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CASR REPORT

Eosinophilic Gastroenteritis as a Rare Cause of Recurrent Epigastric Pain

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Abstract

Eosinophilic gastroenteritis (EGE) is a rare inflammatory disorder of gastrointestinal tract characterized by eosinophilic infiltration of the bowel wall. It can mimic many gastrointestinal disorders due to its wide spectrum of presentations. Diagnose is mostly based on excluding other disorders and a high suspicion. Here we report a case of 26 year old man with a history of sever epigastric pain followed by nausea, vomiting since a few days before admission with final diagnosis of EGE.

Keywords: Eosinophilic enteropathy; abdominal pain; endoscopy, Gastrointestinal; emergency department

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Introduction:

Eosinophilic gastroenteritis (EGE) is a rare inflammatory disorder of gastrointestinal tract characterized by eosinophilic infiltration of the bowel wall. It can mimic many gastrointestinal disorders due to its wide spectrum of presentations (1, 2). Diagnose is mostly based on excluding other disorders and a high suspicion (3). Despite of its low prevalence, EGE should be considered as diagnosis in case of recurrent abdominal pains. Lesion biopsies are inevitable for confirming diagnosis and corticosteroids are alternative treatment for remission (4). Here we report a case of 26-year- old man with a history of sever epigastric pain followed by nausea, vomiting, and oral intake intolerance with final diagnosis of EGE.

Case report:

A 26-year- old man was seen in emergency department because of severe abdominal pain since one week before admission. His pain was localized to epigastric area, had burning type and aggravated with feeding without any radiation site and was associated with nausea, vomiting and food intolerance. He had no fever, chills, night sweeting, evidence of gastrointestinal bleeding, change in bowel habit, or icterus. On examination, his vital signs were stable and cardiopulmonary examination was normal. He had severe epigastric tenderness without rebound and guarding or distention and bowel sound was present. His past habitual and medical history has been unremarkable except for allergic rhinitis since five years ago. Complete blood count, serum electrolytes, renal and liver function tests, amylase, lipase, and stool exam for parasites and occult blood were all in normal range. Esophagogastroscopy revealed very severe patchy congestion and erosion along with superficial ulcers in proximal of body, as well as congestion and erythema in mucosa of entire stomach. Bulb and D2 was severe congestive. Multiple biopsies were taken from stomach and duodenum (Figure1, 2). Histology revealed portion of small intestinal mucosa with intact villous and corpus architecture. There are dens infiltration of eosinophilic inflammatory cells and evidence of their degranulation in lamina properia and submucosa. After ruling out of parasite infection and malignancy and involvement of other organs with negative studies including multiple stool examinations, serology for certain parasites, evaluation of biopsies for malignant cells and other infiltrations, chest and abdominopelvic computed tomography (CT) Scan, and echocardiography diagnosis of EGE was established. Treatment with 25 mg prednisolone was began and after 2 days significant resolution of his symptoms was seen. In follow up, after one month, he was completely well, without complain of abdominal pain and nausea or vomiting.

Discussion:

Eosinophilic gastroenteritis (EGE), is a rare inflammatory disorder characterized by eosinophilic infiltration of GI tract wall, especially stomach and duodenum (1). There are limited data on epidemiology of EGE. The prevalence in US is 22-28 per 100000 cases.

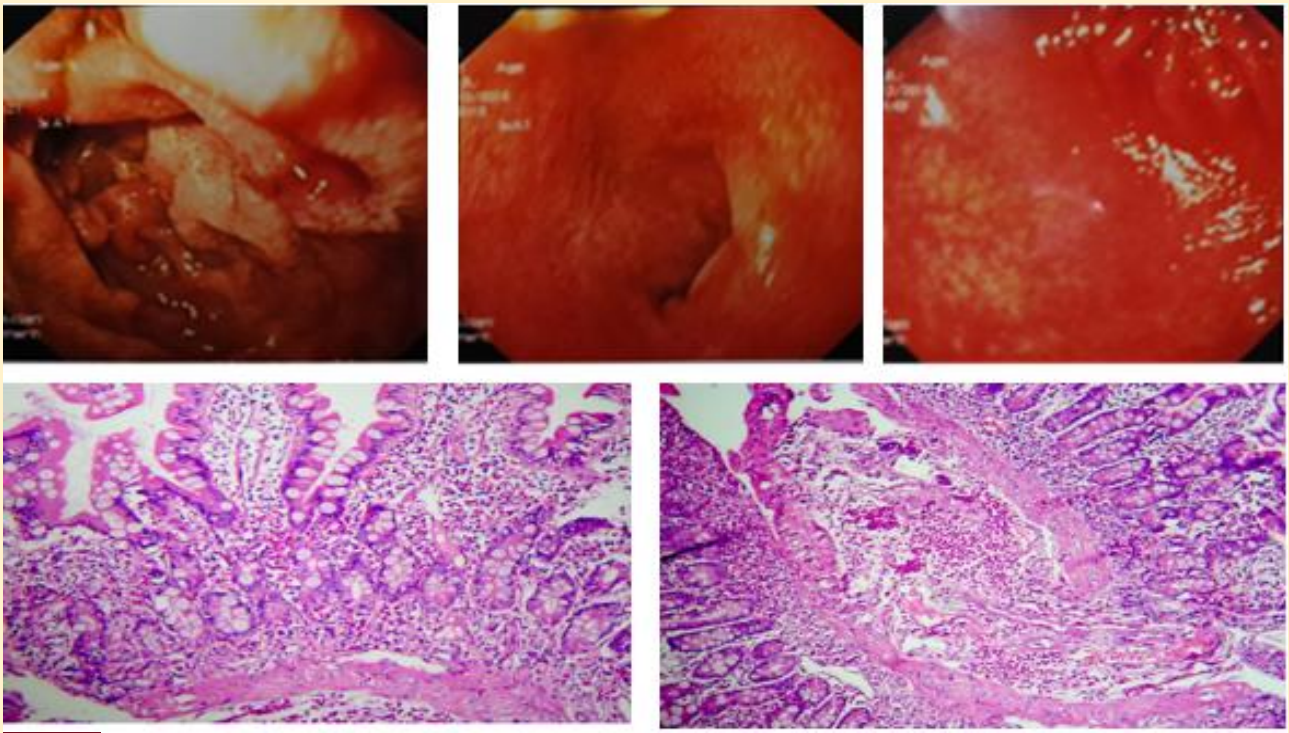

Figure 1: Endoscopy and microscopic views of lesion.

It is mostly seen in white and to some extent Asians and affects adults and children of both sexes with a slight male preponderance (2, 5). Patients present clinically at any age with a peak between third to fifths decades (1, 5).

Depending on the location, depth and extent of bowel wall involvement, EGE has a broad spectrum of clinical manifestations from abdominal pain, nausea and vomiting to gastrointestinal obstruction and ascites, which can mimic most of gastrointestinal and abdominal pathologies. High serum level of IgE is common in these patients. Eczema, atopic diseases, such as asthma, may be accompanied. It also runs a chronic relapsing course (1, 2, 4). The diagnosis is difficult and is mostly based on excluding other diagnoses and a high clinical suspicion. The presence of abnormal gastrointestinal symptoms, along with 20 or more eosinophil per high-power field in one or more areas of the gastrointestinal tract, absence of an identified cause of eosinophilia (parasites, drug use, and malignancy), exclusion of eosinophilic involvement in organs other than the gastrointestinal tract and a history of atopy or food allergies are often necessary for diagnosis (3, 4). The macroscopic appearance of tissue is nonspecific and lesion biopsies are inevitable for confirming diagnosis (6). Gastrointestinal obstruction is the most common complication. Treatment should be individualized, considering patient's age and severity of the symptoms. There are several reports on the role of elemental or elimination diet on improvement in disease activity (1-3, 5). In patients in whom, diet restriction is not feasible or has failed, low dose steroid therapy is the main therapeutic alternative. Antihistamines (ketotifen), mast cell stabilizer (oral chromoglycate), and leukotriene antagonists (montelukast) are also used in its treatment (7, 8). Flare-ups can also be controlled with oral corticosteroids (9). In case of gastrointestinal obstruction, surgery may be inevitable.

Conclusion:

Eosinophilic gastroenteritis is a rare cause of epigastric pain but, should be considered as differential diagnosis in cases of recurrent abdominal pain.

Conflict of interest:

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