Hypercalcemia-induced Pancreatitis in a Patient With Sarcoidosis: A Case Report

Chelsea Lauro OMS-III[1], Daniel Feldman OMS-III[2], Kaitlyn Dalsey DO[2], Iftekhar Mahmud DO[3], Brendan Kelly DO[4]

AtlantiCare Regional Medical Center, Pomona, N.J., U.S.A.

Introduction

- Sarcoidosis is a multi-system inflammatory disease characterized by non-caseating granulomas in affected organs.
- Pancreatic involvement
  - Acute pancreatitis previously described in only a handful of case reports
- Prevalence 10 to 20 per 100,000 people
  - 3-4 fold increase in African Americans.
- The treatment of sarcoidosis can be complex due to the vast variability of organ systems affected.
- Diagnosis and intervention early in the course of rare diseases, such as sarcoidosis, in patients with low socioeconomic status can increase the likelihood that treatment will be successful.

Case Presentation

48 year old African American female presented to a clinic in another state with significant weight loss. CT demonstrated bilateral hilar and subcarinal lymphadenopathy. A fine needle aspiration revealed granulomatous inflammation. Bronchoscopy and biopsy confirmed the diagnosis of sarcoidosis. However, she was not receiving active treatment for her disease. Four months later, she presented to our ED with abdominal pain, anorexia, and weakness. Pertinent labs: lipase 9,462, leukocytosis 13.1, corrected calcium of 15.6, creatinine of 3.48, BUN of 48, and GFR of 17.

Diagnosis & Management

CT with oral contrast showed chronic-appearing lung disease in the right middle and lower lobes as well as hepatosplenomegaly, heterogenous liver, and ascites (Figure 1).

US of the abdomen revealed fluid around the pancreas and possible cholelithiasis.

MRCP failed to reveal any choledocholithiasis or cholelithiasis.

US of the kidneys was unremarkable.

Additional lab: intact PTH of 6.8, PTHrP < 2.0, 1,25-hydroxy vitamin D of 171, 25-hydroxy vitamin D of 17.8, and ACE of 26.

Diagnosis: Acute pancreatitis likely secondary to hypercalcemia in the setting of sarcoidosis.

Treated with IV hydration and IV Lasix for calciuresis, calcitonin, and 40mg prednisone daily for 10 days. The hypercalcemia persisted so she received Pamidronate.

Discharged home on 30mg prednisone and with plans to follow up outpatient with a pulmonologist and a nephrologist.

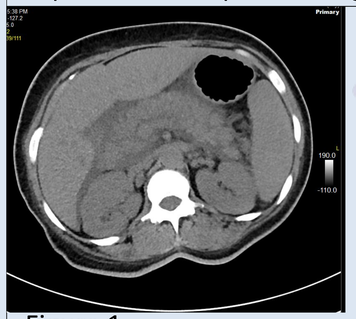

Figure 1

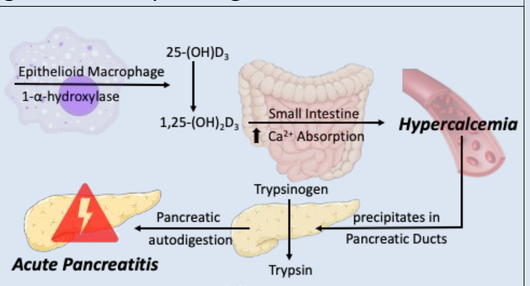

Figure 2

Discussion

- Hypercalcemia is present in 11% of patients with sarcoidosis and is caused by ectopic production of either Vitamin D or PTHrP (Figure 2).
- Many socioeconomic factors contribute to a patient with sarcoidosis' disease course.
- African Americans with no/public insurance frequently experience chronic, rapidly progressive disease.
- Our case was one of the only reports to describe hypercalcemia-induced pancreatitis in the setting of an established sarcoidosis diagnosis, rather than as the presenting manifestation of previously undiagnosed disease.
- Our had known sarcoidosis but still suffered major complication, highlighting the importance of outpatient follow up and maintenance in the management of her disease.
- Public insurances limit the pool of available physicians and create a sizable barrier for patients to receive the maintenance care needed to improve their outcomes.
- Exposes the need for more research into the specific obstacles that many patients with sarcoidosis face and how to address them.
- Opens up avenues to be explored in which social work and non-profit agencies may play a crucial role .

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