



Learning Objectives

- Recognize GI bleeding as a rare presentation of OC-GCT
- Describe patient history, clinical course, and management
- Describe histology, pathophysiology and prognosis of OC-GCT

Case Presentation

We report on a 76-year-old African American male with no known past medical history who initially presented with complaints of intermittent episodes of severe abdominal pain and a 25lb unintentional weight loss over a 2 month period. He was found to be anemic with elevated liver enzymes and bilirubin. Imaging at that time revealed a 8.2x5.1cm expansile pancreatic body/tail mass with pancreatic ductal dilation, a 3.1x2.9 cm pancreatic head mass, a 2.1x2 cm left kidney mass and multiple hepatic lesions consistent with metastatic disease. PET-CT revealed a large mass involving the body and tail of pancreas with considerable metabolism and extensive and essentially innumerable lesions throughout the liver with considerable metabolism (Figure A,B). He was transfused for low hemoglobin, underwent ERCP for CBD stone removal and stent placement, and underwent ultrasound guided biopsy of liver lesions. Biopsies were consistent with UC-OGC originating from the pancreas. Tumor markers were positive for KRAS, ARID1A, CDKN2A, DKM6A, NF1, and TP53 mutations. Once stabilized, the patient was discharged. He then presented one month later for hematemesis and was found to have a hemoglobin of 6.8. The patient was transfused for low hemoglobin and underwent EGD which was unremarkable. The upper gastrointestinal bleed was presumed to be due to the pancreatic masses. The patient was deemed stable at that time and was discharged home with instructions to follow-up with oncology for further treatment.

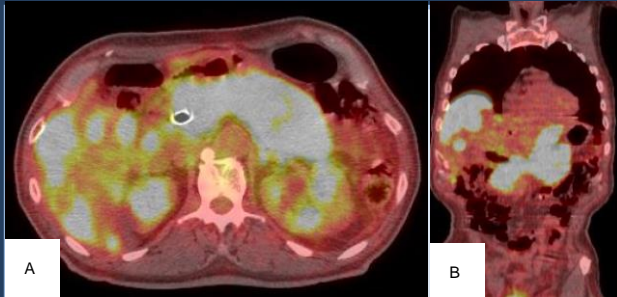


Figure A: Transverse PET-CT displaying a large mass involving the body and tail of pancreas with considerable metabolism
Figure B: Coronal PET-CT displaying innumerable lesions throughout the liver with considerable metabolism.

Discussion

Mucinous cystic neoplasms (MCNs) are rare lesions of the tail of the pancreas, accounting for 2%–5% of all exocrine pancreatic lesions (Fan X). They are typically formed in the tail of the pancreas and are usually non-invasive, however they can undergo malignant changes. (Naveed S). When they become invasive, MCNs can become a variety of other types of malignant lesions, but less commonly become an osteoclast-like giant cell tumor. Histologically it is suggested that OCGT comes from both epithelial and mesenchymal origin. With positive immunohistochemical staining positive for CEA and keratin favoring epithelial origin and positive CD68 and vimentin favoring mesenchymal derivation. Compared to its counterpart pleomorphic giant cell tumor and adenocarcinoma, OCGT has a better prognosis because it is less aggressive with slow metastasis. The prognosis can vary person to person from 4 months to 10 years. However it has a similar outcome to common ductal pancreatic cancer, with the median patient survival after diagnosis of 11 months. (Temesgen WM) (Leighton CC)

Clinical Pearl #1:

Currently, there is no standardized treatment for UC-OGC because of the rarity of the disease. Treatment regimens of UC-OGC are described in few case reports. En bloc surgical resection is considered to be the first line treatment. Some literature suggests using the same standardized chemo and radiation therapy as ductal pancreatic carcinoma because UC-OGC is thought to be a variant. A few articles also proposed using monoclonal antibodies against PD-1 and PD-L1 due to its effectiveness against a wide variety of cancers, including giant cell cancers in other organs (Demetter, P) (Maksymov V).

Clinical Pearl #2:

Gastrointestinal bleeding is a rare complication of pancreatic cancer. Only 2.6% of patients with pancreatic cancer experience an episode of upper GI bleeding (Obleaga, C.V., et al). The diagnosis can be established using endoscopic or surgical methods, although conventional endoscopic evaluation has been unsuccessful in some cases, including the case in point. Physicians should be aware that the severity of the bleeding in these patients can vary from occult bleeding to severe hemorrhagic bleeding leading to hypovolemic shock. Treatment options including endoscopic hemostasis, arterial embolization, and surgery. Failure to achieve hemostasis results in an extremely poor prognosis (Obleaga, C.V., et al).

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