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Case Report

Eosinophilic Gastroenteritis - A Case Report

Pinakin Pujari[1], Rajashree Ratnaparkhe[2], Manjiri Vyavahare[3]

[1]DNB Gen Surgery, MCh Paediatric Surgery, Consultant Paeditric Surgeon & Head, Dept. of Surgery, Dr Hedgewar Hospital Aurangabad, Maharashtra, India.
[2]MD Paediatrics, Consultant Paediatrician, Dr Hedgewar Hospital Aurangabad, Maharashtra, India.
[3]Consultant Paediatrician, Dr Hedgewar Hospital Aurangabad, Maharashtra, India.
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I N F O

Corresponding Author:
Pinakin Pujari, Dept. of Surgery, Dr Hedgewar Hospital Aurangabad, Maharashtra, India.
E-mail Id:
drpinakinpujari@gmail.com
Orcid Id:
https://orcid.org/0000-0003-2384-8197
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I N T R O D U C T I O N

Eosinophilic gastroenteritis is a rare disease of unknown aetiology, and is characterized by focal or diffuse eosinophilic infiltration of the gastrointestinal tract. It usually occurs in the third decade of life.[1]

This has a variable clinical presentation. Usually such cases present with non-specific abdominal symptoms, recently many cases are have been reported that presented mainly ascites. In our case, the patient initially presented with diarrhoea and then developed ascites. A high index of suspicion is required for diagnosis.

Demonstration of peripheral eosinophilia in blood, ascitic fluid and on histopathologic examination of antral biopsy confirms the diagnosis. (Histopath report suggestive of Eosinophilic gastroenteritis).

Here we report a case of eosinophilic gastroenteritis in a child that mainly presented as enteritis and ascites.

Case Report

A 4-year-old boy presented with complaints of fever, pain in abdomen, abdominal distension, and loose motions since 5 days. He also had occasional non-bilious vomiting since 5 days. No history of any food allergy was reported.

On examination the patient was found to be febrile and haemodynamically stable. Per abdomen examination revealed abdominal distension, smiling umbilicus with the presence of horse shoe dullness suggestive of ascites. Rest of the systemic examination was normal. His complete blood count was raised as shown in table 1 with eosinophilic predominance.

Table 1.Complete blood count of the patient

Date	Hb gm%	TLC	Eosinophil %	Platelet
19-05-2017	9.9	50640	65.5	5.56
21-05-2017	10.8	48500	63	4.75
01-06-2017	9.8	9100	0.1	6.86

Total serum IGE level was 323 mIU/ml (normal 100 mIU /ml). Liver function test, renal function test, and serum LDH were normal.

Table 2.Other investigations

Date	Investigations	Value
21-05-2017	LFT, RFT, Urine R	Normal
23-05-2017	24 hr urinary albumin	233 IU/I (Normal)
	Ascitic fluid	50-100 leukocytes per hpf TLC-26500 cells/ cumm Eosinophil - 95%

Ascitic fluid tapping was done which showed raised TLC count with raised eosinophil count .Ultrasonography of abdomen showed moderate ascites, rest was normal. (Figure 1) CT scan was done which showed gross ascites, mildly dilated small bowel loops with thick enhancing walls suggestive of enteritis with thick pylorus and thick walled bowel again supporting the diagnosis of eosinophilic gastroenteritis (Figure 2).

For histopathological confirmation of peripheral eosinophilia, upper GI endoscopy (normal report) with biopsy was done. Histopathology showed submucosa diffusely infiltrated by eosinophils suggestive of eosinophilic gastritis (Figure 3).

After confirmation of the diagnosis, patient was started with per-oral cetirizine and prednisolone 1 mg/kg/day in tapering dose. The patient responded well to the treatment. Fever and loose motions subsided but abdominal distension persisted. The patient was then discharged on tapering doses of oral prednisolone over 6 weeks. After 2 weeks, TLC was 9800 (eosinophil 0%), with no abdominal distension and normal abdominal USG.

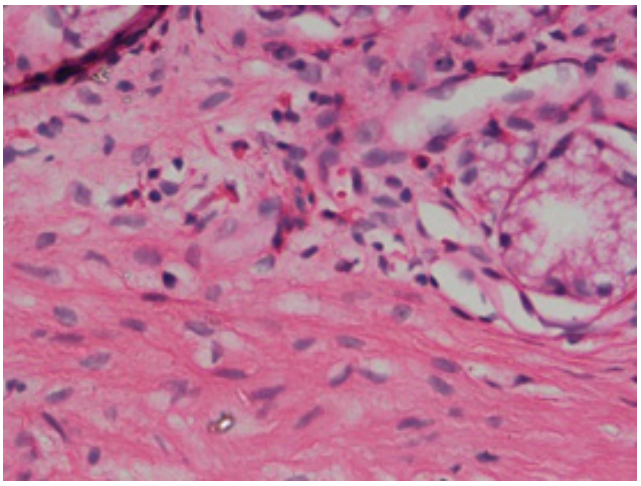

Figure 1.Histopathology view

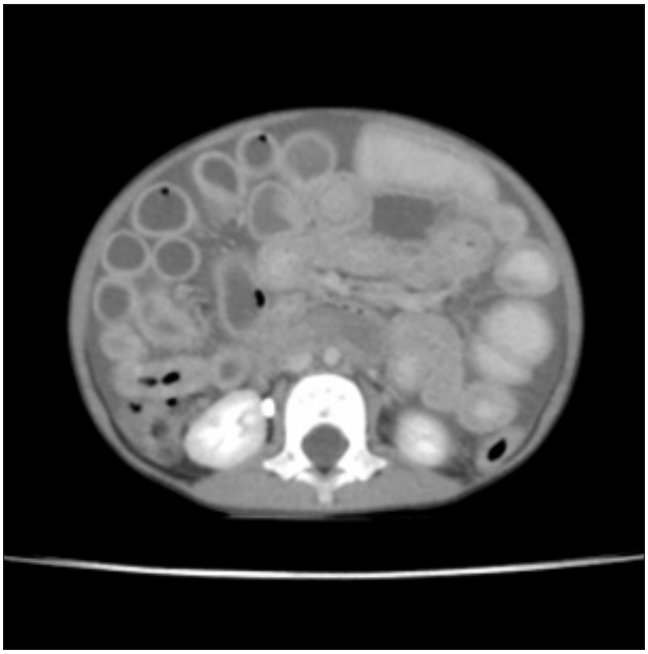

Figure 2.CT Abdomen

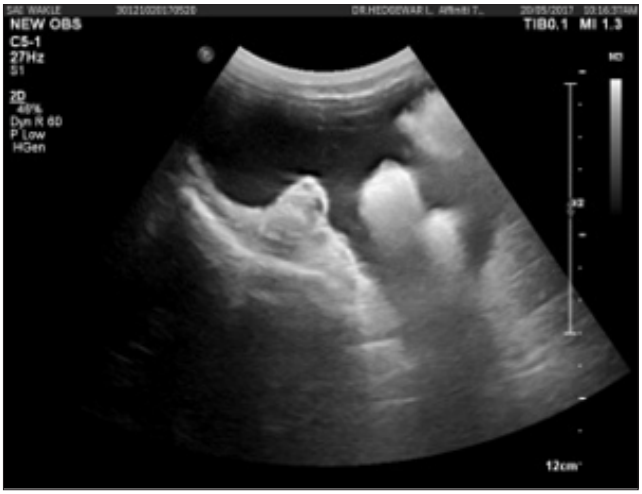

Figure 3.Ultrasonography abdomen

Discussion

Eosinophilic gastroenteritis is a rare inflammatory disorder characterised by focal or diffuse infiltration of the gastrointestinal tract by eosinophils. Although the etiologic mechanism is unknown, allergic or immunologic disorder is the most commonly proposed caused for this disease?[1] A strong history of allergy is usually present in these patients specially in pediatric population.[2]

The Klein classification separates eosinophilic gastroenteritis into the following three groups according to the predominant tissue layer of involvement in the gastrointestinal tract: (a) predominant mucosal, (b) muscular, and (c) Subserosal disease.[3]

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Our present case satisfies the following criteria of eosinophilic gastroenteritis.

- Presence of gastrointestinal symptoms
- Biopsies demonstrating eosinophilic infiltration of one or more areas of the gastrointestinal tract or characteristic radiological finding with peripheral eosinophilia
- No evidence of parasitic or extra intestinal disease[4]

The clinical manifestation of eosinophilic gastroenteritis range from nonspecific gastrointestinal complaints to more specific symptoms such as protein losing enteropathy, luminal obstruction and eosinophilic ascites.[5]

The most common CT features include circumferential bowel wall thickening predominantly in the jejunum, was present in our case as shown in (Figure 1 and 2).

No standard treatment for eosinophilic gastroenteritis is available, but steroids, and antihistaminics are often prescribed with good result.

In some cases that are refractory to medical management or present with intestinal obstruction due to stenotic lesions surgical resection of the affected bowel segment may be required.

Our patient in the present report completely recovered with medical management.

The case is presented for its rarity and atypical presentation.

Conclusion

We conclude that eosinophilic gastroenteritis should be suspected in any unexplained and atypical gastrointestinal manifestation with peripheral eosinophilia.

Conflict of Interest: None

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