1-1-2020

Getting the gist of a schwannoma

Rishabh Gulati
Division of Gastroenterology and Hepatology, The University of New Mexico School of Medicine, University of New Mexico, Albuquerque, New Mexico, USA

Joshua A. Hanson
Department of Pathology, The University of New Mexico School of Medicine, University of New Mexico, Albuquerque, New Mexico, USA

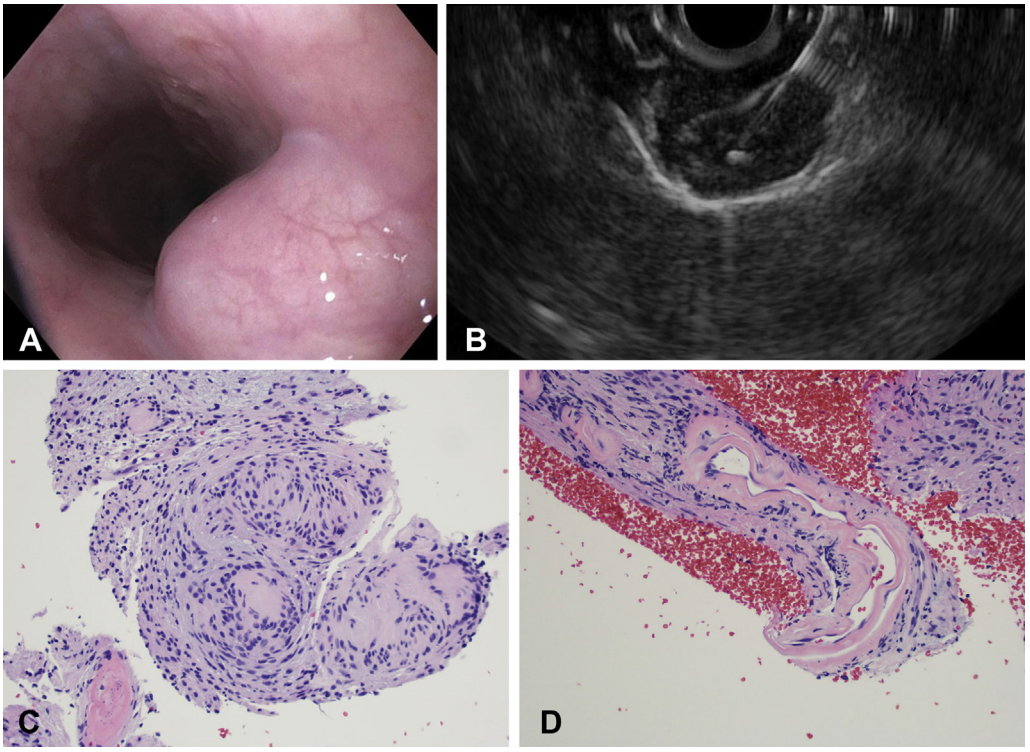
Gulshan Parasher
Division of Gastroenterology and Hepatology, The University of New Mexico School of Medicine, University of New Mexico, Albuquerque, New Mexico, USA

Daniel Castresana
Division of Gastroenterology and Hepatology, The University of New Mexico School of Medicine, University of New Mexico, Albuquerque, New Mexico, USA

Recommended Citation
Gulati R, Hanson JA, Parasher G, Castresana D. Getting the gist of a schwannoma. Gastrointest Endosc. 2020 Jan;91(1):191-192. doi: 10.1016/j.gie.2019.07.027. Epub 2019 Aug 2. PMID: 31381899.

Mohamed O. Othman, MD, *Associate Editor for Focal Points*

Getting the gist of a schwannoma



A 57-year-old woman with a chronic cough was referred for an upper endoscopy to evaluate an esophageal mass identified on a CT scan of the chest. A small subepithelial esophageal lesion was seen 21 cm from the incisors in an otherwise unremarkable examination (**A**). Subsequent upper-EUS examination revealed a 14 mm by 21 mm, well-circumscribed, hypoechoic lesion originating from the muscularis propria (layer 4) (**B**). The initial EUS impression was suggestive of a GI stromal tumor (GIST). However, examination of EUS-guided fine-needle biopsy specimens showed a haphazard arrangement of spindle cells in a fibrotic stroma. Focally, hypercellular areas alternated with hypocellular areas with cellular palisading and hyalinized blood vessels (**C, D**). Immunohistochemical stains demonstrated diffuse reactivity for S100 and no expression of SMA and DOG-1. The neoplastic cells were negative for CD-117. These findings were diagnostic for an esophageal schwannoma.

Benign esophageal tumors account for 2% of all esophageal tumors. Schwannomas are peripheral nerve sheath tumors that occur throughout the GI tract, typically identified at the mediastinum but rarely in the esophagus. Case series have raised concern for malignant transformation; therefore, resection is recommended. The treatment includes surgical enucleation and newer techniques, such as submucosal tunneling endoscopic resection.

DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

Rishabh Gulati, MD, *Division of Gastroenterology and Hepatology,* **Joshua A. Hanson, MD,** *Department of Pathology,* **Gulshan Parasher, MD, Daniel Castresana, MD,** *Division of Gastroenterology and Hepatology, The University of New Mexico School of Medicine, University of New Mexico, Albuquerque, New Mexico, USA*

https://doi.org/10.1016/j.gie.2019.07.027

Commentary

Although not as well known and frequently encountered as GISTs, schwannomas are also members of the spindle cell tumor family. These lesions are most commonly seen in the stomach but can occur anywhere in the GI tract. Schwannomas are often found to have perilesional adenopathy, whereas this is rare in GISTs.

Schwannomas often stain positive for S100 and negative for CD117, DOG-1, CD34, and desmin (similar to the lesion in this case). The risk of malignancy in a schwannoma is, overall, quite low. Older patients or those with significant comorbidities often select simple observation/surveillance, whereas younger and healthier patients tend to undergo resection. This case illustrates the importance of a good differential diagnosis because most gastroenterologists would have thought this lesion was a GIST on first evaluation.

Douglas G. Adler, MD, FASGE
GIE Senior Associate Editor
University of Utah School of Medicine
Salt Lake City, Utah

Mohamed O. Othman, MD
Associate Editor for Focal Points

Combined endoscopic-laparoscopic radical esophagectomy and lymph node dissection for the treatment of esophageal squamous cell carcinoma