A Case of Subserosal Eosinophilic Gastroenteritis Presenting with Abdominal Pain and Distension

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Introduction

- Eosinophilic gastroenteritis is a rare condition that presents with varying gastrointestinal symptoms depending on layer of involvement; mucosal, muscular, or subserosal.

Case Presentation

- A 27 year old Mexican woman presented with three weeks of intermittent supra-umbilical abdominal pain, early satiety and progressively worsening abdominal distension
- On physical examination the patient was noted to have abdominal distension with shifting dullness but was non tender to palpation
- The CBC with manual differential showed a WBC of 19.4 x10^3/ul with 39% eosinophils.
- Computed tomography of her abdomen and pelvis with contrast showed diffuse mural thickening and edema of the small bowel with a large volume of mesenteric and intra-peritoneal free fluid.
- Antegrade double balloon enteroscopy revealed diffuse congested mucosa in the third and fourth part of the duodenum. Patchy congestion was found throughout the jejunum
- Pathologic exam of biopsies taken from the stomach, duodenum and jejunum showed increased lamina propria and mildly increased epithelial eosinophilia, with an epithelial eosinophil count of 14 per high power field (range of 0-14)

Hospital Course

- Cytology was negative for malignant cells
- Ultrasound guided paracentesis was performed for diagnostic purposes.
- The serum to ascites albumin gradient was 0.5 g/dL. The ascitic fluid was amber and clear with a WBC count of 9960/ul with the differential of 76% eosinophils, 19% mesothelial cells, 3% monocytes and 2 % lymphocytes. The ascites fluid adenosine deaminase level was unremarkable.
- The patient was treated with an empiric course of albendazole for possible underlying intestinal parasite infection prior to the initiation of oral steroid treatment for serosal eosinophilic gastroenteritis

Discussion

- Patients with serosal eosinophilic gastroenteritis typically present with eosinophilic ascites, abdominal bloating, and a high peripheral eosinophilia
- Diagnosis is made with endoscopic biopsy of the affected area which usually shows greater than 20 eosinophils per high power field.
- When endoscopic biopsy is non diagnostic, full thickness surgical biopsy should be undertaken.

References