

Dysphagia in the Setting of Absent Esophageal Contractility: A Case for Ruling Out Eosinophilic Esophagitis

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Case Presentation

A 24-year-old male presented with reflux, dysphagia, and regurgitation, resulting in a 20-pound weight loss despite proton pump inhibitor and empiric H. pylori treatment.

Gastric emptying study was unremarkable, and initial EGD with distal esophageal biopsies were unremarkable with no eosinophils.

He presented to our clinic with persistent symptoms and underwent esophageal manometry, notable for absent contractility with normal integrated relaxation pressure.

Repeat EGD showed distal esophageal mucosal changes (EoE EREFS of 4) and biopsies with up to 60 eosinophils per high-power field (HPF) consistent with EoE.

Budesonide slurry started with dramatic improvement in symptoms, and subsequent food elimination diet with complete resolution of symptoms following dairy elimination.

Follow-up EGD on dairy elimination diet with EoE EREFS of 1 & esophageal biopsies demonstrated <15 eosinophils per HPF in all samples.

At present, 2.5 years after initial dairy elimination diet, patient maintains dairy avoidance and remains completely asymptomatic with weight back to baseline.

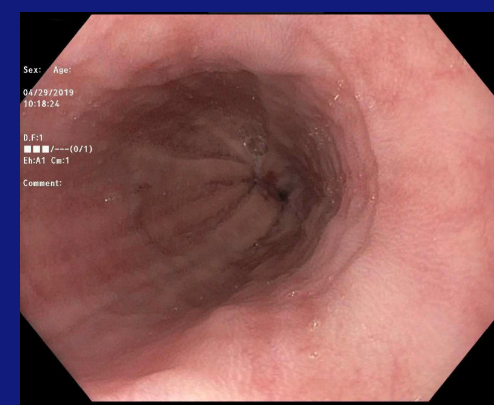


Figure 1. EGD showing mucosal changes suggestive of EoE (mild edema, rings, exudates, and furrows).

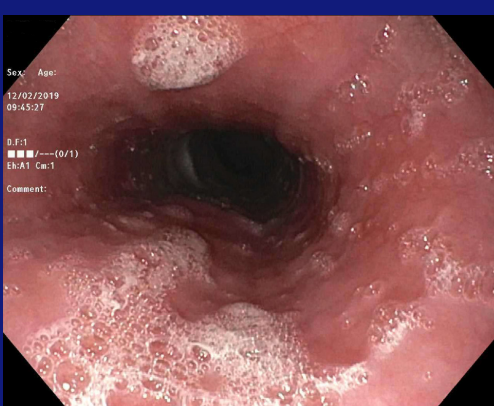


Figure 2. Repeat EGD showing significant improvement in previous mucosal changes.

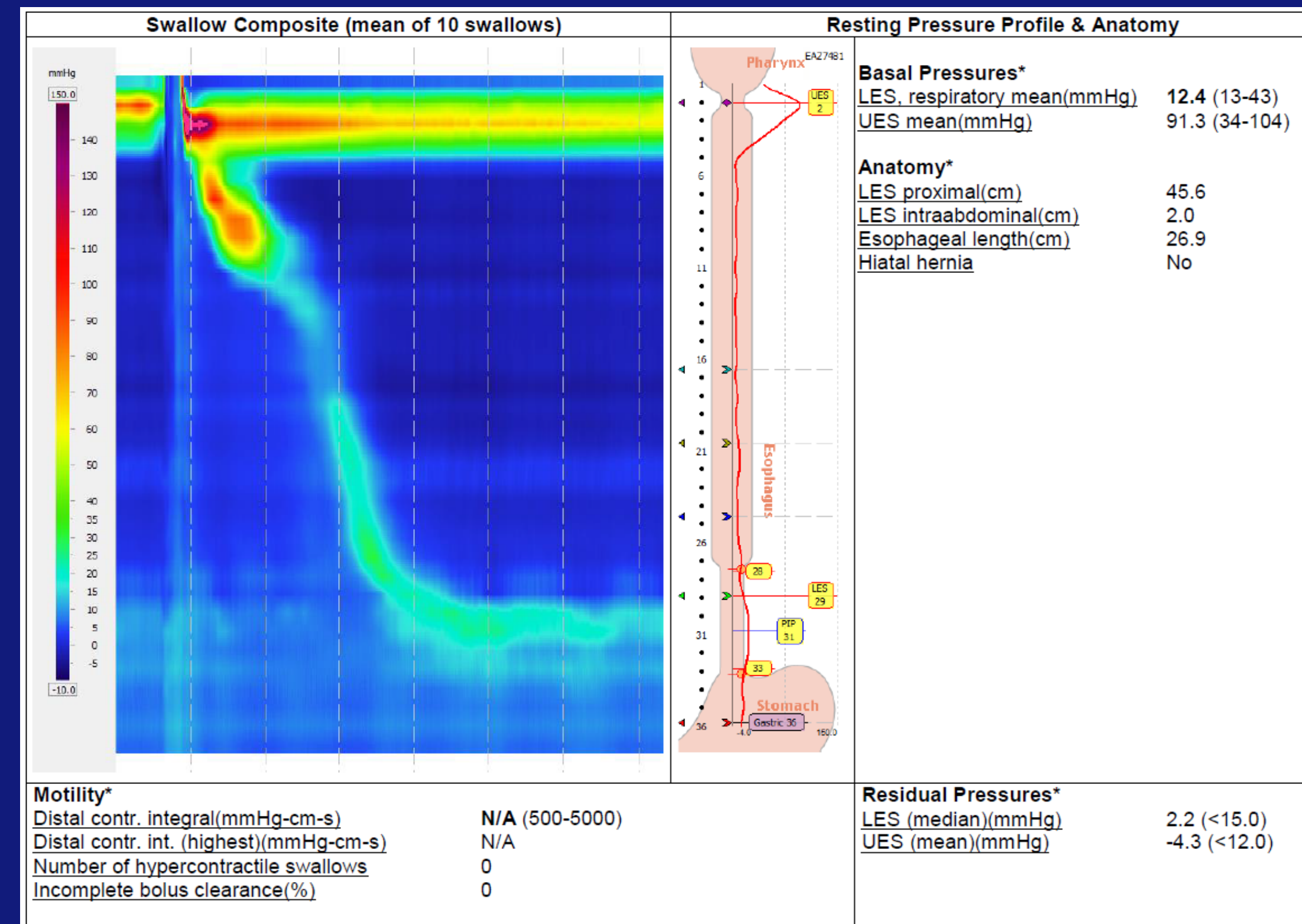


Figure 3. High resolution manometry showing 100% failed and ineffective swallows with normal IRP, with Chicago Classification V3.0 diagnosis of Absent Contractility.

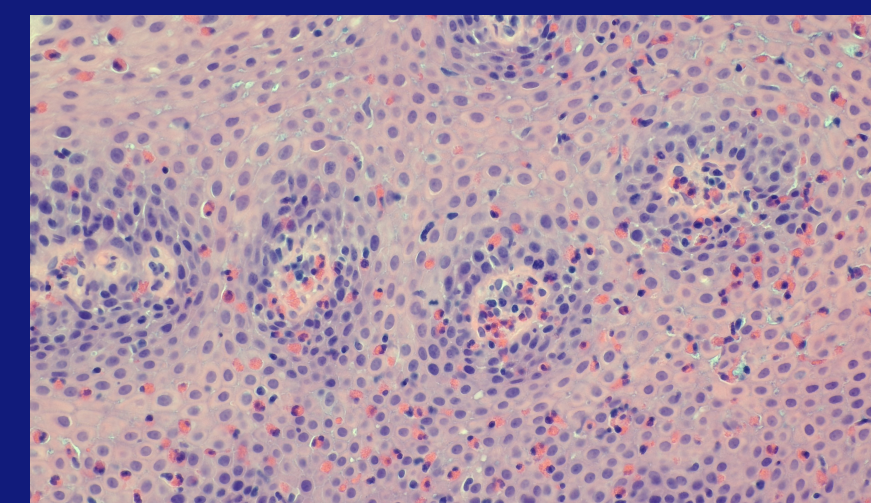


Figure 4a. Distal esophageal biopsy with up to 60 eosinophils per HPF.

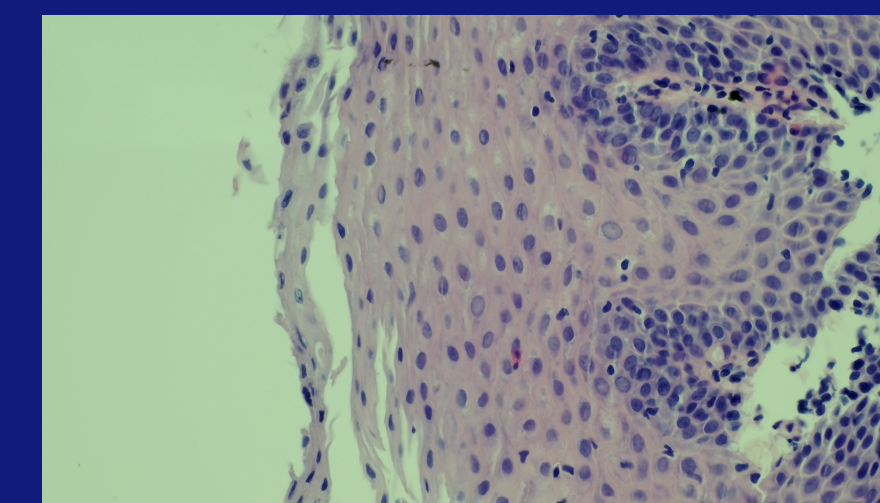


Figure 5a. Post-EoE treatment esophageal biopsy with less than 15 eosinophils per HPF.

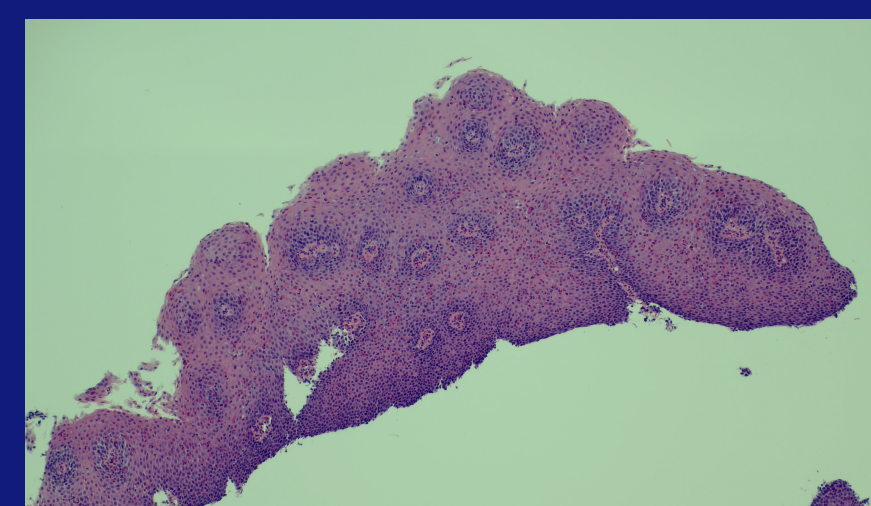


Figure 4b. Distal esophageal biopsy.

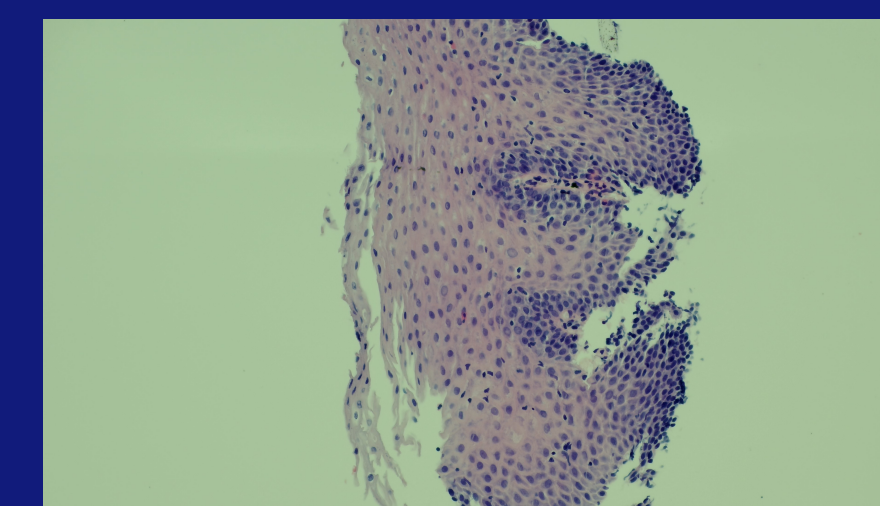


Figure 5b. Post-EoE treatment esophageal biopsy.

Discussion

Theoretical mechanisms of association between eosinophilic esophagitis and motility disorders:

- EoE may cause the release of myoactive and neuroactive eosinophil secretory products which impact peristalsis and lower esophageal sphincter relaxation, induce tissue remodeling, or disrupt esophageal intramural neurons
- Stasis resulting from a motility disorder leads to irritation, with cytokine release attracting eosinophils

Diagnosis of eosinophilic esophagitis:

- Clinical symptoms consistent with EoE
- Esophageal eosinophilia with at least 15 eosinophils/hpf or 60/mm²
- If above criteria are met, evaluate for non-EoE disorders that can cause or contribute to EoE

Clinicians should have an awareness of the association between EoE and motility disorders when evaluating either entity, as EoE requires a high index of suspicion and assurance of adequate biopsies for diagnosis. Several biopsies from two or more esophageal levels are recommended to increase sensitivity of testing.

Guidelines for management of EoE currently recommend ruling out underlying motility disorders. The complete resolution of symptoms and pathology with EoE treatment in this patient suggest the inverse is also true – eosinophilic esophagitis should be considered in the case of motility disorders.

