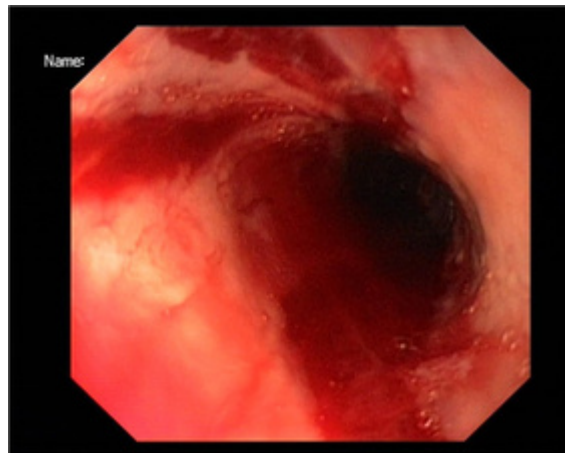
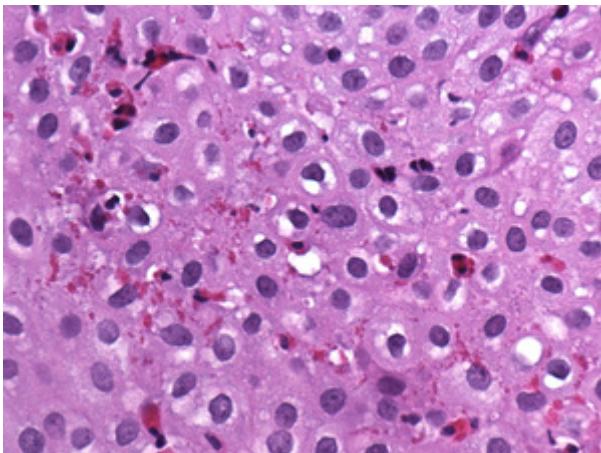
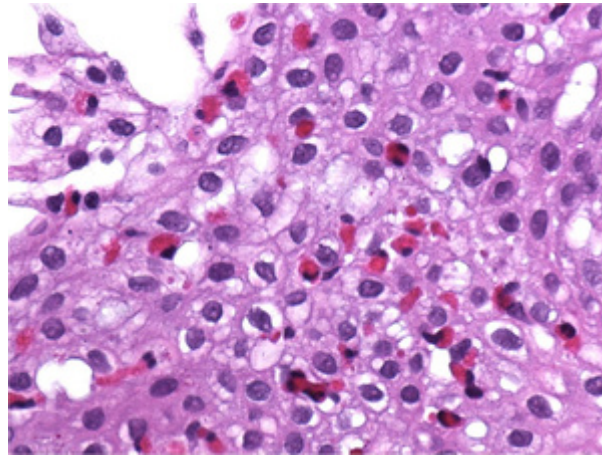
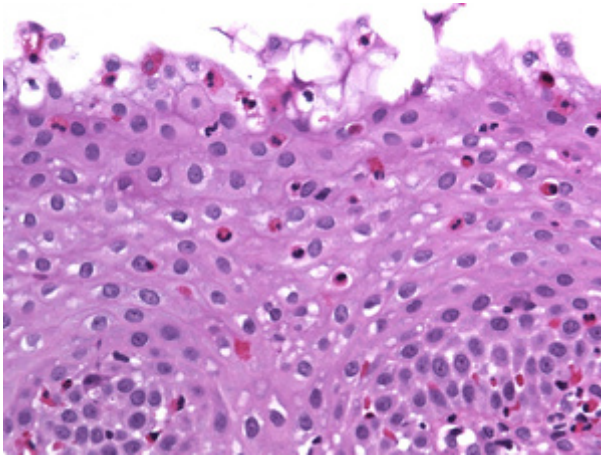
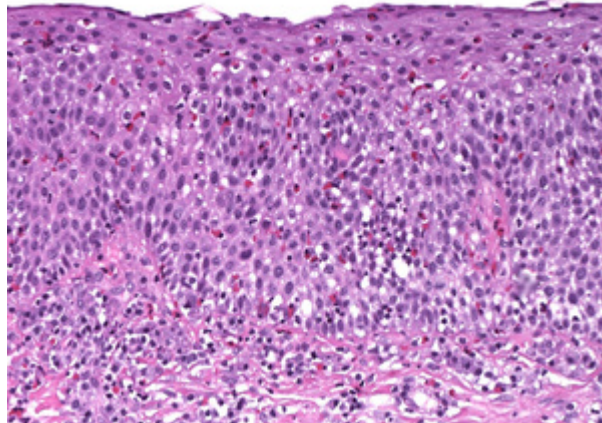
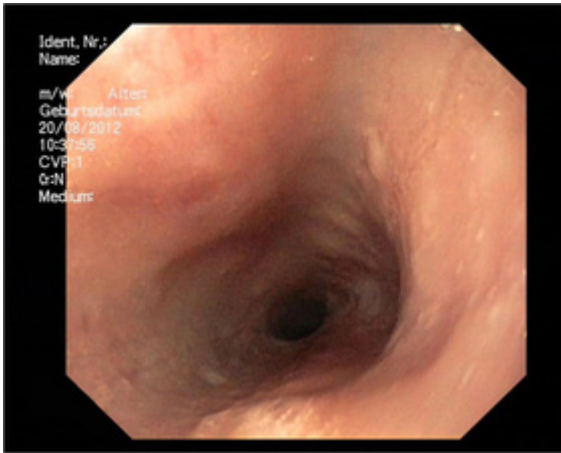


January 2013

18-year-old male with a long-lasting history of dysphagia. Endoscopy shows stenosis of the mid oesophagus.

What is your diagnosis?



Diagnosis

Eosinophilic oesophagitis.

Comment

Histology shows numerous eosinophils (up to 50 per HPF) aggregating in the superficial parts of the squamous epithelium with microabscess formation and degranulation. Basal cell hyperplasia, dilation of intercellular spaces, and papillary elongation are also present. The underlying stroma contains a mixed

inflammatory infiltrate and shows mild fibrosis. The patient underwent balloon dilation (panel F) and is currently free of symptoms under elimination diet and topical corticosteroids.

Eosinophilic oesophagitis represents a chronic, immune/antigen-mediated disease characterized clinically by symptoms related to oesophageal dysfunction and histologically by eosinophil-predominant inflammation. The prevalence of the disease is increasing worldwide and has been estimated to be 1%. The disease may occur at any age. Adults typically present with dysphagia and food bolus impaction, while young children may present with food intolerance, nausea and vomiting, or failure to thrive. Endoscopy may show concentric mucosal rings ("trachealization"), diffuse narrowing, or may be visually normal.

The major histologic features, which are considered characteristic and necessary to establish the diagnosis but not pathognomonic, include eosinophilic microabscesses (collections of ≥ 4 eosinophils within the epithelium), surface layering of eosinophils often associated with sloughing of superficial squamous cells, peak eosinophil counts ≥ 15 per HPF, and eosinophil degranulation. Minor features, which are frequent but less specific, include marked basal cell hyperplasia, lengthening of lamina propria papillae, intercellular edema, and lamina propria fibrosis with chronic inflammation. Please note that oesophageal eosinophilia is a nonspecific reaction pattern to a variety of insults, the most important differential diagnosis being gastrooesophageal reflux disease (GERD). In contrast to GERD, eosinophilic oesophagitis typically involves longer segments of the oesophagus and affects the proximal and middle portion (with relative distal sparing). The pathologic findings of eosinophilic oesophagitis are often patchy in distribution, and multiple biopsies from different areas should be obtained (cave: sampling error).

For further reading

- › Odze RD. Pathology of eosinophilic esophagitis: what the clinician needs to know. *Am J Gastroenterol.* 2009;104:485-90.
- › Liacouras CA, Furuta GT, Hirano I, et al. Eosinophilic esophagitis: updated consensus recommendations for children and adults. *J Allergy Clin Immunol.* 2011;128:3-20.
- › Maguire A, Sheahan K. Pathology of oesophagitis. *Histopathology.* 2012;60:864-79.

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