Dysphagia, rings and furrows; oh my! A rare cause of benign esophageal stenosis.

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Background

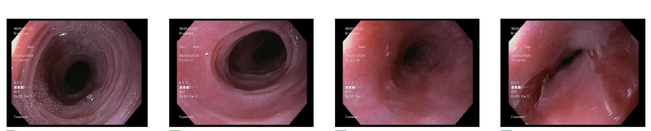
- Lichen planus (LP) is a chronic, inflammatory autoimmune disease that affects the skin, nails and mucosal membranes.
- Mucosal lesions occur in 30-70% of patients without skin lesions.
- LP is a rare cause of esophagitis and stricture/stenosis which requires esophageal dilation.

Purpose

- Discuss the presentation of esophageal lichen planus
- Review the endoscopic and histologic findings associated with esophageal LP
- Discuss the management of esophageal LP including PPI therapy and esophageal dilation

Case Description

- 52 year old female presents for second opinion of progressive dysphagia to solids for 18 months.
- She complains of feeling like she is "swallowing a golf ball" with slow transit, odynophagia and pills getting stuck. She also complains of a burning sensation with carbonated drinks, wine and spicy food. She experiences heartburn three time per week with with nocturnal symptoms.
- 20 pound weight loss over 3-4 months.
- PMH includes GERD, bronchiectasis, no significant family hx.
- She was previously on a PPI but currently unable to swallow pills
- Physical exam unremarkable and oral mucosa without ulcers or lesions and no rashes
- She was started on lansoprazole 30mg dissolved twice daily
- EGD 12 weeks later demonstrated benign appearing stenosis in the lower third of the esophagus about 8mm in diameter and less than 1 cm in length. She also had LA grade A esophagitis, atrophy, longitudinal markins, tight circumferential folds, decreased vascular pattern, whispy white areas and white specks. Esophagus was dilated to 12mm.
- Pathology demonstrated squamous cells with mixed inflammatory cells including lymphocytes and eosinophils (up to 12 per HPF), mid esophagus with squamous epithelium with mixed inflammatory cells + lymphocytes eosinophils up to 10 per HPF and proximal esophagus with lymphocytes and rare eosinophils.



1 Middle Third of the Esophagus | 2 Middle Third of the Esophagus | 3 Lower Third of the Esophagus | 5 Lower Third of the Esophagus

Clinical Course

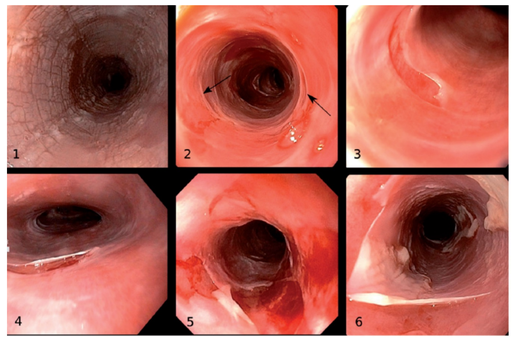
- GERD symptoms improved with PPI and dysphagia improved with dilation.
- She continued to have odynophagia with burning sensation with swallowing food
- Repeat EGD ordered off of PPI to determine if possible eosinophilic esophagitis (EoE) and decreased eosinophils due to PPI therapy.
- Repeat EGD demonstrated benign stenosis in distal esophagus and mucosal changes consistent with EoE.
- Pathology: "Basilar lymphocytosis and scattered apoptotic keratinocytes raises possibility of lichenoid esophagitis pattern which is non-specific but can be seen in association with lichen planus, medication injury/polypharmacy, viral infections and rheumatologic disorders. Patchy increased intraepithelial eosinophils which is nonspecific and seen in EoE, GERD, achalasia, drug hypersensitivity, infections"
- The patient received serial EGDs for dilation over the next several months.
- Subsequent esophageal dilation was complicated by mucosal tear requiring esophageal stenting which was eventually removed.
- She was started on swallowed budesonide to treat LP vs eosinophilic esophagitis with resolution of pills getting stuck in her throat, burning sensation and regurgitation.
- Repeat EGD after a few months of swallowed budesonide demonstrated stenosis that was dilate with Savary. Four mg of triamcinolone were injected at the site of the stricture.
- Interval between esophageal dilations has increased.
- Plans for repeat EGD with biopsies and possible repeat triamcinolone injection.

Discussion

- Esophageal involvement in lichen planus is rare. Patients often present with dysphagia or odynophagia.
- It is more common in middle-aged to older women.
- Involvement is usually in the proximal esophagus.
- Management of esophageal LP includes esophageal dilations, intralesional corticosteroids, topical corticosteroids and systemic steroids/immunosuppression.
- Refer to dermatology if there are skin or mucosal findings.

Endoscopic + Histologic Findings

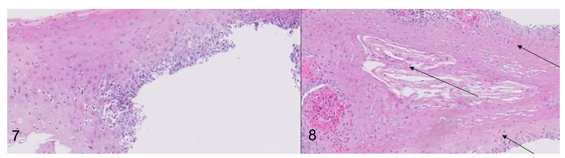
- Macroscopic findings on examination include:
  - mucosal friability with denudation, sloughing and pseudomembranes
  - Hyperkeratosis with white/rough mucosal surface and plaques
  - Trachealization
  - stenosis/stricture
  - esophageal webs



1. Whitish, rough surface (hyperkeratosis)
2. Rings, trachealization

3-6. Spontaneous tearing/sloughing of mucosa

- Microscopic findings include:
  - Band-like or lichenoid lymphocytic infiltrate involving the superficial lamina propria and basal epithelium
  - Scattered eosinophilic apoptotic keratinocytes (Civatte bodies) in the basal layer
  - Predominance of CD3+ T cells in subepithelial infiltrate



7) Basal cell hyperplasia. 8) Necrotic keratinocyte (Civatte bodies).

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