Mesalamine Hypersensitivity Induced Hemorrhagic Shock

Baron Ekeledo, MD[1]; Mahesh Gajendran, MD[2,3]; Karolina Dziadkoweic, MD[2,3]; Juan Echavarria, MD [2,3]
[1]University of Texas Rio Grande Valley, [2]University of Texas Health San Antonio,
[3]University Hospital San Antonio

Introduction

5-aminosalicylic acid (mesalamine) rarely induces hypersensitivity. It is currently the first line therapy for treatment of ulcerative proctitis. However, based on recent data extracted from the journal of gastroenterology and hepatology, less than 12% of patients are unable to tolerate mesalamine or other compounds of 5-aminosalicylic acid prompting discontinuation of treatment. The most common side effects have been identified as headache, nausea, abdominal pain, and mild watery diarrhea. This case report highlights the importance of recognizing mesalamine hypersensitivity in patients with ulcerative colitis.

Case Description

A 62-year-old man with history of hypertension, hyperlipidemia, chronic kidney disease stage 3B and ulcerative proctitis presented to the ED with abdominal pain (intensity 9/10), rectal pain, tenesmus, flatulence, persistent bloating, and bright red blood per rectum of 2 months duration. The colonoscopy showed diffuse moderate mucosal changes characterized by altered vascularity, congestion, erythema, friability, and loss of vascularity in the rectum extending in a contiguous fashion from 10cm to anal canal. The pathology reported nonspecific chronic inflammation with hyperplastic epithelial changes but negative for dysplasia or malignancy. He began oral mesalamine and mesalamine suppository therapy. With symptomatic improvement he was discharged home and was readmitted 3 days after with worsening hematochezia. He began intravenous steroids and his mesalamine therapy was changed to balsalazide. During the next 24 – 48 hours, patient started having increased hematochezia with blood clots associated with increased rectal pain (pain scale 10/10). His vital signs were recorded as temperature 97.3F, blood pressure 58/32, heart rate 42, respiratory rate 9 and saturation of 86% on room air. His hemoglobin dropped from 9.6 to 7.7. He was resuscitated with IV fluids and PRBC transfusion. His blood pressure and heart rate normalized. At that point he was diagnosed with 5-ASA hypersensitivity. All his mesalamine products were discontinued and hydrocortisone suppositories began with continuation of his IV steroids. He improved clinically and was discharged home with a steroid taper and daily hydrocortisone suppositories.

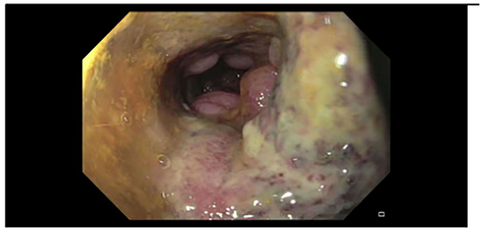

Image 1.
A diffuse area of severely hemorrhagic and ulcerated edematous mucosa located in the rectum. There is noted loss of vascular markings and friability.

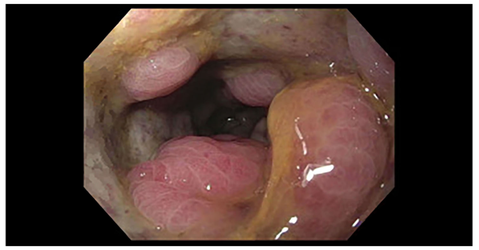

Image 2.
Noted luminal narrowing and edematous mucosa. Mild friability with spontaneous bleeding.

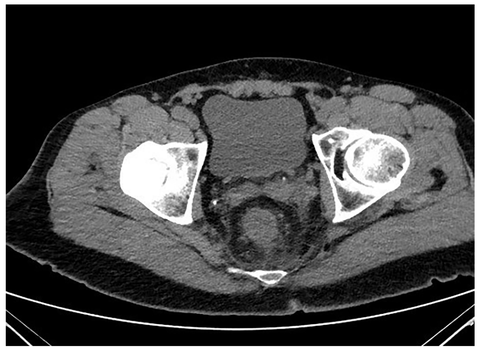

Image 3.
Computed Tomography Abdomen/Pelvis without IV contrast: Edematous rectum with perirectal fat stranding suggesting proctitis

Discussion

Hemorrhagic shock is due to the loss of circulating blood volume and the oxygen carrying capacity. Although etiologies are numerous, the most common are blunt trauma and gastrointestinal bleeding. We can confidently identify the patient's hemorrhagic shock to his severe ulcerative proctitis which was worsened by mesalamine administration. The disease course can be chronic, alternating between acute flare-ups and recovery. 5-aminosalicylic acid (mesalamine) is currently the first line therapy for treatment of ulcerative proctitis. However, in the event of hypersensitivity, alternatives include anti-tumor necrosis factor agent-based therapy (azathioprine), oral and intravenous glucocorticoids. Although mesalamine hypersensitivity is not common, it is important to include it in the differential diagnoses of patients with pertinent inflammatory bowel disorders who present with worsening clinical symptoms after introduction to mesalamine or similar 5-aminosalicylic acid compounds.

Contact

<Baron Ekeledo>
<UTRGV>
Email: Baron.Ekeledo@utrgv.edu
Phone:3187448273

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