Gelatinous Ascites and a Double Duct Sign: A Case of Pancreatic Adenocarcinoma

Nikita Lobo, MD, MS[1]; Jenson Erapuram, MD[1]; Gian Galura, MD[1]; Abhizith Deoker, MD[1]
[1]Texas Tech El Paso Health Sciences Center El Paso Paul L. Foster School of Medicine

Introduction

- Pseudomyxoma peritonei (PMP) is a rare disorder characterized by the accumulation of gelatinous material within the abdomen and pelvis
- Usually occurs due to rupture of appendiceal mucocele
- Uncommonly be seen with mucinous tumors arising from the ovary, gastrointestinal tract, urachus, and pancreas.
- Case of pancreatic adenocarcinoma diagnosed as a result of the clinical syndrome precipitated by pseudomyxoma peritonei.

Initial Presentation

- A 59-year-old Hispanic male with a past medical history of hyperlipidemia presenting due to a two-month history of poor oral intake and worsening abdominal fullness, distension, discomfort, and intermittent pain.
- He had previously been evaluated in Juarez, Mexico and had been prescribed medications including pantoprazole and dicyclomine, which provided no relief.
- CT abdomen & pelvis was obtained in the emergency department; findings include multiple hepatic subcapsular cystic liver lesions, abdominal omental caking, ascites, and extrahepatic biliary and pancreatic ductal dilatation without definitive evidence of a mass. CT chest showed a left sided pleural effusion
- CEA and CA 19-9 were found to be elevated at 49.4 and 416.

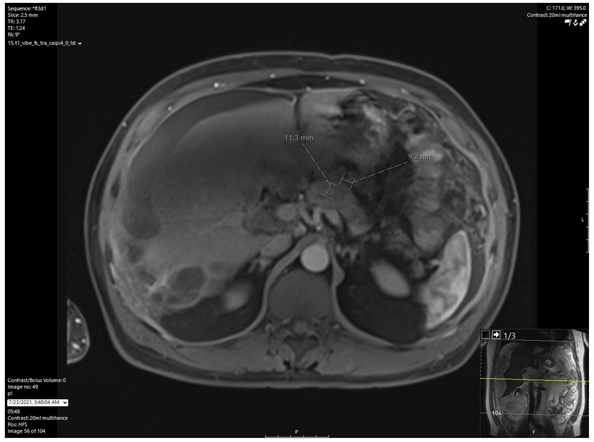

Image 1. MRI revealed lesion in the body of the pancreas

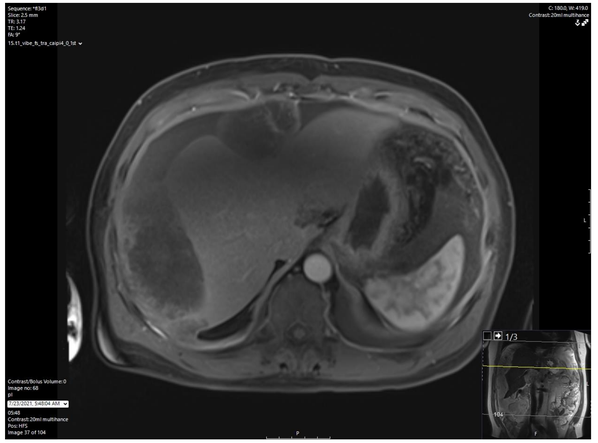

Image 2. MRI showing scalloping of the liver due to pseudomyxoma peritonei

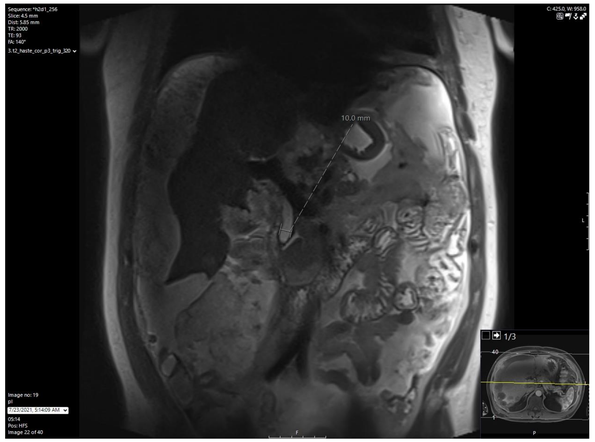

Image 3. MRI showing dilated Common Bile Duct and Pancreatic duct

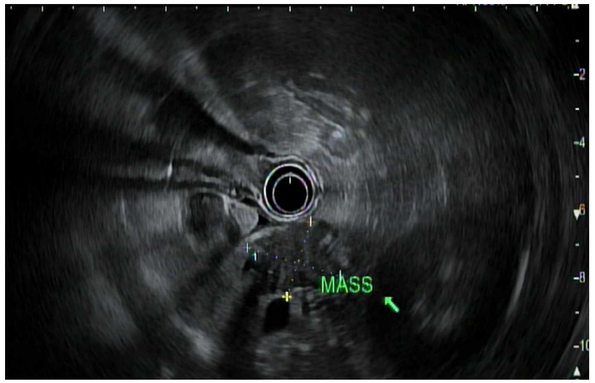

Image 4. EUS showing pancreatic mass, In addition to findings, splenic vessel invasion by mass was found.

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Clinical Course

- Upper endoscopy and colonoscopy were negative.
- Paracentesis was performed which yielded gelatinous ascites.
- Clinical suspicion for malignancy of appendiceal origin was raised which would have needed surgery and biopsy.
- An MRI of the abdomen was obtained to assess for pancreatic mass given presence of double duct sign.
- EUS FNA was performed; splenic vessel invasion by the mass was noted.
- Cytopathology supported a diagnosis of pancreatic adenocarcinoma, likely specifically pancreatic mucinous adenocarcinoma.
- Paracentesis and thoracentesis procedures provided temporary symptomatic relief. The patient was initiated on palliative chemotherapy with gemcitabine and nab-paclitaxel which led to a significant reduction in ascites and pleural effusion and subsequent marked improvement in symptoms.

Discussion

This case highlights the potential of malignancies such as pancreatic adenocarcinoma to cause pseudomyxoma peritonei despite it more commonly being associated with appendiceal origin. There are few case reports showing concurrent findings of pancreatic cancer and pseudomyxoma peritonei. Knowledge of this can help guide diagnostic and therapeutic plans.

Contact

Nikita Lobo
Email: nievlobo@gmail.com
Phone: 2163752804

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