**Turk J Gastroenterol** *2015; 26: 286-7*

# Eosinophilic gastroenteritis as an unusual manifestation of multiple mesenteric lymph node enlargements and recurrent diarrheas

To the Editor,

Eosinophilic gastroenteritis (EG), as originally described by Kaijser in 1937, is an uncommon inflammatory disease characterized by eosinophilic infiltration of the gastrointestinal tract without evidence of known causes of eosinophilia (1). There are rare presentations of mesenteric lymph node involvement and recurrent diarrhea in Korea, and there is no agreed specific therapy for EG. Herein, we present a rare case of EG.

A 58-year-old woman presented with a history of recurrent diarrhea, abdominal pain, and weight loss (5 kg in 2 weeks). Her past medical history revealed irritable bowel syndrome (IBS). She was admitted because of intractable watery diarrhea. She was treated with IBS medication (antispasmotic agent and antianxiolytics) and antidiarrheal agents. However, her symptoms had worsened. She had no family history of allergic diseases. Her physical examination was unremarkable. Laboratory tests revealed a WBC count of 8680/mm$^3$ and an eosinophil count of 1970/mm$^3$ (22.7%). The serum IgE level was 254 kU/L (normal: 0-25 kU/L). Stool examination for parasites and the allergy test were negative, including the MAST test. Endoscopic examinations revealed chronic atrophic gastritis. Abdominal pelvic CT revealed reactive changes, including above and below 1 cm-sized multiple mesenteric lymph node enlargements in the entire abdominal cavity (Figure 1). Colonoscopy revealed endoscopic features of colitis, including mucosal edema, loss of vascularity, and focal hyperemic change in the IC valve area. Multiple colonic biopsies revealed active inflammatory reactions with remarkably increased eosinophils in the lamina propria, and occasionally, the muscularis mucosa, which were consistent with EG (Figure 2). Before the use of steroids, a tricyclic antidepressant and a selective serotonin reuptake inhibitor was added to her treatment. After this, her symptoms improved and diarrhea stopped. Thus, steroid therapy was not required in this case. We administered the regimen for 4 weeks, and the patient promptly responded; the serum IgE level decreased to 99.2 kU/L.

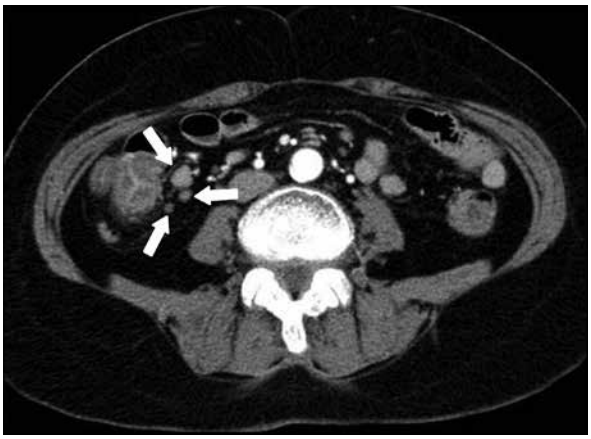

**Figure 1.** Abdominal pelvic CT shows above and below 1 cm-sized multiple mesenteric LNs enlargement in the entire abdominal cavity.

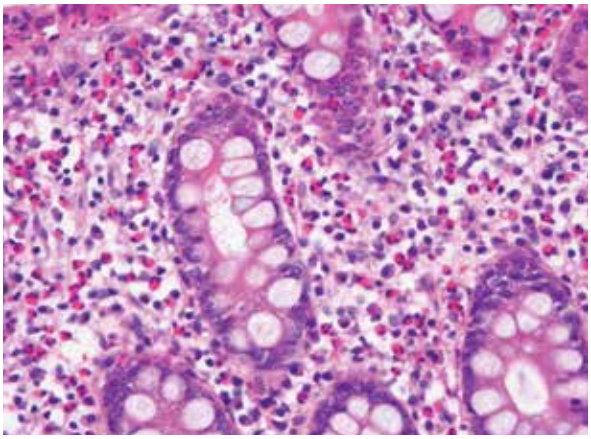

**Figure 2.** Histological sections from the biopsy of the colon and terminal ileum reveal remarkably increased eosinophils in the lamina propria, and occasionally, in the muscularis mucosa. (H&E, ×400).

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**Received:** September 02, 2013 **Accepted:** August 07, 2014
 • Available online at www.turkjgastroenterol.org • DOI: 10.5152/tjg.2015.6084

Currently, there are no prospective randomized controlled trials on specific therapy for EG (2). Corticosteroids are the mainstay for initial management (3,4). However, instead of steroids, we used anti-anxiolytics and anti-depressants for our patient, because of which she responded promptly, her symptoms resolved, and her IgE levels decreased. The exact cause of this result should be further evaluated. However, we speculated that there were some pathophysiological associations between EG and stress, which is a well-known risk factor for allergy disease.

In conclusion, EG may present with recurrent diarrheas and multiple mesenteric lymph node enlargement. Further studies are warranted to determine the pathophysiology of EG and establish optimal treatment regimens for EG.

**Ethics Committee Approval:** N/A.

**Informed Consent:** Written informed consent was obtained from patient who participated in this case.

**Peer-review:** Externally peer-reviewed.

**Author contributions:** Concept - E.J.P., H.J.O.; Design - E.J.P., H.S.K., H.J.O.; Supervision - H.S.K., H.J.O.; Resource - E.J.P., H.S.K., H.J.O.; Materials - E.J.P., H.J.O.; Data Collection &/or Processing - E.J.P., H.S.K., H.J.O.; Analysis &/or Interpretation - E.J.P., H.S.K.; Literature Search - E.J.P., H.S.K., H.J.O.; Writing - E.J.P., H.J.O.; Critical Reviews - H.J.O.

**Conflict of Interest:** No conflict of interest was declared by the authors.

**Financial Disclosure:** The authors declared that this study has received no financial support.

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