Introduction

Diarrhea is a commonly encountered problem in Hospitalist Medicine. We present a case of intractable abdominal pain with diarrhea, later diagnosed as progression of a rare preexisting condition.

Case Presentation

- A 74-year-old male presented with intractable nausea, vomiting abdominal pain, abdominal distention, diarrhea, and loss of appetite for the past 2 weeks. Abdominal pain was spasmodic, generalized, moderate intensity, without any precipitating or relieving factors and brown-yellow non-bloody diarrhea.
- Interestingly, he had a similar episode of diarrhea 3-4 weeks ago, at that time was evaluated in ER and discharged on antibiotics for presumed gastroenteritis. Patients denied travel history or outside food consumption on both presentations.
- Physical examination revealed lethargy, generalized abdominal tenderness on superficial palpation along with macular-papular rash over the entire back. Initial workup including WBC count, blood cultures, C difficile, stool parasite/ova, stool WBC count, Anti-Tissue Transglutaminase antibody were negative. Chemistries were within normal limits.
- Imaging significant for small bowel wall thickening, with no obstruction. Patient was started on empiric antibiotics. CTA abdomen revealed less than 50% celiac artery stenosis thus ruling out acute bowel ischemia.
- Upon further interviewing regarding the patient’s rash, he reported past medical history of Cutaneous Mastocytosis, which had been confirmed with skin biopsy and bone-marrow biopsy, but currently was not taking any treatment.
- While de-escalating antibiotics, we started H1/H2 blockers (Loratadine and Famotidine). A progressive improvement in diarrhea was observed. Patient was discharged home, and outpatient EGD, and colonoscopy were scheduled to rule out gastric/duodenal ulcers.

Discussion

- Mastocytosis is the clonal proliferation of mast cells (MC) characterised by multifocal clusters of abnormal MC within multiple organ systems.
- Depending on tissue/Organ involvement (skin and/or internal organs), it is classified as Cutaneous mastocytosis (CM) or Systemic mastocytosis (SM) respectively. Increased cytokinin secretion from mast cells (including histamine, heparin, leukotrienes, prostaglandins, and PAF) activates H1/H2 receptors causing not only cutaneous manifestations but also increased gastric acid secretion, (predisposing to gastric and duodenal ulcers, Upper GI bleeding, abdominal pain)[6]. Thus SM can frequently present as pruritic maculopapular rash/urticaria[2], and chronic recurrent diarrhea, nausea, and weight loss[1].
- A study comparing histopathological samples for SM, inflammatory bowel disease, eosinophilic colitis, etc, found that in all SM patients, D816V KIT mutation was detected[7]. Another study found that adult-onset CM more frequently progressed to SM[9][10]

Conclusion

Diarrhea is a common symptom of systemic mastocytosis. However systemic mastocytosis is a rare cause of diarrhea. There should be a high degree of suspicion in patients with otherwise unexplained symptoms of abdominal pain and diarrhea, especially if pruritic maculopapular skin rash is also present.

References