Case Report:  
Eosinophilic gastroenteritis - a rare case presentation  
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Abstract
Eosinophilic gastroenteritis (EGE) is a rare disease characterized by eosinophilic infiltration and peripheral eosinophilia. It can be seen anywhere in the gastrointestinal tract. It is diagnosed in the biopsies taken during endoscopic examination to the patients with epigastric abdominal pain and vomiting. A 23-year-old woman was admitted with abdominal pain and vomiting. She had no history of any disease, food, pollen, or drug allergy in her medical history. Leukocyte: 8000/mm³ (neutrophil: 21%, eosinophil: 61.9%, lymphocyte: 14.1%), platelet: 269,000/mm³, immunoglobulin E: 1200 IU/mL (normal range: 20–100 IU/mL), Absolute eosinophil count: 1010 cells/cu mm was counted in her blood examination. The duodenal biopsy was reported as EGE. We applied methyl-prednisolone 40 mg/day. With this treatment, the patient's symptoms regressed. In this article we present a case of chronic pain in epigastric region with vomiting diagnosed as EGE. The first step in diagnosing is suspecting EGE. It should be borne in mind in patients with epigastric pain & vomiting.

Keywords: Chronic abdomen pain, Endoscopic examination, Eosinophilic gastroenteritis, vomiting, cramp

Introduction
Eosinophilic gastroenteritis (EGE) is a rare disease characterized by eosinophilic infiltration in gastrointestinal tract and peripheral eosinophilia. It is present anywhere along the gastrointestinal tract. The cause of EGE is unknown and pathogenesis is not fully understood but hypersensitivity is considered as a major factor. EGE are of 3 different forms and are defined as 1) mucosal involvement/infiltration, 2) muscle involvement/infiltration and lastly 3) serosal involvement/infiltration. EGE was first identified in 1937 by Kaijser et al. Biopsies taken during endoscopic examination are the gold standard to diagnose EGE in the patients with abdominal pain, vomiting and chronic diarrhea. The number of diagnosed cases is increasing with the increase in endoscopic procedures. This article deals with a case of chronic abdominal pain with vomiting, which led to the diagnosis of EGE.

Case report
A 23-year-old woman was admitted with the complaints of abdominal pain and vomiting. She has pain since 2 months. There was no fever, weight loss, or rash. She has no history of any disease, food, pollen, or drug allergy in her medical history. There was no remarkable feature in her physical examination. Sedimentation: 35 mm/h, hematocrit: 35.5%, leukocyte: 8000/mm³ (neutrophil: 21%, eosinophil: 61.9%, lymphocyte: 14.1%), platelet: 269,000/mm³, immunoglobulin E (IgE): 1200 IU/mL (normal range: 20–100 IU/mL), Absolute eosinophil count: 1010 cells/cu mm was counted in her blood examination. Liver and renal functions were in normal range. Parasitological examination and bacterial culture of stool were normal. There were no abnormal findings in her abdominal ultrasonography.
CT scan of abdomen & pelvis and posterior-anterior lung radiography. EUS (Figure 1) was done shows mildly dilated common bile duct. Endoscopic examination was performed showed duodenitis (Figure 2 & 3); multiple duodenal and antral biopsies were taken. The duodenal biopsy was reported as EGE with 35-40/hpf eosinophils. We applied methyl-prednisolone 40 mg/ day. With this treatment, the patient's symptoms regressed.

**Discussion**
EGE is a rare disease characterized by eosinophilic infiltration and peripheral eosinophilia. It is difficult to diagnose because of nonspecific symptoms. Gastric or duodenal biopsies are required for confirming diagnosis. The macroscopic appearance is normal and nonspecific. 20 or more eosinophils were seen in each magnification field histologically³.⁴ then it is conclusive of EGE. The following causes 1) Malignancy, 2) parasite infestation and 3) drug abuse of eosinophilia should be ruled out before terming it as EGE. EGE is seen anywhere along the gastrointestinal tract¹.⁵.
EGE has nonspecific symptoms, so the first step in diagnosing is suspecting EGE. Peripheral eosinophilia is seen in two-thirds of patients⁶.
Eosinophilic infiltrations in the biopsy anywhere in the gastrointestinal tract is diagnostic if the other reasons (parasites, drug use, malignancy) are excluded. Because of diffuse involvement, multiple biopsies should be taken from different places. High serum level of IgE is common in these patients. Eczema, atopic diseases, such as asthma, may be accompanied. EGE affects both sexes and all age groups but most of the cases are older than 30 years. It is difficult to determine the actual frequency or prevalence of EGE. Number of diagnosed cases is increasing with the increase in endoscopic procedures but the actual frequency of EGE is not known.

There is no consensus about the treatment of EGE. There are not enough studies on this. The treatment should be individualized according to the patient's age and the severity of the symptoms. Antihistamines (ketotifen), mast cell stabilizer (oral chromoglycate), and leukotriene antagonists (montelukast) are other drugs that can be used in the treatment of EGE.

Conclusion

The first step in diagnosing is suspecting EGE and to bear in mind that patients presenting with chronic vomiting can present as EGE.

References