EOSINOPHILIC GASTRITIS

Pages with reference to book, From **9** To **13**

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Abstract

A case of eosinophilic gastritis in a 15 year old male, presenting with anaemia, pyloric outlet obstruction and a mass in the upper abdomen is being reported.

INTRODUCTION

Eosinophilic gastritis is a part of spectrum of eosinophilic gastroenteritis, a complex disease entity with poorly understood etiology. Eosinophilic gastroenteritis was first recognised by Kaijser in 19371. Since then more than 100 case reports have appeared in the world literature tif 1979.[1]
Eosinophilic gastroenteritis is characterized by peripheral eosinophilia, eosinophilic infiltration of some portion of the gastro-intestinal tract and abnormalities of gastrointestinal function.
Although it still must be considered a disease of uncertain etiology but coincidence of eosinophilic gastroenteritis with atopic disorders and food sensitivities have led clinicians to consider this disorder as immunologic in nature.
The disease responds inconsistently to simple food withdrawal programmes. IgE antibodies to specific food substances have been found in a few patients leading to a postulated pathoDhysiologic mechanism involving tissue mast cells, release of slow-reacting substances of anaphylaxis (SRS-A) and chemotaxis of eosinophils. Oral steroids in uncontrolled trials appear to ameliorate the disease.[1]

CASE REPORT

young boy aged 15 years, resident of was admitted in Jinnah Postgraduate Centre on 12th January, 1986. His problems started six months prior to admission. He had pain in upper abdomen, recurrent postprandial fullness, nausea, vomiting and inability to gain weight. Vomiting was most troublesome, initially it occurred only[2-3] times a day but as the time passed', he was unable to retain even liquids. There were two episodes of haematemesis and malaena during this period. There was no personal or famil3 history of allergy, asthma, eczema, urticaria or hay fever.

PHYSICAL EXAMINATION

On admission he was thin built and anaemic. ,Abdominal examination revealed fullness in upper abdomen, positive succussion splash and a mass of irregular ill defined margins, extending from epigastrium to the umblicus.

LABORATORY FINDING

Haemoglobin was 8.6 gm, absolute values showed iron deficiency anaemia PCV-47, MCV-85 (N 76-96), MCH-22 (N 28-32), MCH-3 I (N 32-36). Total leucocyte count was 1 3,600/cumm. Differential leucocyte count showed 20% eosinophilia. Absolute eosinophilic count was 1016/cumin. Multiple stool

examinations were positive for occult blood, but no ova or parasite were ever present. Barium meal with fluoroscopy (Figure 1)

Figure 1. Barium Meal X-Ray showing gross distortion of gastric lumen. Multiple filling defects and thickening of the wall.

showed thickened thd distorted gastric mucosa. Peristaltic movements were sluggish. Ultrasound examination of stomach showed thickened wall of stomach (Figure 2).

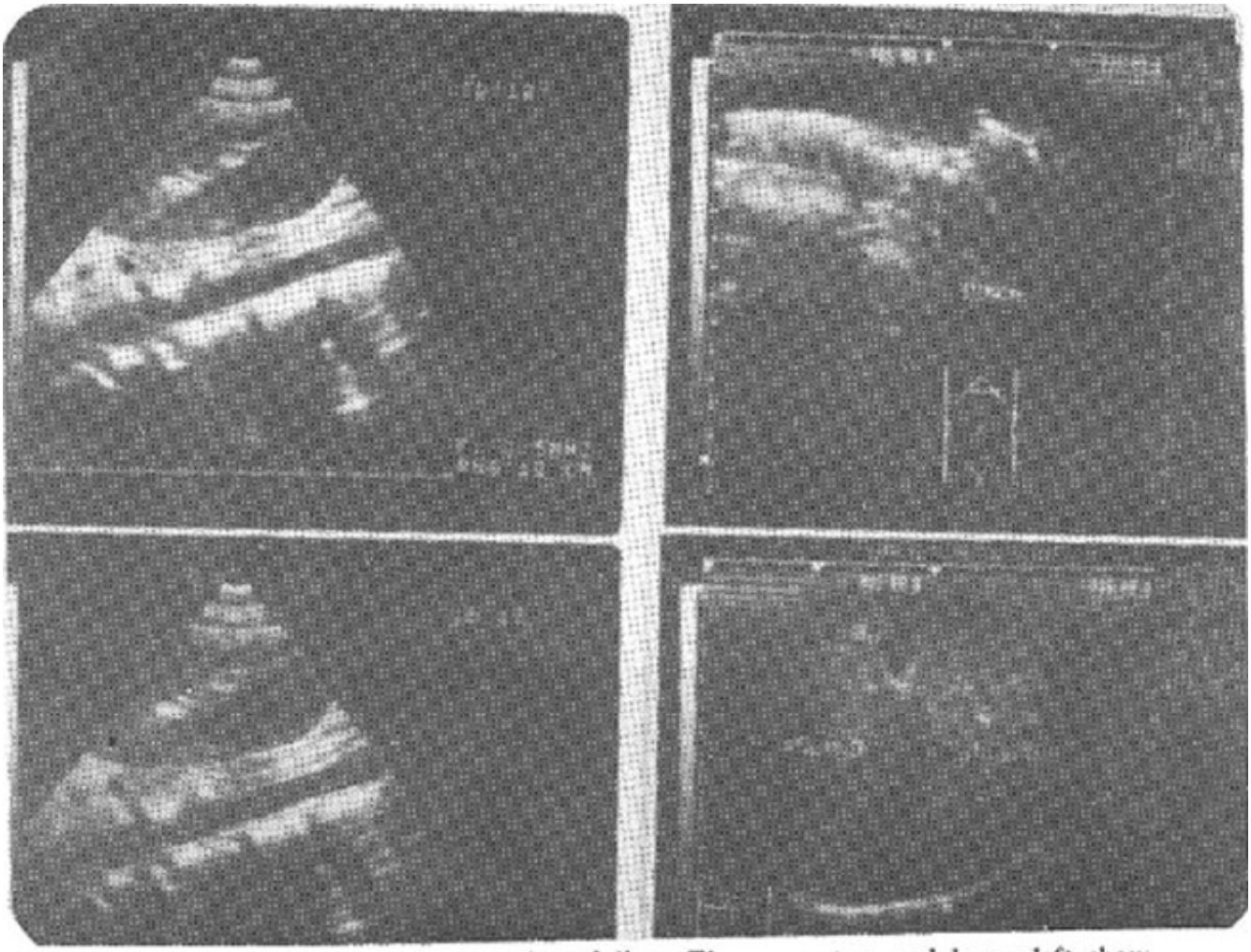

Figure 2. Ultrasound images of stomach and liver. The upper two and lower left show stomach with thickened wall, infiltration and narrowing of lumen, lower right shows liver with normal echogenecity.

ENDOSCOPY AND BIOPSY

Initial endoscopic examination revealed multiple small grape like nodular swaffings, occupying the greater curvature, antrum and extending upto the second part of the duodenum. Biopsy was taken from the antral lesions and was submitted for histopathology (Figure 3).

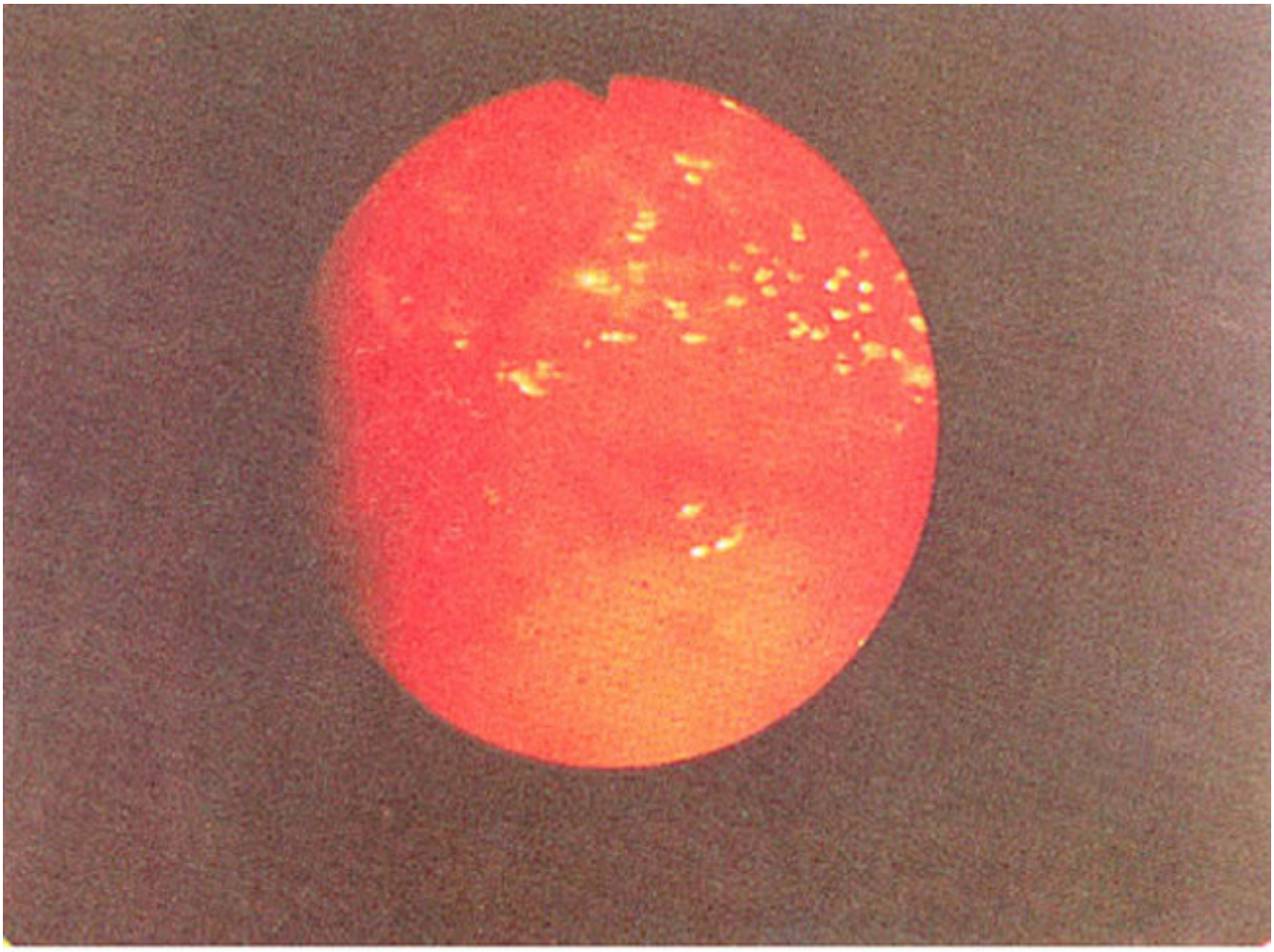

Figure 3. Gross lesion as seen on endoscopy. The gastric antrum, showing multiple small greyish white nodular masses.

On microscopy the antral mucosa was seen heavily infiltrated by eosinophils involving the whole depth of the mucosa, and distorting the pits and the glands. The covering epithelium was mostly eroded (Figure 4).

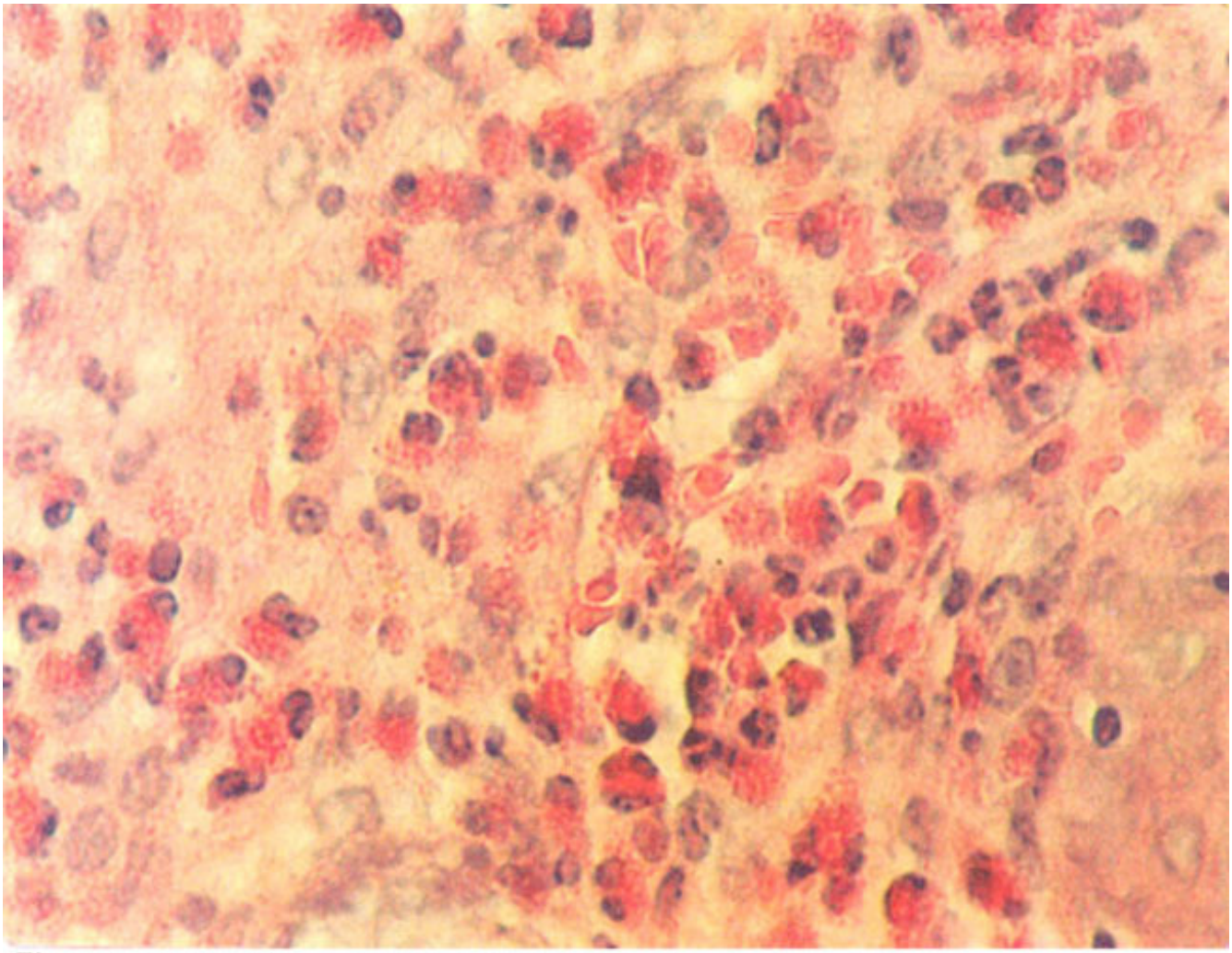

Figure 4. Photomicrograph of the gastric mucosa showing heavy infiltration of eosinophils.

COURSE IN THE HOSPITAL AND FOLLOW UP

Patient was given intravenous fluids and electrolytes to correct fluid and electrolyte balance. A course of corticosteroid was given, with tablet prednisolone 40mg daily for 4 days which was tapered to 20mg/day for two weeks. There was a dramatic response to steroids with marked increase in the appetite and weight of the patient. Nausea and vomiting stopped after initial therapy of 40 mg daily for 4 days. At the end of therapy the mass disappeared.

Gastroscopy repeated after 4 weeks revealed reduction in the size of nodular swellings, and the microscopic examination of the biopsy taken this time showed gastritis in healing phase. The patient was discharged and till he attended the out patient department for follow up after 8 weeks he was in remission.

DISCUSSION

The clinical manifestations of eosinophilic gastritis depend on the area of maximal gastrointestinal involvement, and the depth of the maximal disease process. Three main patterns have been described3. Predominent mucosal disease produces iron deficiency anaemia with faecal blood loss. Concomittent enteric loss of protein with hypoproteinemia is also seen.3 Predominent muscle layer disease causes marked thickening and rigidity of gut wall, resulting in pyloric narrowing and gastric outlet

obstruction.4 Predominent subserosal involvement causes ascites.
In this case the diagnosis was made on endoscopic and histological findings. The endoscopic biopsy is only mucosa deep, therefore muscle layer involvement could not be determined on microscopy, which was suggested by the clinical presentation of pyloric outlet obstruction, and a mass in the upper abdomen. Eosinophiic gastroenteritis with systemic involvement has also been reported.[5]

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REFERENCES

1. Cello, J.P. Eosmophilic gastroenteritis - A complex disease entity. Am. J. Med., 1979; 67 1097.
2. Klein, N.C., Haigrove, R.L., Sleisenger, M.H.et al. Eosinophilic gastroenteritis. Medicine, 1970; 49: 299.
3. Katz, J.A., Goldman, H. and Grand, J.R. Gastricmucosal biopsy in eosinophilic (allergic) gastroenteritis. Gastroenterolgy, 1977; 73 : 705.
4. McCune, W. S., Gusack, M. and Newman, W.Eosinophilic gastroduodenitis with pyloric obstruction. Ann. Surg., 1955; 142: 510.
5. Robert, F., Omura, F. and Durant, J. R. Mucosaleosinophilic gastroenteritis with systemic involvement. Am.J. Med., 1977; 62: 139.