A Mystery Block, Or Two

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Admission Diagnosis

Necrotizing Pancreatitis complicated by WOPN

Initial Presentation

18 year-old female with history of obesity, cholelithiasis, and marijuana use disorder admitted for 1 mo at an OSH for acute necrotizing pancreatitis of unclear etiology

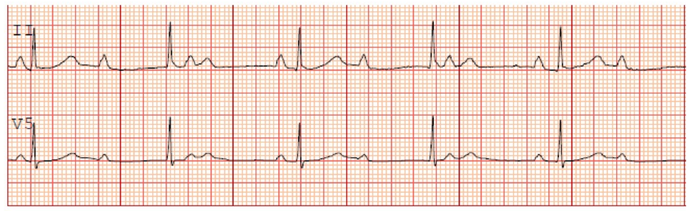
- Developed a large peri-pancreatic fluid collection with near occlusion of the portal venous confluence, and signs of partial GOO
- Also found to have asymptomatic complete heart block, no prior ECGs
- Transferred to OHSU for surgical intervention
- No recent trauma, travel, rash or tick bites
- No current or prior alcohol use
- Family history of acute pancreatitis, no cardiac arrhythmias/blocks

Clinical Course

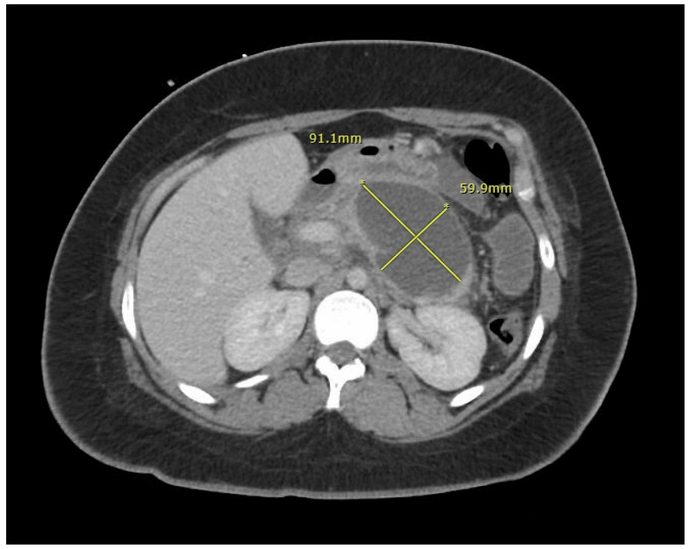
- **At outside hospital:**
  - -No biliary duct obstruction: only mildly elevated GGT
  - -Intermittent brady to 40s at OSH, increased to 100 with activity
  - -cardiology at OSH felt block a/w acute pancreatitis, anticipated resolution with txt underlying disease
- **Overall improvement: normalizing of CRP, platelets and WBCs with conservative management**
- **Complete heart block required further eval prior to GI surgical intervention**
- **Her junctional rate augmented well with atropine, never required pacing, unremarkable work up**
- **Successful EUS cystgastrostomy:**
  - **-two large WOPN, s/p x2 pigtail stents**
- **Holter on discharge**

Imaging & Labs

- **RUQ U/S nonobstructive cholelithiasis without signs of cholestasis**
- **Repeat liver labs without signs of obstruction**
- **Normal TG levels, normal IgG4 subclass**
- **MRCP demonstrating decrease in size of peripancreatic fluid collection however still c/f worsening GOO**
- **TTE and Cardiac MRI unremarkable**



ECG: Complete Heart Block: narrow QRS at rates >40s consistent with high junctional escape rhythm



CT A/P with IV Contrast on Hospital Transfer:
-Liver & biliary tree unremarkable
-Pancreas body and tail with WOPN 9.1cm x 6 cm
-New simple fluid collection within lesser sac 6 x 4cm
-Signs of disconnected pancreatic duct syndrome

Pancreatitis Evaluation

- **Etiology unclear despite broad work up**
  - -**Idiopathic / Genetic: mat / pat grandparent with acute pancreatitis,** (-) genetic panel
  - -**Biliary**: known cholelithiasis, although no signs of clear obstruction
- **interval imaging with improvement, GI to follow up**

Complete Heart Block Evaluation

- **Etiology unclear, differential included:**
  - **-Congenital:** no hx maternal CTD (maternal anti-ro/la)
  - **-Familial cardiac conduction disorder:** SCN5A, SCN1B, TRPM4 muts
  - **-Infectious: Lyme** (negative) **or Chagas carditis** (no recent travel history)
  - **-Inflammatory / genetic cardiomyopathies:**

unremarkable cardiac MRI & (-) arrhythmia and cardiomyopathy genetic panel

- **On holt monitor, cardiology to follow up**

Key Points

- **High incidence of acute pancreatitis in US:** 2/3 cases: alcohol + gallstones; majority deemed “idiopathic” likely to have genetic risk, particularly in younger patients
- **Etiology of complete heart block in younger patient without a clear acquired or structural cause may be congenital or genetic** (less common)
- **Most asymptomatic patients with CHB will become symptomatic and require pacemaker** (timing of insertion is not straightforward)
- **This is a unique case with likely rare causes of 2 conditions known to have:** high mortality rates & recurrence

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