

Esophageal Epidermoid Metaplasia

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Abstract

A 66-year-old man presented with increasing heartburn and reflux. He had no history of alcohol and tobacco consumption with no weight loss. Physical examination was unremarkable. Laboratory tests were normal. Upper gastrointestinal endoscopy showed a concentric thickening, lumen-constricting, white rough mucosa in the distal esophagus (Figure 1A). Common possible causes of esophageal narrowing was excluded. Narrow band imaging magnifying endoscopy demonstrated white, well-demarcated, cobblestone-appearing, and shiny plaques organized in a linear pattern (Figure 1B). Histopathological examination evidenced squamous epithelium with basal cell proliferation and a prominent granular layer (Figure 1C, D). No evidence of fungal and viral infection was found. No malignancy was confirmed pathologically. The patient received the diagnosis of esophageal epidermoid metaplasia based on specific endoscopic and histopathological manifestations. Esophageal epidermoid metaplasia is a premalignant lesion with risk for progression to squamous cell carcinoma, which rarely encountered in endoscopy practice and commonly presented in the mid to distal aspect.[1] The etiology remains uncertain, which is usually associated with alcohol and smoking exposure, chronic gastroesophageal reflux, and vitamin A deficiencies.[2] Endoscopic features mostly include white plaques, keratotic patches, altered texture, granularity, sloughing, and nodularity appearance.[3] White cobblestone-appearing patches are extremely eye-catching on narrow band imaging, which are easily mistaken for lichen planus, glycogenic acanthosis, and pill esophagitis. No guidelines have been made regarding its management. The hyperkeratotic endoscopic and histologic features of the squamous mucosa persisted on repeated follow-up endoscopic evaluations although reflux symptoms have remained completely controlled for this patient. He remained well and no progressive disease was detected at 2-year follow-up. Surveillance for this condition was uninterrupted.

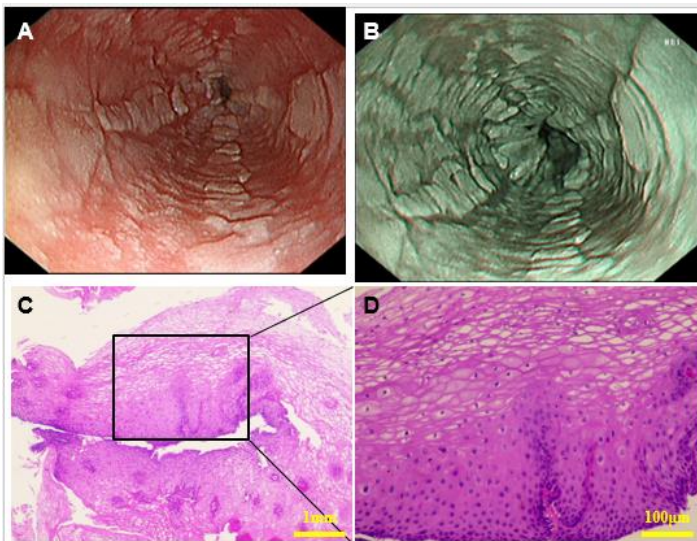


Figure 1: **A.** Upper gastrointestinal endoscopy showed a concentric thickening, lumen-constricting, white rough mucosa in the distal esophagus. **B.** Narrow band imaging magnifying endoscopy demonstrated white, well-demarcated, cobblestone-appearing, and shiny plaques organized in a linear pattern. **C, D.** Histopathological examination evidenced squamous epithelium with basal cell proliferation and a prominent granular layer.

Learning points:

Gastroenterologists should bear in mind esophageal epidermoid metaplasia whenever having a case of heartburn and reflux. Esophageal epidermoid metaplasia may mimic lichen planus,

glycogenic acanthosis, and pill esophagitis in endoscopic findings. Histologic examination should be the first modality of investigation.

Footnote:

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Written informed consent was obtained from the patient for publication of this “GI Image”. Board institutional approval was not required.

Author’s contributions:

Collection of data and writing: Shi-Rui Hou.

Manuscript preparation: Qi Wu.

Final approval of the manuscript: Wei Liu.

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