

Oral Viscous Budesonide Ameliorates PPI-Refractory Lymphocytic Esophagitis: A Longitudinal Clinical, Endoscopic, and Histologic Outcome Case Report



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Introduction

- Lymphocytic esophagitis (LyE) is a new and emerging immune-mediated esophageal disease, manifesting clinically as dysphagia
- We present a patient with LyE complicated by esophageal strictures refractory to proton-pump inhibitor (PPI) therapy, who demonstrated clinical, endoscopic and histologic improvement on swallowed oral viscous budesonide (OVB)

Case Presentation

- 77F nonatopic patient presented with chronic progressively worsening dysphagia to solids refractory to omeprazole 20 mg twice daily
- Outside EGD with endoscopic findings and histology consistent with LyE
- Index EGD (Fig 1.) revealed similar findings to prior EGD.
 Optimization of PPI attempted but limited by patient tolerance
- EGD#2 (**Fig 2.**) with worsening disease and OBV 2 mg twice daily was added to PPI (month 9). Clinical response reported but OVB decreased to 1 mg twice daily after 3 months due to joint pain
- EGD #3 (Fig. 3) showed partial improvement with apparent vascularity and pink mucosa. Low-dose PPI discontinued.
- EGD #4 (Fig. 5) with patient on OVB monotherapy showed continued endoscopic and histological improvement. Following EGD,
 OVB decreased to 0.5 twice daily and low-dose PPI restarted.
- EGD #5 (Fig. 7) demonstrating continued improvement endoscopically and limited histological activity of disease
- **Follow-up:** Patient demonstrates both continued clinical and histological response to therapy. She is scheduled for her next EGD between months 22-24.

Month 0 Outside EGD

Endoscopy

Reports not fully available but described a narrowed esophagus with diffuse pallor, edema, decreased vascularity, diffuse rings, mucosal scarring, and distal strictures status post dilation and biopsies consistent with lymphocytic esophagitis

Histology

Distal ES >25 IEL/hpf; Proximal ES >25 IEL/hpf

Management

Started on PPI 20 mg daily

Month 5 Index EGD

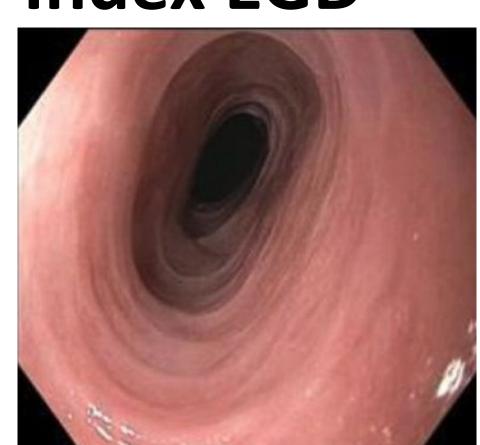


Figure 1
Endoscopic findings
consistent with
prior EGD

Management

Balloon dilation
performed and attempt
made to optimize PPI
dosage however
limited by patient
tolerance

Month 8 EGD #2



Timeline

Figure 2 Worsened endoscopic appearance

Management

Repeat dilation performed.

1-month following EGD,
OBV 2 mg twice daily added to low-dose PPI. OBV reduced to 1 mg daily after 3 months.

Month 13 EGD #3



Figure 3

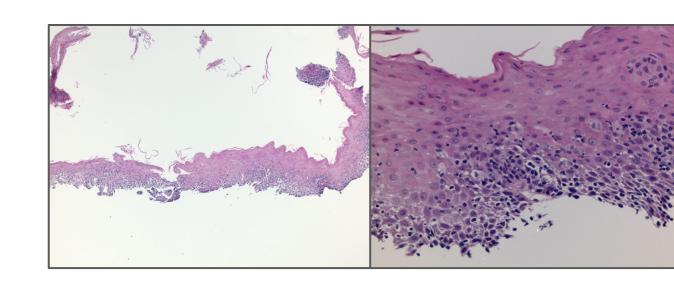


Figure 4: H&E stain- distal ES with up to 25 IEL/hpf and proximal ES with mildly increased IEL

Management

Dilation performed and low-dose PPI discontinued

Month 15 EGD #4

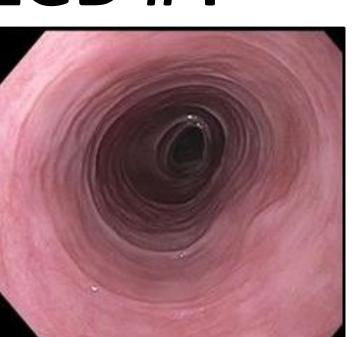


Figure 5

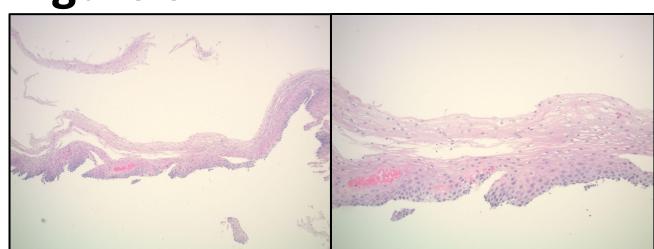


Figure 6: H&E stain- distal ES with patchy increased IEL and mid-ES with focally mildly increased IEL

Management

Dilation performed. OVB decreased to 0.5 twice daily and low-dose PPI restarted for GERD symptoms

Discussion

- LyE has clinical and endoscopic features reminiscent of eosinophilic esophagitis (EoE); however, esophageal non-granulocytic infiltration with >20 peripapillary IEL/hpf is a predominant histologic feature within a spongiotic epithelium
- LyE appears to be more prevalent in females as opposed to EoE which affects more males
- There are limited reports (reserved to case reports or case series) of clinicians treating LyE similarly to EoE but otherwise there have been to date, no large studies investigating the efficacy of these therapies in LyE

Conclusions

 Using OVB dosing regimen from EoE clinical trials, our case details longitudinal clinical, endoscopic and histologic outcomes in PPI-refractory LyE with treatment response to OVB, serving a basis for future studies

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