A Rare Case of Esophageal Granular Cell Tumor in Eosinophilic Esophagitis

Yousaf Abughofah[1], Grace E. Kim, MD[2]; Dennis Chen, MD[3]

[1]Indiana University School of Medicine, Indianapolis, IN, 46202, USA

[2]Section of Gastroenterology, Hepatology, and Nutrition, Department of Internal Medicine, University of Chicago, Chicago, IL

[3]Center for Endoscopic Research and Therapeutics, Section of Gastroenterology, Hepatology, and Nutrition, Department of Internal Medicine, University of Chicago, Chicago, IL

Corresponding Author:
Yousaf Abughofah
yabughof@iu.edu

Conflict of Interest Disclosure: The authors have no conflicts of interest relevant to this article to disclose.

Funding/Support: None

This is the author's manuscript of the article published in final edited form as:

Abughofah, Y., Kim, G. E., & Chen, D. (2023). A Rare Case of Esophageal Granular Cell Tumor in Eosinophilic Esophagitis. Clinical Gastroenterology and Hepatology. https://doi.org/10.1016/j.cgh.2023.09.009

A 25-year-old male with recently diagnosed eosinophilic esophagitis (EoE) presented for a surveillance esophagogastroduodenoscopy (EGD). He was incidentally found to have a 2mm submucosal-appearing nodule with a yellow hue in the distal esophagus (**Figure 1**, arrow). The patient denied unintentional weight loss, gastrointestinal symptoms, family history of gastrointestinal malignancy, or tobacco, alcohol, or drug history. Initial biopsies of the lesion showed normal pathology; repeat EGD with stacked biopsies showed granular cell tumor (GCT; **Figure 2**, star) and endoscopic ultrasound showed no deep tumor invasion. The patient was referred for resection and underwent en-bloc band-assisted endoscopic mucosal resection (**Figures 3, 4**) with pathology confirming GCT without additional abnormalities. Patient is currently asymptomatic and pending surveillance EGD.

GCTs are a rare and usually benign neoplasm most often found in the skin and soft tissue, most commonly presenting in females between the 4th and 6th decades of life. They originate from Schwann cells and have been hypothesized to be related to tissue injury or inflammation. Due to its rarity, the true incidence of GCTs is unclear, however, esophageal GCTs are rising in incidence. Esophageal GCTs are typically subepithelial and characterized by a yellow or white appearance as described in this case report. Their clinical course is rather indolent; previous studies of patients undergoing conservative surveillance for GCTs show stability of tumor sizes up to five years after initial diagnosis. Rarely, malignant forms of GCTs have been described, with older age and tumor size greater than 5cm associated with increased malignant risk. GI involvement of GCT only comprises 8% of all GCTs, and this case highlights a unique co-existence of esophageal GCT in the setting of EoE, a chronic inflammatory disease. More research is needed to examine the possible role of eosinophilic inflammation in the pathogenesis of GCTs.

Acknowledgments

The authors would like to thank Pari Jafari, MD for providing the pathology slide.