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CASO CLINICO

Eosinophilic gastroenteritis: a case report and review of the literature

Gastroenterite eosinofila: a proposito di un caso clinico e revisione della letteratura

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KEY WORDS
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Summary
Background: Eosinophilic gastroenteritis (EoG) is a rare disease of unknown etiology characterized by patchy or diffuse eosinophilic infiltration of the gastrointestinal tract wall. As clinical presentation and endoscopic/ radiological findings are nonspecific, diagnosis may only be ascertained by histologic findings.
Clinical case: This article presents a case of EoG with associated colonic involvement but without peripheral eosinophilia. Although no allergy could be demonstrated, the clinical symptoms and histologic pattern of diffuse eosinophilic mucosal infiltration disappeared after steroid therapy, as discovered by a careful endoscopic follow-up.
Discussion: Current concepts of this complex disorder and a review of the literature are presented.

Introduction

Eosinophilic gastrointestinal diseases (EGIDs) are a heterogeneous group of diseases (eosinophilic esophagitis [EoE], eosinophilic gastroenteritis [EoG], eosinophilic ileocolitis [EoIC] and eosinophilic colitis [EoC]) characterized by gastrointestinal symptoms and increased eosinophils in the intestinal parietal wall [1].

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Initial descriptions of EGIDs schematically divided patients into subtypes with respect to the anatomical location, i.e., mucosal (with the ensuing symptoms of diarrhea and bleeding), muscular (obstruction), and serosal (ascites) disease. Recent descriptions characterize the mucosal forms in more detail [2,3].

Eosinophilic gastroenteritis, an idiopathic inflammation of the alimentary canal, is characterized by infiltration of the intestinal wall by eosinophils, massive submucosal edema, and peripheral eosinophilia; it is generally confined to the gastric antrum and proximal small intestine [4]. Eosinophilic ileocolitis is extremely rare [5–7], and the colon is rarely cited as a unique site for the condition [8,9].

The diagnosis for EGIDs is established after ruling out other causes of an eosinophilic disease, particularly atopy, parasitic infestations, vasculitis, and hypereosinophilic syndrome (HES).

We report a typical case of widespread EoG with associated involvement of colonic mucosa in which symptoms dramatically responded to a course of steroids, as discovered by careful follow up.

Case report

A 64-year-old man was admitted to the Internal Medicine Department complaining of watery diarrhea (approximately 20 stool passages/d) and weight loss but not abdominal pain nor vomiting. He had no history of abdominal surgery or any other allergic disease. He denied taking any medication or herbal medicines.

A physical examination of the abdomen was negative.

Initial laboratory investigations showed a normal white blood cell count with an absolute eosinophil count of 76/mm^3, low albumin (3 g/dL), low IgG (497 mg/dL) and increased IgE (282 U/ml). Tests for antinuclear factor, rheumatoid factor, and antineutrophilic cytoplasmic autoantibody were all negative.

Celiac disease and thyroid in vitro function tests as well as hepatitis A, B and C markers were negative. Carcinoembrionic Antigen (CEA) was 23 ng/ml (NV $<$ 5 ng/ml); Ca 19-9, Ca 125, Ca 15-3 and AFP were within normal range.

Stool examination for ova and parasites were negative as well as RAST testing for a battery of allergens, including common foods. The abdomen CT scan was normal with the exception of minimal widening of the ascending colonic wall.

A gastroscopy showed marked edema of the gastric antrum, narrowing of the pyloric ring and edema of the duodenal mucosa with erythema (Fig. 1). Biopsies of the gastric antrum and proximal and distal duodenum revealed flattening of microvilli and inflammation with eosinophilic infiltration (Fig. 2). A colonoscopy showed marked patches of erythema, mucosal edema and some small sigmoid diverticula (Fig. 3). Biopsies of the rectum, sigmoid and ascending colon revealed architectural distortion and dilatation of cryptae, microabscesses and eosinophilic infiltration of the colonic mucosa (Fig. 4).

Prednisolone at 50 mg/d was prescribed. Complete remission of the diarrhea occurred in approximately one week, and the patient was discharged for follow-up.

Approximately one month later, the patient's bowel habits were normal, and he had gained 2 kg. A new gastroscopy was

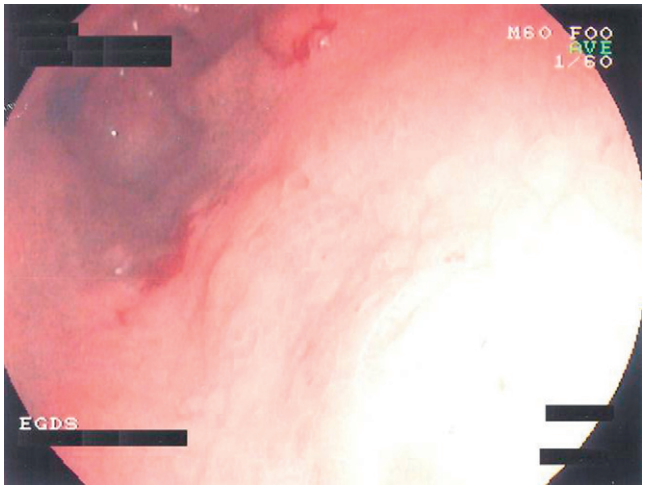

Figure 1 EGDS. marked edema of the gastric antrum, some erosions and narrowing of the pyloric ring.

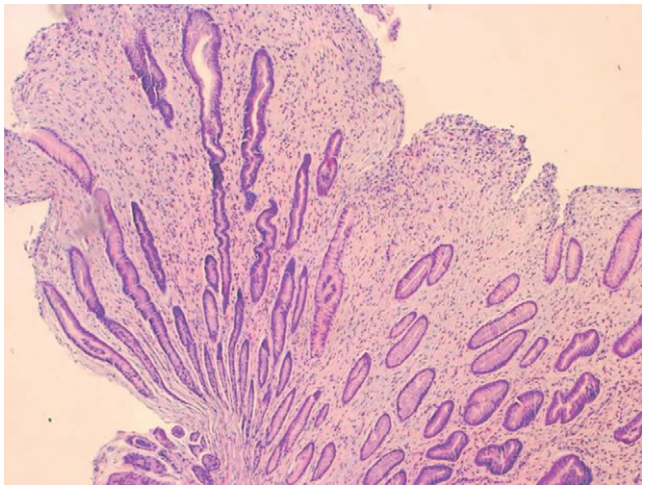

Figure 2 Antral gastric mucosa showing huge edema of the lamina propria and numerous eosinophil infiltrates (E.E. x 50).

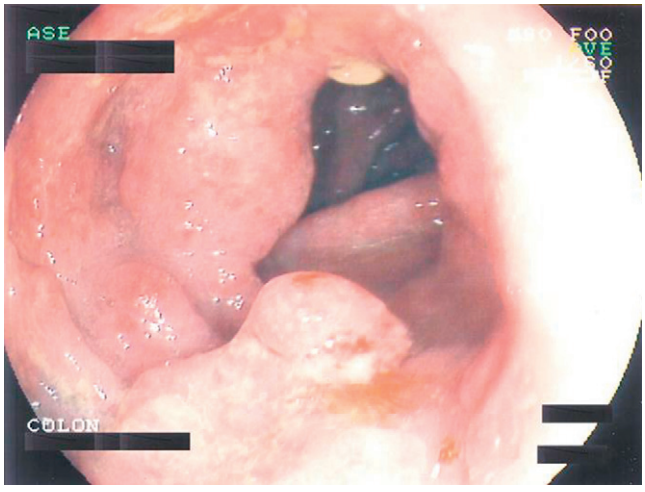

Figure 3 Colon: patched marked erytema, minimal erosions, mucosal edema, and some small sigmoid diverticula.