A rare cause of dysphagia: Esophageal Stricture due to Lichen Planus

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BACKGROUND

- Esophageal lichen planus (ELP) is an under-recognized cause of dysphagia.
- Accurate diagnosis is important as ELP can lead to recurrent severe dysphagia and odynophagia, with a negative impact on quality of life.
- Timely diagnosis is crucial for effective treatment as ELP has been associated with increased risk for development of squamous cell carcinoma.

CASE DESCRIPTION

- A 72-year-old gentleman presented with progressively worsening esophageal dysphagia to solids for 2 years.
- Past medical history included oral lichen planus and osteoporosis treated with alendronate.
- Prior work-up included two endoscopies that had shown a focal proximal esophageal stricture and thin esophageal mucosa. Some of the biopsies obtained during those endoscopies had shown esophageal mucosa with focally increased eosinophils; and some were interpreted as unremarkable.
- The working diagnosis was peptic stricture with possible eosinophilic esophagitis. He completed a trial of PPI, allergen avoidance and serial balloon dilations; but continued to experience dysphagia

CASE DESCRIPTION (CONTINUED)

- He underwent another endoscopy that showed recurrent proximal esophageal stricture that was dilated from 8 to 15 mm.
- This time, biopsy of the stricture showed numerous intraepithelial lymphocytes and focal apoptotic squamous cells (Civatte bodies) compatible with ELP.
- Budesonide slurry 1 mg twice daily was instituted and an EGD 6 months later showed near-resolution of the stricture.
- The patient no longer requires dilations or antacid therapy and is asymptomatic currently.

IMAGING AND HISTOPATHOLOGY

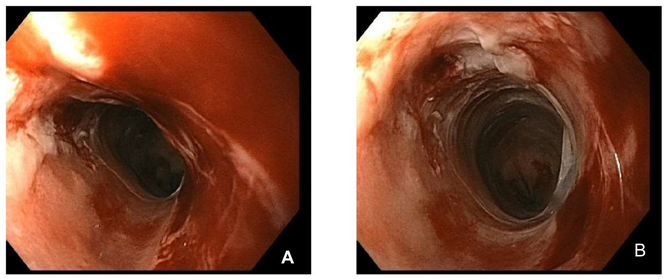

Figure 1: Endoscopy with hyperemic mucosa with mucosal sloughing after dilator passage. A is proximal esophagus and B is mid-esophagus

Common endoscopic findings in ELP:

- Easy peeling of the esophageal mucosa with minimal contact and formation of “tissue paper-like membranes”
- Esophageal strictures, webs
- Pinpoint erosions, mucosal sloughing, lacy white papules
- GERD can be distinguished from ELP by the sparing of GE junction in ELP

Common Biopsy Findings in ELP:

- Dense lymphocytic infiltration of the lamina propria
- Basal cell layer degeneration and epithelial detachment
- Civatte Bodies (apoptotic keratinocytes)

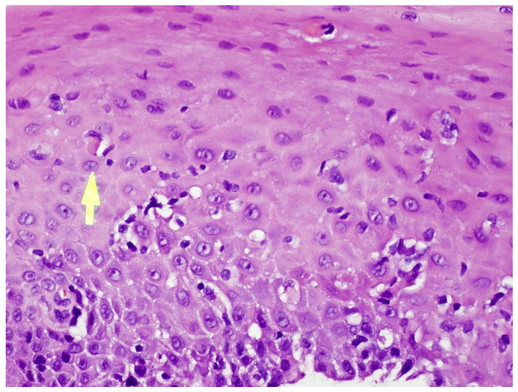

Figure 2: Esophageal biopsy showing esophageal squamous mucosa with basal reactive epithelial changes, increased intraepithelial lymphocytes, and arrow pointing to two apoptotic keratinocytes (Civatte or colloid bodies)

DISCUSSION

- Esophageal lichen planus should be suspected in patients with a history of cutaneous or oral LP
- If histology is inconclusive but a high index of suspicion remains, repeating biopsies and expert pathology review may be warranted as is highlighted in this case.
- The differential diagnosis includes reflux esophagitis, eosinophilic esophagitis, drug-induced lichenoid esophagitis, lymphocytic esophagitis, pemphigoid, candida or viral esophagitis, GVHD and Behcet’s disease
- Treatment includes serial dilations, topical and/or systemic steroids. Recurrence has been described despite topical steroid therapy with requirement of additional dilations. Successful use of immunomodulators such as cyclosporine and mycophenolate has been reported.

REFERENCES

1. Franco, Diana L.et al 2015. “Presentation, Diagnosis, and Management of Esophageal Lichen Planus: A Series of Six Cases.” *Case Reports in Gastroenterology* 9 (2): 253–60.
2. Arshad, Tamoore et al. 2020. “No Lesion? No Problem: Case of Oesophageal Lichen Planus in a Patient without Any Cutaneous Lesions.” *BMJ Case Reports* 13 (3).
3. Donnellan F, et al. Fluticasone propionate for treatment of esophageal lichen planus. A case series. Dis Esophagus 2011;24:211–4.
4. Fox LP et al. Lichen planus of the esophagus: what dermatologists need to know. *J Am Acad Dermatol* 65: 175-183, 2011.