CLINICAL VIGNETTE

Eosinophilic Gastroenteritis as a Cause for Common Gastrointestinal Symptoms

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Case

We present a case of a 47-year-old Caucasian presented to outpatient GI with progressive abdominal bloating and PO intolerance. He reported ten to fifteen years of intermittent heartburn and bloating with three severe episodes of abdominal bloating and distension over the last ten years. The symptoms would persist for up to one month then slowly resolve. He denied weight loss, diarrhea and blood per rectum but reported mild anorexia as well as mild nausea without emesis. OTC PPI was not helpful in relieving symptoms. His past medical history included chronic low back pain and prior ruptured appendectomy. A CT scan was ordered, which showed a long segment of marked, circumferential thickening of the distal duodenum and much of the jejunum, along with moderate to large volume ascites and numerous mesenteric lymph nodes. He was advised to go to the ER for hospital admission for expedited workup.

On presentation to the ER, he was afebrile and vital signs were stable with a BP of 132/70 and HR of 75. Exam was notable for anicteric sclera, normoactive bowel sounds, mildly distended abdomen with + fluid wave, but no jaundice or peripheral edema. Initial labs were notable for slightly elevated inflammatory markers (CRP 2.4) as well as a mild anemia with Hg 13 and moderate eosinophilia with absolute count of 3540 (ref 0.00-0.50 x 10E3/ul). A diagnostic paracentesis revealed a SAAG of 0.5, suggestive of a non-portal hypertensive source for ascites, along with a significant eosinophilic predominance.

Small bowel enteroscopy showed mild erythema in the duodenum and jejunum with what appeared to be an edematous bowel. Multiple biopsies showed a focal area of prominent lamina propria eosinophils (focally >100 eos per HPF), compatible with a diagnosis of eosinophilic gastroenteritis. He was started on prednisone 40mg with a slow taper and elected to place himself on an elemental diet with good symptomatic response.

Discussion

Eosinophilic gastrointestinal disease (EGID) collectively refers to a group of conditions including eosinophilic esophagitis (EoE), eosinophilic gastritis (EoG), eosinophilic enteritis (EoN), and eosinophilic colitis (EoC). Due to the rare nature of these conditions, there is limited prevalence data. However, one study estimates the prevalence of eosinophilic gastroenteritis (EoGE) in the United States at 22 to 28 per 100,000 persons.[1]

The clinical presentation of EGID is dependent on the location, extent and layer of the bowel that is involved, which can occur anywhere in the GI tract. The most common presenting symptoms of eosinophilic mucosal infiltration are abdominal pain, nausea, early satiety, vomiting, diarrhea and weight loss. Involvement of the muscle layer can present with intestinal obstruction, nausea, vomiting and abdominal distension. Subserosal involvement can lead to isolated ascites or ascites in combination with symptoms characteristic of mucosal or muscular EGID.[2]

Once a diagnosis is established, the approach to treatment is fairly standard. For highly motivated patients, an initial attempt at a six-food elimination or elemental diet can be considered. Such diets should be followed to for a minimum of four to six weeks. If a patient fails or declines a dietary approach, or for patients with severe disease, a trial of prednisone is recommended. The standard dose is typically 20 to 40mg/day. Improvement of symptoms typically occurs within 2 weeks, at which time steroids can be rapidly tapered.[3,4]

Conclusion

While still relatively rare, EGID should be considered for patients presenting with the typical constellation of symptoms associated with the disease. The challenge is that many of the symptoms seen in EGID are also seen in various other GI diseases and syndromes. If EGID is considered, blood work along with endoscopy with biopsies of the upper GI tract are necessary to confirm this diagnosis.

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