

Endoscopic Mucosal Resection Ligation for Rectal Schwannoma: A Case Report

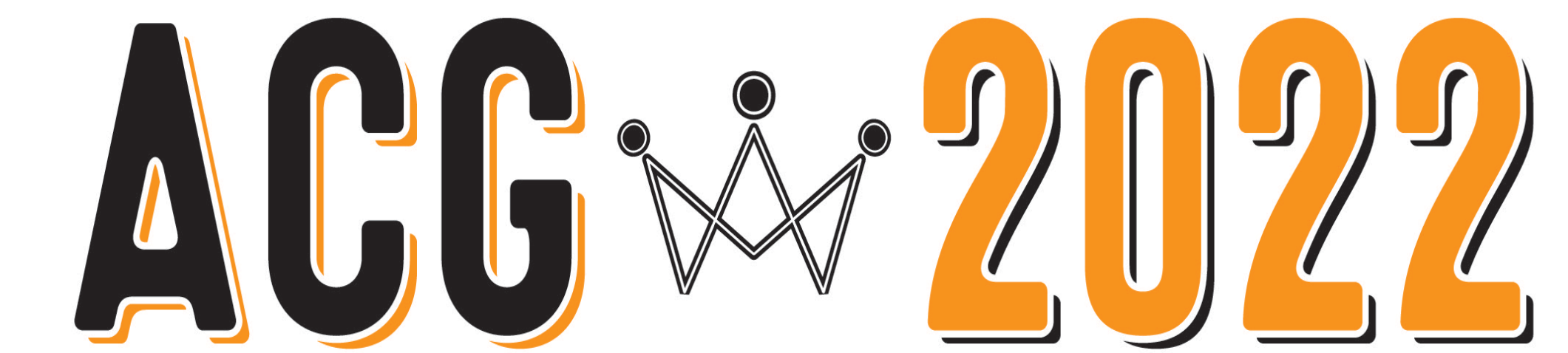


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Background

- Gastrointestinal (GI) schwannomas are a type of gastrointestinal autonomic nerve tumor related to the myenteric plexus.
- They are 2-6% of all mesenchymal tumors and 0.1% of all benign GI tumors. Treatment of rectal schwannomas is complete excision with negative microscopic surgical margins.
- Here, we describe a case of rectal schwannoma, initially suspicious for carcinoid tumor on endoscopic ultrasound, finally retrieved via ligation endoscopic mucosal resection.

Case Presentation

- A 55-year-old male without any significant past medical history was referred for management of rectal sub-epithelial lesion on outpatient screening colonoscopy.
- On evaluation, a subepithelial nodule was found 10 cm proximal to the anus.
- Endoscopic ultrasound (EUS) using forward viewing scope showed a well circumscribed hypoechoic 8 mm x 6 mm round intramural lesion, with well-defined borders arising within the deep mucosa of the rectum suspicious for carcinoid tumor (Figure A). No additional wall layers were involved.
- Subsequently, a ligation endoscopic mucosal resection (EMR-L) of the lesion was performed.
- Biopsy showed homogenous tumor cells containing eosinophilic cytoplasm arranged in a microcystic/reticular pattern and lacking the Antony A/Antony B areas and Verocay bodies, thus suggestive of non-microcystic/reticular Schwannomas.

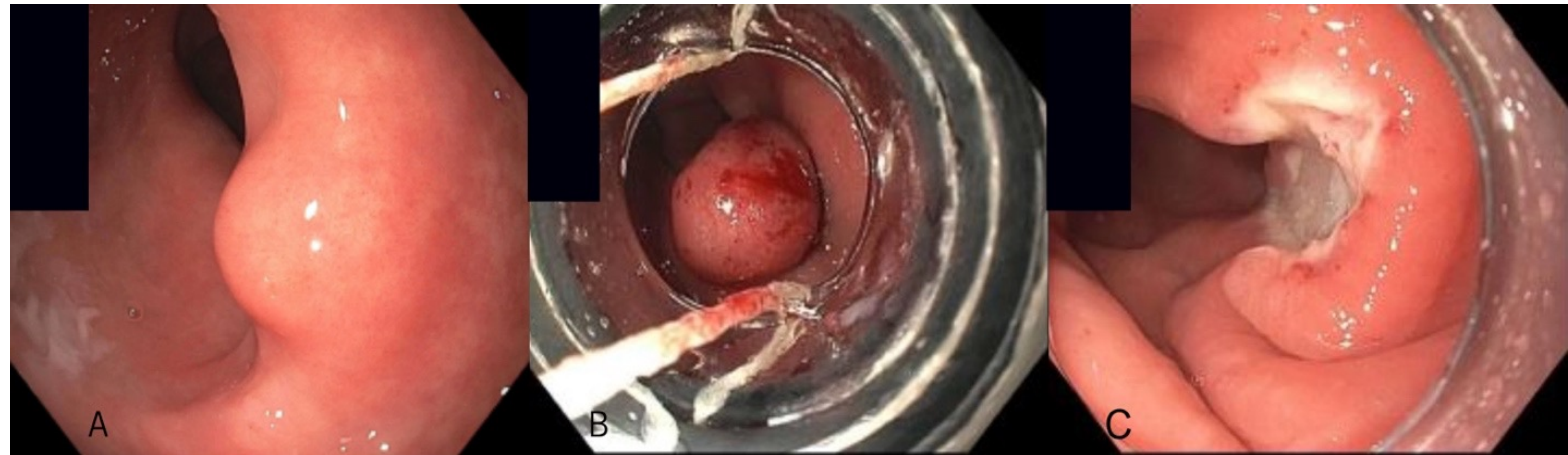


Image Caption: Image caption: A) Endoscopic appearance of subepithelial lesion. B) Ligation EMR was performed for rectal subepithelial lesion. C) Post EMR appearance of the site of lesion

Case Presentation

- The resection margins were negative.
- The neoplastic cells were strongly and diffusely positive for SOX-10 and S-100.
- Biopsy specimen stained negative for AE1/AE3, DOG-1, CD34, CD117, SMA, BER-EP4, desmin, HMB45 and MelanA.
- Patient was diagnosed with benign microcystic/reticular Schwannoma based on immunohistochemical profile.

Discussion

- The incidence of rectal neuroendocrine tumors is increasing likely due to aggressive screening, improved treatment modalities and surveillance techniques, approaches which have also increased overall life expectancy.
- Our patient presented with an incidental finding of rectal subepithelial mass on screening colonoscopy.
- Here, we describe a novel approach to management of rectal mass via EMR-L using a forward viewing EUS scope, which can be utilized for safe and effective resection of these lesions.