



Eosinophilic Gastritis with Antral Pseudopolyposis

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INTRODUCTION

Eosinophilic gastritis (EG) is a rare disease distinguished by eosinophilic infiltration likely due to antigen driven humoral immunity affecting about 6 in 100,000 people. Diagnosis and treatment are often challenging due to the heterogeneity of manifestations and endoscopic findings. This case highlights a severe variant of EG.

CASE

A 20-year-old man with a history of atopy presented initially with bilateral lower extremity edema of 1 year duration.

- Postprandial nausea and emesis primarily with egg consumption
- Denied abdominal pain, constipation, hematochezia, melena, hematemesis, or coffee-ground emesis
- LFT WNL, *Helicobacter pylori* negative
- EGD: innumerable 3-7mm semi-pedunculated polyps in the gastric antrum; a single 3-5mm duodenal bulb polyp; no esophageal mucosal abnormalities
 - Pathology: >50 eosinophils/hpf & superficial eosinophilic abscesses
- Colonoscopy: unremarkable
- Treatment: Prednisone 40mg x2 weeks followed by taper
- Follow up EGD: 75% reduction in polyp burden

TABLE 1: SEROLOGIC PROFILE

	BEFORE	AFTER
Hgb	8.5 g/dL	11.3 g/dL
WBC	12.7 x 10 ⁹ /L	9.9 x 10 ⁹ /L
Eosinophils	34%	3.1%
Albumin	2.5 g/dL	3.3 g/dL
Protein	4.1 g/dL	5.3 g/dL
Ferritin	7 mcg/L	
Iron	<10 mcg/dL	

FIGURE 1: ENDOSCOPIC IMAGES

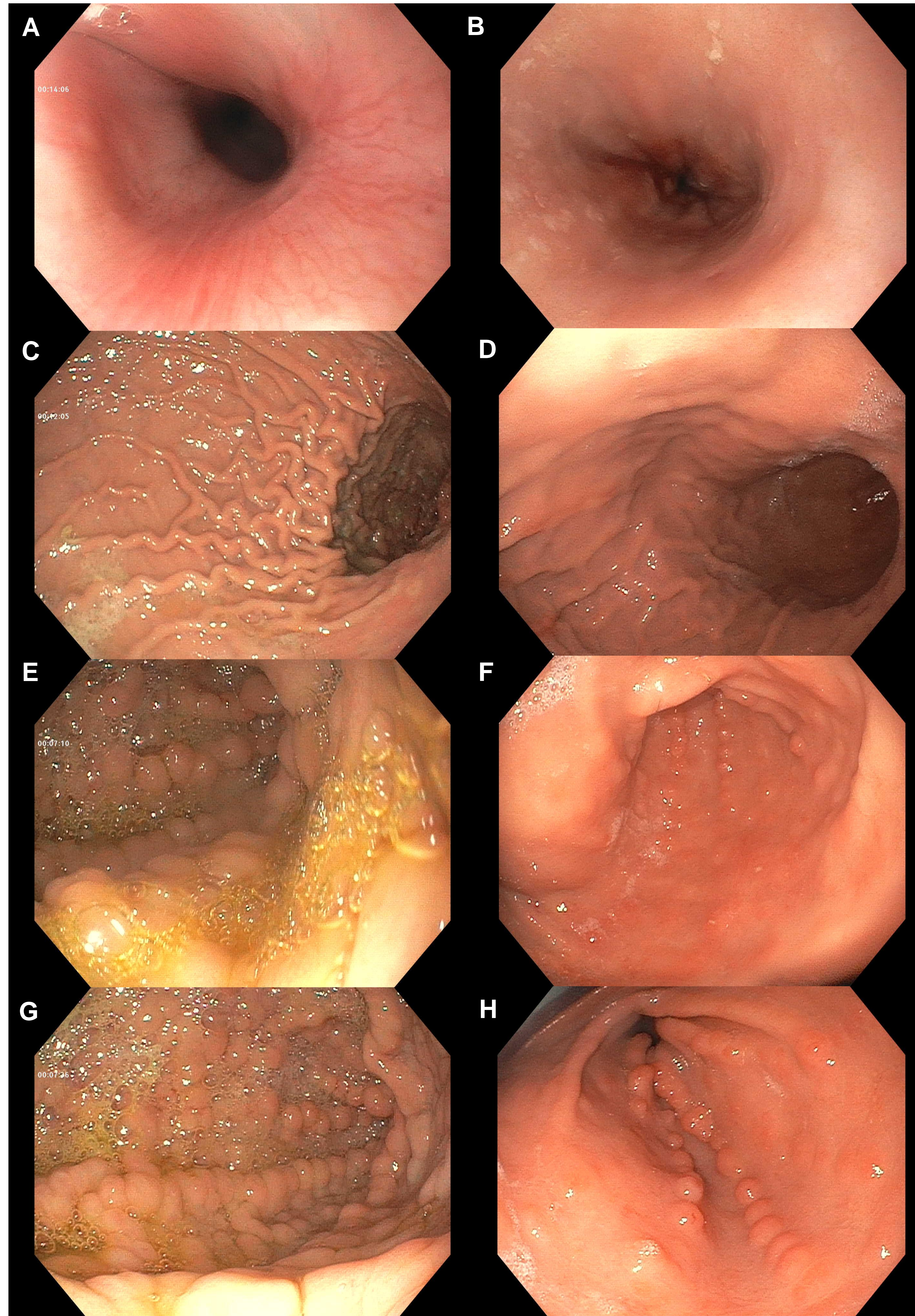


Figure 1: A: Esophagus before treatment; B: Esophagus after; C: Body before; D: Body after; E: Antrum before; F: Antrum after; G: Pylorus before; H: Pylorus after

DISCUSSION

- EG is an important consideration of young patients with symptomatic edema and anemia
- Most common presenting symptoms: Nausea, vomiting, and abdominal pain
- Weight loss, failure to thrive, hypoalbuminemia, and iron deficiency anemia have been reported but malabsorption is poorly characterized
- Endoscopic findings are variable in EG and poorly characterized but there have been recent efforts to create a validated scoring tool¹
- Gastric pseudo-polyps are a characteristic of high disease severity and underscore an important distinction from hereditary polyposis syndromes in the young demographic
- Random biopsies are crucial to establishing the diagnosis and differentiating inflammatory from dysplastic changes
- Unlike eosinophilic esophagitis, no cutoff for eosinophilic infiltration has been established
- As our understanding of eosinophilic gastrointestinal disorders evolves, continued efforts to characterize the associated syndromes and characterize the variety of endoscopic changes are essential

TABLE 2: PROPOSED EG REFERENCE SYSTEM¹

	1	2	3	4	5	6
Erosion/ Ulcer	< 5 Erosions	≥ 5	Shallow ulcer	<25% Thickness	25% - 50%	>50%
Granularity	Fine	Coarse				
Nodularity	Mild	Severe				
Erythema	Mild	Severe				
Friability	Mild	Severe				
Folds	Thickening					
Pyloric stenosis	Present					

REFERENCES

1. Hirano I, Collins MH, King E, et al. Prospective Endoscopic Activity Assessment for Eosinophilic Gastritis in a Multisite Cohort. *Am J Gastroenterol.* 2022;117(3):413-423. doi:10.14309/ajg.0000000000001625