

Research Article

EOSINOPHILIC ENTERITIS CAUSING INTESTINAL OBSTRUCTION

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ABSTRACT

Eosinophilic gastroenteritis is a rare disease of the Gastrointestinal tract, mimicking many other Gastrointestinal disorders due to wide spectrum of presentations. It is diagnosed by excluding other causes of eosinophilia, it runs a chronic relapsing course and can respond to low dose steroid therapy. This study demonstrates the occurrence of intestinal obstruction due to eosinophilic infiltration in the gastroenteral region. The intestinal obstruction due to eosinophilic gastroenteritis, is quite rare and diagnosis is by excluding other causes and by histology

Key words: eosinophils, eosinophilic gastroenteritis, intestinal obstruction, abdominal pain, eosinophilia

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INTRODUCTION

Eosinophilic gastroenteritis is a rare inflammatory disease, first described by Kaiser¹ in 1937. Since then less than 300 cases have been reported in literature. The exact etiology² is not known, causes proposed are atopy [50%] with a family history of allergy, Ankylostomacanicum, silk allergy and food allergy to milk and milk worm products. Almost all patients have tissue eosinophilia and raised IgE levels³ suggesting a type-1 hypersensitivity reaction. Specific food⁴ antigens can cause mast cell degranulation in the Gastrointestinal wall, releasing eosinophil chemotactic factors and platelet activating factors^{3 5}. The degranulation of eosinophils causes release of histamine, major basic protein [MBP], eosinophil peroxidase [EPO] and TNF. These proteins cause inflammation, tissue damage and further mast cell degranulation resulting in a vicious circle.⁶ Drugs like gold, carbamazepine, cotrimoxazole, clofazimine have shown to cause eosinophilia in the walls of the GIT. The diagnosis is established by demonstrating^{3 5} eosinophilic infiltration in biopsies obtained on endoscopy. Naylor reported a history of allergy in 52% of cases in a review of 220 cases, similarly⁶ Lee et al in 4 out of 8 cases reported food allergy. Peripheral eosinophilia was demonstrated in up to ^{2 4}80% **Methodology**- since 2012 May to 2015 August a total of 12 cases of intestinal obstruction due to Eosinophilic Enteritis were admitted in MVJ MC & RH for and were operated, on laparotomy most of them had strictures in jejunum [4] and ileal strictures [8], some underwent strictureplasty [1] and some underwent intestinal resection [11] and anastomoses.

DISCUSSION

In this study of 12 cases admitted in MVJ Medical college, from 2012 May to 2015 August diagnosed as Eosinophilic gastroenteritis, histology was characterized by eosinophilic infiltration of the gut.^{3 7} Males [7] predominate over females [5] ages involved ranged from 30 to 55 yrs. Symptoms were vague abdominal pain, nausea, vomiting, intestinal obstruction and ascites^{4 6}. The presence of abnormal gastrointestinal symptoms along with 20 or more eosinophils per high power field in one or more areas of gut and⁵ absence of other causes of eosinophilia [parasites, drugs and malignancy] point to a diagnosis of Eosinophilic gastroenteritis. Studies have shown that disease reactivity can be modified by^{4 6} elementary diets,^{3 6} ketotifen [antihistamines] sodium cromoglycate [mast cell stabilizer] and monteleukast [leukotriene antagonists] are used as drug treatment, flare ups can be controlled with corticosteroids is shown in studies.

CONCLUSION

Eosinophilic enteritis should be kept in mind in the differential diagnoses of intestinal obstruction especially with a past history of allergy and eosinophilia.

Primary	Secondary
Primary eosinophilic esophagitis	Gastrointestinal infections: Helminthes, fungi
Primary eosinophilic gastroenteritis	Hypereosinophilic syndrome
Primary eosinophilic colitis	Systemic disease (e. g., connective tissue disease, vasculitis, celiac disease, inflammatory bowel disease)
Allergic proctocolitis of infancy	Drugs (e. g., naproxen, clozapine, rifampicin, gold)

Table showing features of patients who underwent Laparotomy for intestinal obstruction

Age in yrs	Number of patients	Sex	Diagnosis	Procedure done
30-40 yrs	4	M-2,F-2	Intestinal obstruction	Intestinal resection and anastomoses
40-45 yrs	3	M -2,F-1	Intestinal obstruction	Intestinal resection and anastomoses 2,strictureplasty 1
45-55 yrs	5	M-3,F-2	Intestinal obstruction	Intestinal resection and anastomoses

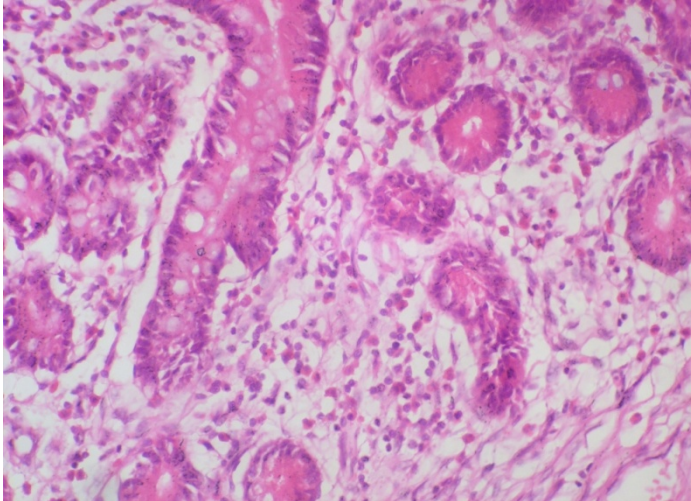
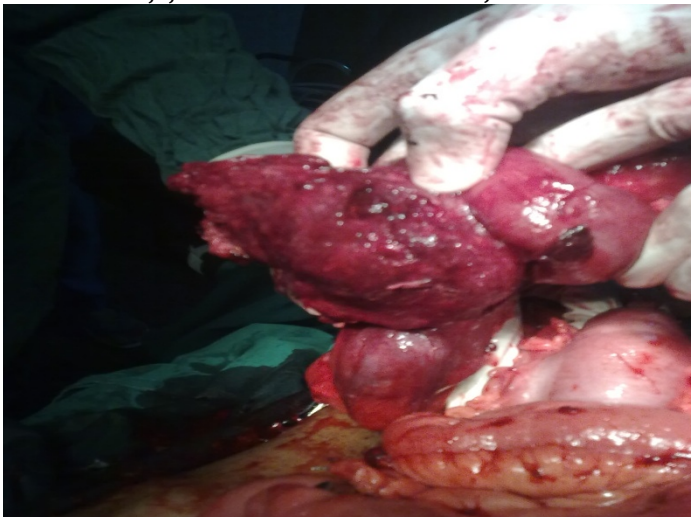


FIGURE showing eosinophilic infiltration in the jejunum - Mass seen in jejunum 40 inches distal to DJ flexure



Jejunum being anastomosed side to side

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