

INTRODUCTION

- ❖ Granular cell tumors (GCTs) are rare, often benign tumors of neurogenic origin. GCTs are usually found incidentally but can present with dysphagia in symptomatic patients. They are diagnosed via biopsy and histology following an esophagogastroduodenoscopy(EGD).
- ❖ We present a case of a 46-year-old female who presented with dysphagia, GERD, and weight loss diagnosed with esophageal granular cell tumor following an EGD.

CASE PRESENTATION

- ❖ A 46 years old female with a past medical history of H. pylori gastritis presents with complaints of dysphagia for three months and GERD associated with weight loss.
- ❖ EGD reviewed a single 4 mm nodule found in the lower third of the esophagus with the appearance of a lipoma (Figure 1).
- ❖ Biopsy of esophagus nodule resulted in esophageal squamous epithelium with focal granular cell tumor; Immunohistochemistry tumor cells are positive for S100, CD56, CD68, negative for calretinin and AE1/3 supporting rare esophageal granular cell tumor.
- ❖ EUS demonstrated a 4.7 mm x 2.6 mm intramural (subepithelial) lesion appeared to originate from within the superficial mucosa (Layer 1), Patient underwent repeat EGD with en-bloc cap and band-assisted endoscopic mucosal resection (EMR) followed by three hemoclips placed for hemostasis.
- ❖ The patient was discharged home on a proton pump inhibitor. The patient reports clinical improvement on follow-up after four weeks.

DISCUSSION

- ❖ GCTs are thought to originate from Schwann cells; the prevalence of GCTs is challenging to determine as there have been roughly 300 documented cases of GCTs discussed in the literature.
- ❖ Conversely, patients with larger diameter lesions typically present with indolent dysphagia and other less common symptoms such as gastro-esophageal reflux disease, dyspepsia, chest pain, cough, or nausea. GCTs on EGD appear sessile, yellow-white in color, and firm, with a negative pillow sign.
- ❖ After performing EGD, an endoscopic ultrasound (EUS) is diagnostically utilized to ascertain tumor invasion and provide a biopsy through fine needle aspiration (FNA). Histopathological diagnosis, including immunohistological staining, is essential for confirmation of GCT.
- ❖ Immunohistological staining is positive for S-100, PAS (Periodic Acid Schiff), neuron-specific enolase, nestin, and vimentin.
- ❖ Patients whose neoplasms are less than 1 cm in diameter are treated conservatively with endoscopic follow-up, with tumors greater than 1 cm in diameter, or having clinical symptoms that need endoscopic or surgical resection.

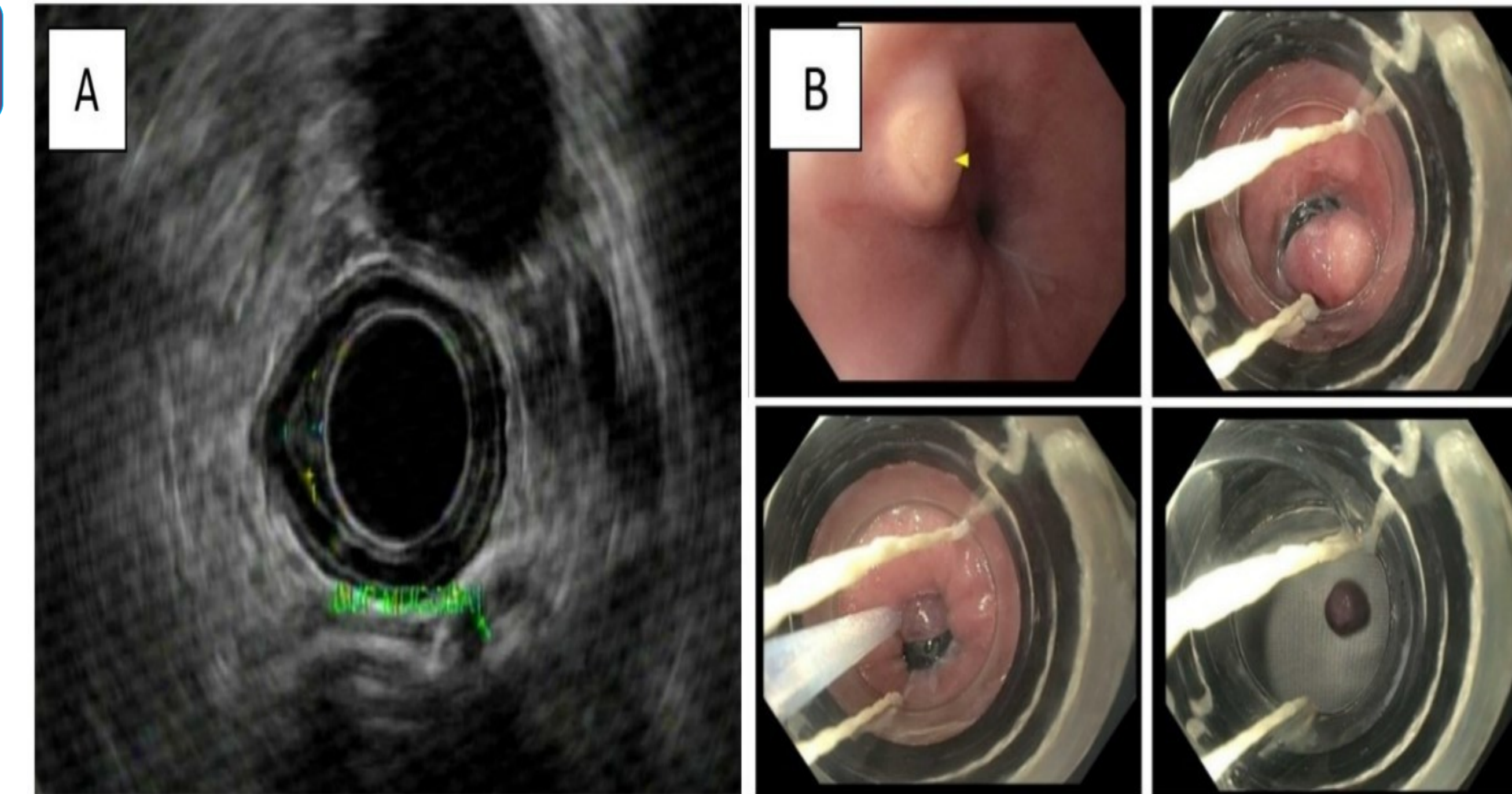


Figure 1A: EUS showing 4.7 mm x 2.6 mm hypoechoic intramural (subepithelial) lesion was found in the lower third of the esophagus. It appeared to originate from within the superficial mucosa (Layer 1). A tissue diagnosis was obtained prior to this exam. Figure 1B: EGD significant for sessile, yellow white in color, and firm mass followed by EMR Figure

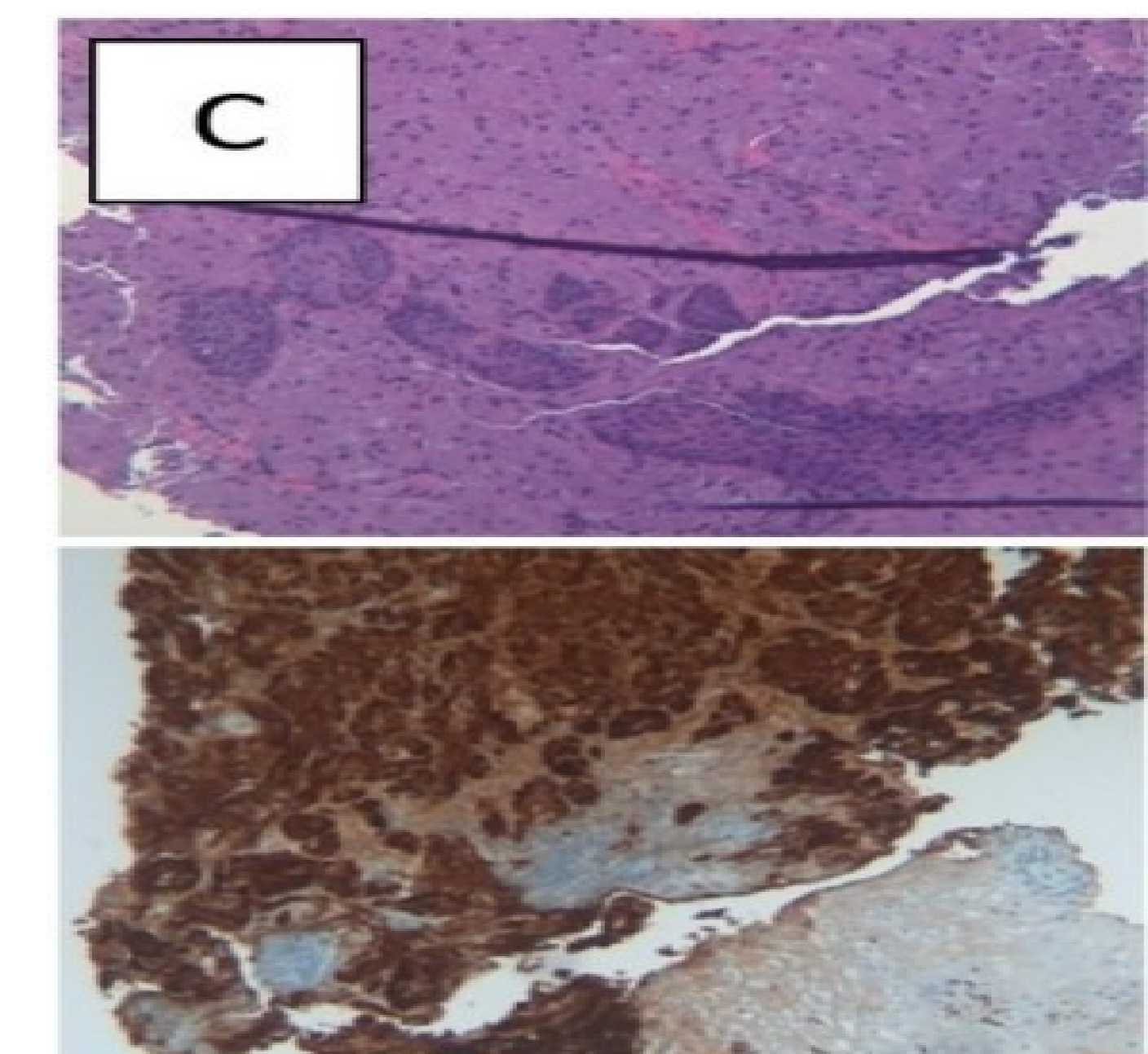


Figure 1C: Histopathology with H&E showing clusters of polygonal cells with granular eosinophilic cytoplasm (top) and S100 stain (below)