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A CASE REPORT OF EOSINOPHILIC ENTERITIS

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ABSTRACT

Eosinophilic enteritis is eosinophilic infilteration of bowel wall. it most commonly involves stomach and proximal small bowel.we present a case of a 36 year old female who presented with complaints of right lower abdominal pain, vomiting's and fever,per abdominal examination there was tenderness in right iliac fossa with rebound tenderness. Usg abdomen was suggested appendicitis. Pt was taken up diagnostic laparoscopy in which we found a mass involving appendix, caecum, ascending colon hence laparotomy with ilieotransverse anastomoses was done. Histopathological examination revealed eosinophilic enteritis.post operatively patient was put on oral glucocorticoid regimen.Patient has been asymptomatic in the follow up for 6 months

KEYWORD

eosinophilic enteritis, EGE, eosinophilic gastroenteritis

ARTICLE HISTORY

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INTRODUCTION:

Eosinophilic enteritis is eosinophilic infiltration of any layer of bowel wall. it most common involves stomach and proximal small bowel[3] and can also involve oesophagus, distal small bowel , colon, biliary tracts, gall bladder and pancreas. The standardised estimated prevalence for the US population has been calculated to be 8.4/100,000[1]. There is a higher incidence in third to fifth decade of life but eventually this disease affects age groups from infancy to the seventh decade[2]. It can be classified as mucosal, muscular and subserosal based on the depth of eosinophilic infiltration. Here we present a case which presented with signs and symptoms of acute abdomen which was later diagnosed as eosinophilic enteritis.

CASE PRESENTATION:

A 36 year old female presented with abdominal pain in the right lower abdomen for 5 days. It was sudden in onset, colicky type of pain. Patient had five episodes of vomitings for two days which was non bilious and low grade fever for one day. There was no history suggestive of allergy, asthma or parasitic infestation. There was history of puerperal sterilisation done ten years back.

On examination general condition of patient was fair with tachycardia. The abdomen was non distended soft with tenderness and rebound tenderness present in right iliac fossa without guarding.

Laboratory routine investigations showed raised total leukocyte count of 14,453. There was no peripheral eosinophilia. USG abdomen suggested acute appendicitis with involvement of terminal ileum and ascending colon. Patient was taken for diagnostic laparoscopy, findings: mass seen in RIF involving appendix, caecum, ascending colon, hence laparotomy with right hemicolectomy with ilieotransverse anastomosis was done. On cut section of the specimen a well circumscribed area with proliferative lesion with areas of necrosis was seen. Post operative period was uneventful.The histopathological examination of the resected specimen revealed eosinophilic enteritis with obstruction and associated inflammatory changes. At discharge patient was prescribed with prednisolone 10mg which was gradually tapered over 6 weeks.

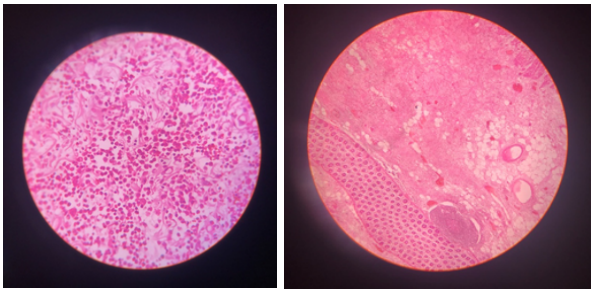

Fig 1&2 Histopathology showing eosinophils

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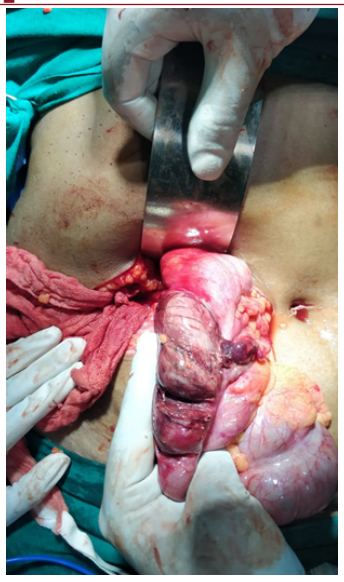

Figure.3 Intaoperative image showing involvement of ascending colon

DISCUSSION:

Eosinophilic gastroenteritis was first described by Kaijer in 1937[4]. It is a rare disease. The most common presenting symptoms are abdominal pain, nausea, vomiting, diarrhoea. It can also present as intestinal obstruction or perforation. This is dependent on the layer of involvement of the GI tract, such as mucosal, muscular, or serosal (table. 1)

Table .1

Layer involved	presentation
Mucosa	Abdominal pain, vomiting, diarrhoea, gi bleed, protein losing enteropathy.
Muscular	Strictures, intestinal obstruction, nausea, vomiting
Serosal	Ascitis, high peripheral eosinophil count.

The diagnostic criteria were first proposed by Klein et al in 1970[2] and updated by Talley et al in 1990[5]. The three main diagnostic criteria are presence of GI symptoms, biopsy demonstrating eosinophilic infiltrates and no evidence of any parasitic or extra intestinal disease. The criteria for the pathological diagnosis is presence of eosinophilic infiltrate more than 20 per high power field. The association with peripheral eosinophilia is not mandatory for diagnosis because it may be absent in up to 25% of patients[3].

CT imaging can also be useful to distinguish the depth of involvement based on specific radiographic findings, but they may be absent in at least 40% of patients. Endoscopic findings are also nonspecific and range from mucosal erythema, friability, polyps, oedema, ulceration, fibrosis and complete loss of villi.

There are several conditions which may present with eosinophilic infiltration in gut. These are food allergies, drugs, parasitic infestation, connective tissue disorders, Crohn's disease, vasculitis, malignancy and non-topical sprue[6]. The conditions which can present with terminal ileal strictures and obstruction include tuberculosis, pelvic inflammatory disease, mesentric ischemia, Crohn's disease, carcinoid infiltration, radiation enteritis, diffuse enteropathy and lymphoma. The diseases which show both eosinophilic infiltration and as intestinal obstruction are parasitic infestation, vasculitis and Crohn's disease [3,7]]. Focally enhanced neutrophilic exudates & granulomas are seen in Crohn's disease but are absent in eosinophilic gastroenteritis. In case of vasculitis, inflammation is centred in and around blood vessels along with visible ischemic changes. The parasitic infestation is identified depending upon eosinophilc picture with identification of organism by HPE and stool examination.

The EGE is treated mainly by dietary modification and oral glucocorticoids. The surgical resection may be required in cases of obstruction. The surgical resection of the strictured segment may have to be performed before pathological diagnosis, as it is difficult to take biopsy if mucosa is not involved or if it cannot be sampled. However in an early presentation, preoperative lab workup, endoscopy, and biopsies can be done

CONCLUSION:

The diagnosis of EGE is difficult because it is a rare disease, it is often not considered, as it presents with non-specific signs and symptoms. The final diagnosis requires histopathological confirmation. However, EGE should be considered in the differential diagnosis of patients with unexplained acute abdominal pain. Stool examinations to exclude parasitic infection are mandatory. Endoscopy with multiple biopsies can be done to confirm the diagnosis in case of early presentation

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