass
- EUS/FNA negative for malignancy, patient improved and deferred further treatment
- 2023: Presents again with more severe symptoms → CT: 15 cm mass at largest dimension causing gastric outlet obstruction
- EGD/EUS: biopsy favoring adenocarcinoma but unable to rule out neuroendocrine tumor

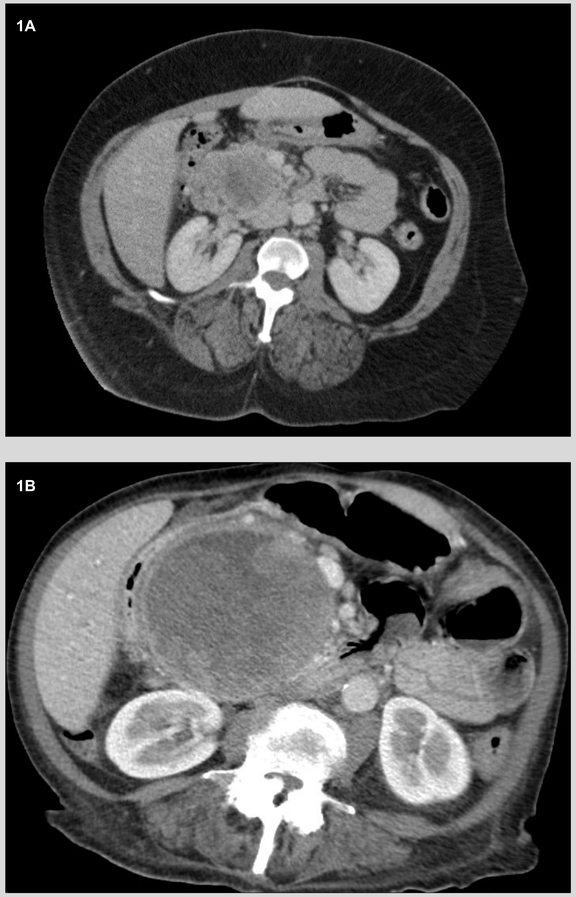


Figure 1 (above) 1A: Axial CT in 2018, 1B: Axial CT in 2023



Figure 2 (above): Gross specimen of 14.1cm ITPN pancreatic mass

Results

- Procedure: Pylorus preserving open pancreaticoduodenectomy with GJ tube placement
- Course: Uneventful, discharged POD 7 on tube feeds and PO liquid diet
- Final Pathology: 14.1cm ITPN without invasive carcinoma and negative margins, nodes 0/13 for malignancy
- Immunohistochemistry: positive for CK7, Cam 5.2, focal CD10, alpha-1 antitrypsin, and MUC1, with a Ki-67 proliferative index of 29.2%.

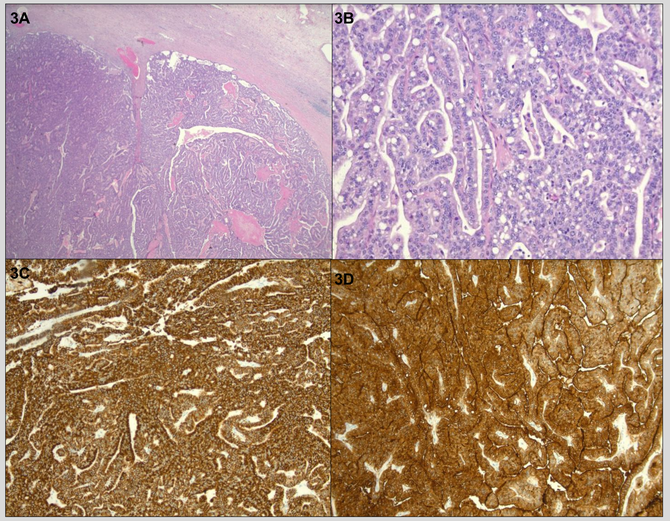


Figure 3 (above): H&E and immunohistochemical stains. 3A: Epithelial neoplasm with tubular glands and papillary structures, 3B: Neoplastic cells with round nuclei and eosinophilic cytoplasm, 3C: positive for CK7, 3D: Positive for MUC1.

Conclusion

- Summary: Patient with a slowly progressive and rare pancreatic mass with good postoperative early survival compared to other pancreatic masses like PDAC, although ITPN is often misdiagnosed
- Moving Forward: Further studies to fully characterize the natural history of ITPN and refined diagnostic techniques to obtain earlier and more accurate identification of this rare pancreatic neoplasm

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