



# Epidermoid Metaplasia: An Endoscopic Surveillance Dilemma



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## INTRODUCTION

- Oral leukoplakia presents as white patches on oral mucosa with a prevalence of 1.5-4.3%
- Potentially malignant disorder with guidance regarding surveillance vs excision/ablation
- Epidermoid metaplasia is an analogous entity within the esophagus (0.2% of 1,048 consecutive esophageal biopsies) in which squamous epithelium of the esophagus is replaced with a layer resembling the epidermis of the skin
- Both diagnoses present in middle-aged to elderly patients with a history of smoking and/or alcohol intake
- Similar to oral leukoplakia, epidermoid metaplasia is a potentially malignant disorder and has been associated with adjacent areas of high grade dysplasia and/or esophageal squamous cell carcinoma

## CASE 1

- A 69-year-old female with active tobacco use presented for GERD and globus sensation
- EGD: white plaques with an undulated appearance to the mid-esophagus (Figures 1/2)
- Mid-esophageal biopsy: granular cell layer and hyperkeratosis, consistent with epidermoid metaplasia
- EGD one year later showed similar endoscopic findings without evidence of dysplasia
- Patient is scheduled to continue annual surveillance EGD

## CASE 2

- A 43 year-old-male with history of colon cancer s/p sigmoidectomy and epidermoid metaplasia (diagnosed four months prior) presented for refractory reflux
- EGD: LA Grade B esophagitis with an area of well-demarcated, white plaque with an irregular contour (Figures 3)
- Biopsies from the gastroesophageal junction again showed reactive squamous epithelial changes, including epidermoid metaplasia
- Patient is pending surveillance EGD in 1 year



Figure 1: A characteristic granular, undulating appearance of epidermoid metaplasia is visualized.



Figure 2: A well-circumscribed white plaque is seen in the mid to distal esophagus.

## DISCUSSION

- Epidermoid metaplasia is often characterized by a well-demarcated, white plaque in the mid-to-distal esophagus
- Unlike its equivalent, oral leukoplakia, there is currently no consensus on surveillance for epidermoid metaplasia
- However, given its risk for malignant transformation, we recommend annual EGD with four quadrant biopsies

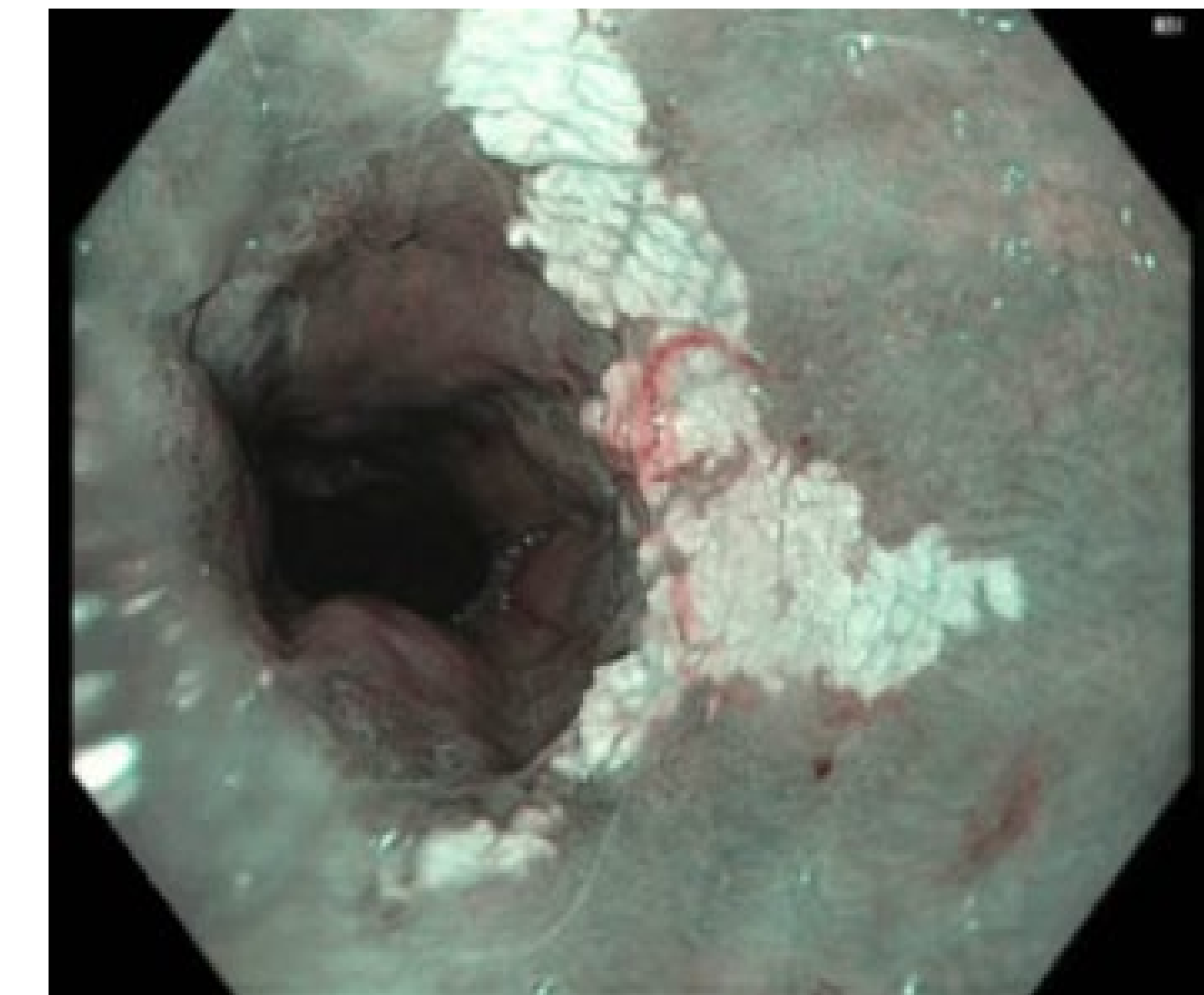


Figure 3: The shaggy appearance of epidermoid metaplasia is manifested in the distal esophagus and visualized under narrow band imaging.