

CLINICAL VIGNETTE

Epidermoid Metaplasia of the Esophagus

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Introduction

Esophageal Epidermoid metaplasia is a rare condition of the mid to distal esophagus. The pathophysiology is thought to be due to chemical or mechanical irritation such as acid reflux or alcohol abuse.¹ Patients often present with gastroesophageal reflux (GERD) or dysphagia. Due to its rarity and insufficient awareness, epidermoid metaplasia can be under-diagnosed. This case highlights common risk factors and symptoms associated with epidermoid metaplasia.

Case

A 54-year-old female with a remote history of ductal carcinoma in situ (DCIS) of the right breast and alcohol abuse presented with chronic heartburn. At the time of evaluation, she reported a 10-year history of severe burning pain and dysphagia. These symptoms were often present with alcohol use. When she abstained from alcohol, she reported her symptoms improved significantly. Her dysphagia included one episode of food impaction with a piece of steak that eventually dislodged with forced emesis.

Esophago-gastro-duodenoscopy (EGD) was notable for esophageal findings of concentric rings and a small whitish colored patch with plaque-like nodules in the distal esophagus. This area was biopsied. Pathology showed squamous mucosa with epidermoid metaplasia, rare intraepithelial eosinophils (1-2 per high power field) and no dysplasia. She was also noted to have helicobacter pylori on gastric biopsies. After treatment of *Helicobacter pylori*, patient was maintained on Pantoprazole for 2 months with improvement in symptoms. Surveillance EGD is planned in the future.

Discussion

Epidermoid metaplasia is defined by the presence of dense granular layer with overlying hyperorthokeratosis in the squamous mucosa of the esophagus.¹

Endoscopically, a white nodular plaque is visualized (Figure 1) that is often described as esophageal leukoplakia.² It can be focal or diffuse. Histopathologic features include hyperorthokeratosis and a thickened granular cell layer.²

The underlying etiology of epidermoid metaplasia is unclear. Smoking and alcohol have been recognized as contributing risk

factors.² It is commonly seen in middle-aged adults with presenting symptoms of GERD and/or dysphagia.²

An association between epidermoid metaplasia and squamous dysplasia and carcinoma has been reported although the evidence is indirect and limited.^{2,3} Either endoscopic ablation or close surveillance has been recommended.⁴ Surveillance EGD is recommended 6 months after diagnosis and then yearly if no dysplasia is noted.⁵ This case highlights the significance of close examination of the esophagus for less common lesions that could have severe consequences or are associated with poor outcomes.

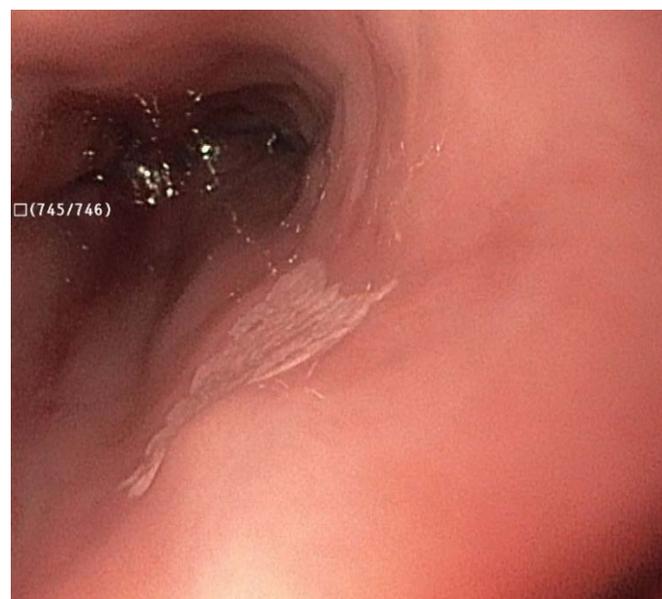


Figure 1 - Epidermoid metaplasia in the distal esophagus

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