Digesting a Differential of Zebras in a Unique Case of Pancreatitis

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BACKGROUND

- Standard workup of acute pancreatitis includes consideration of alcohol consumption, gallstones, medications, triglyceride level, and autoimmune pancreatitis
- Rare causes are often disregarded or diagnosed late, leading to missed opportunities in providing potentially life-saving therapy
- When coupled with multi-organ failure, pancreatitis is associated with increased morbidity and mortality
- Rheumatological and infectious etiologies should be considered in patients with persistent pancreatitis of unclear etiology

INITIAL PRESENTATION

- 42-year-old male (MHx: hypertension) presented with abdominal pain, 10-lb weight loss, fever, and parotitis
- No history of alcohol
- Close-contact living arrangements
- Febrile and tachycardic
- US Abdomen: Negative for gallstones
- CT Abdomen: Acute pancreatitis
- Laboratory findings on admission significant for:
  - WBC 3 with Abs Lymph 0.3
  - AST 128, ALT 75
  - LDH 560
- Lipase within normal limits

HOSPITAL COURSE

Summary (Figure 2): Viral serologies were positive for IgM Mumps and he was initially treated with aggressive IV fluids and supportive care. Following a brief period of clinical improvement, his symptoms relapsed and he developed diffuse vasculitis-appearing rashes, oral ulcerations, chest pain, and dyspnea. CT Abdomen showed worsening pancreatitis and Echocardiography showed pericarditis. Rheumatological work-up was positive for anti-neutrophil (ANA) and anti-double stranded DNA (α-dsDNA) antibodies. Skin biopsy showed leukocytoclastic vasculitis. Fungal workup was positive for Blastomycosis. Patient then developed acute encephalopathy and was urgently intubated. He was given high-dose steroids for Lupus Nephritis and Itraconazole for disseminated Blastomycosis. He continued to improve clinically, was eventually extubated, and discharged on steroid taper and Plaquenil.

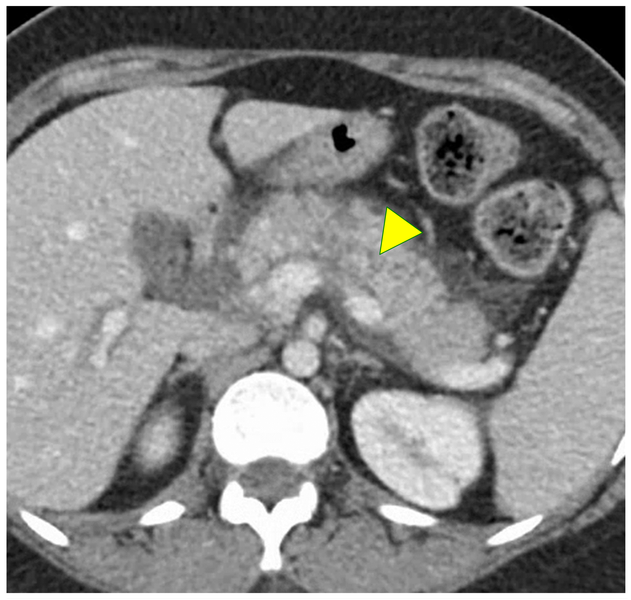

FIGURE 1: CTAP contrast demonstrating heterogenous echotexture and surrounding fat stranding compatible with acute pancreatitis

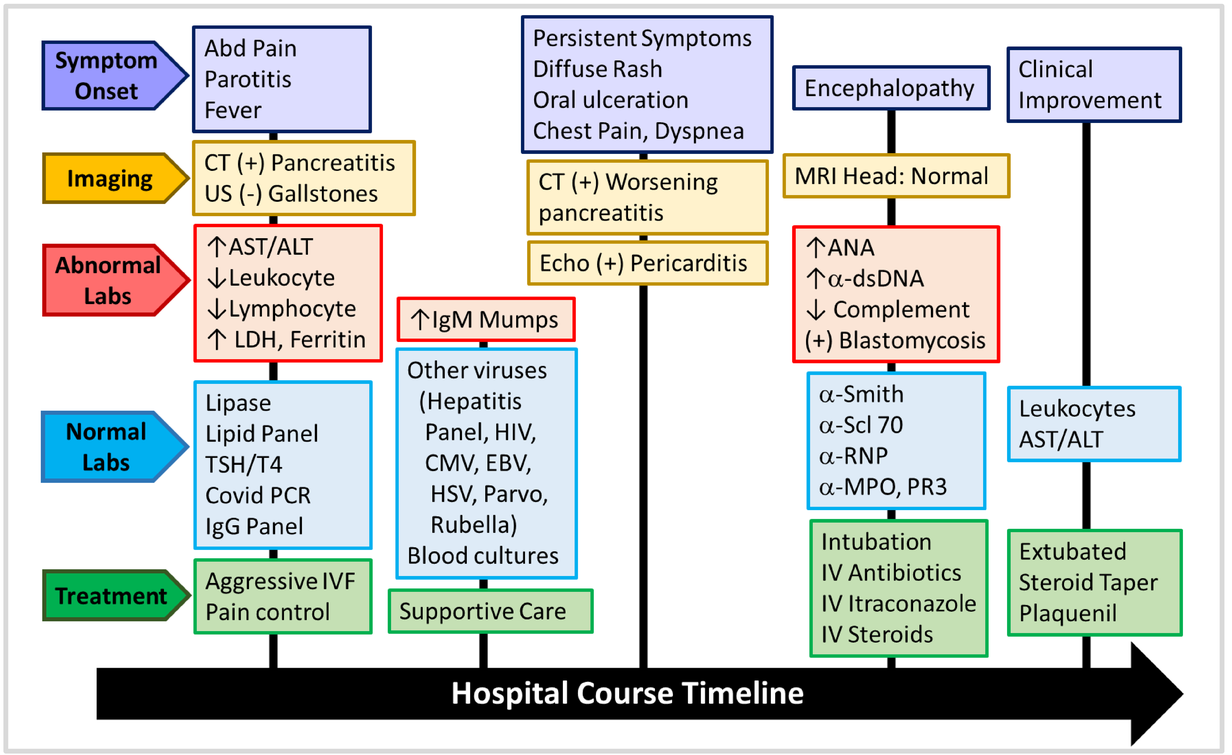

FIGURE 2: Schematic of relevant hospital course events for a patient with acute pancreatitis associated with Lupus, Mumps and disseminated Blastomycosis.

DISCUSSION / RECOMMENDATIONS

- We suspect patient's pancreatitis was likely secondary to Lupus-vasculitis. Unfortunately, his late Lupus presentation delayed diagnosis and prompt administration of IV steroids
- Mumps-pancreatitis is suggested, however, IgM can be falsely elevated in active Lupus
- While Fungi have been associated with pancreatitis, cases of Blastomycosis-associated pancreatitis have not yet been reported
- Rare causes of pancreatitis, including Rheumatological diseases, should be considered in cases of persistent pancreatitis as a lack of proper treatment can result in multi-organ failure and increased risk of mortality