

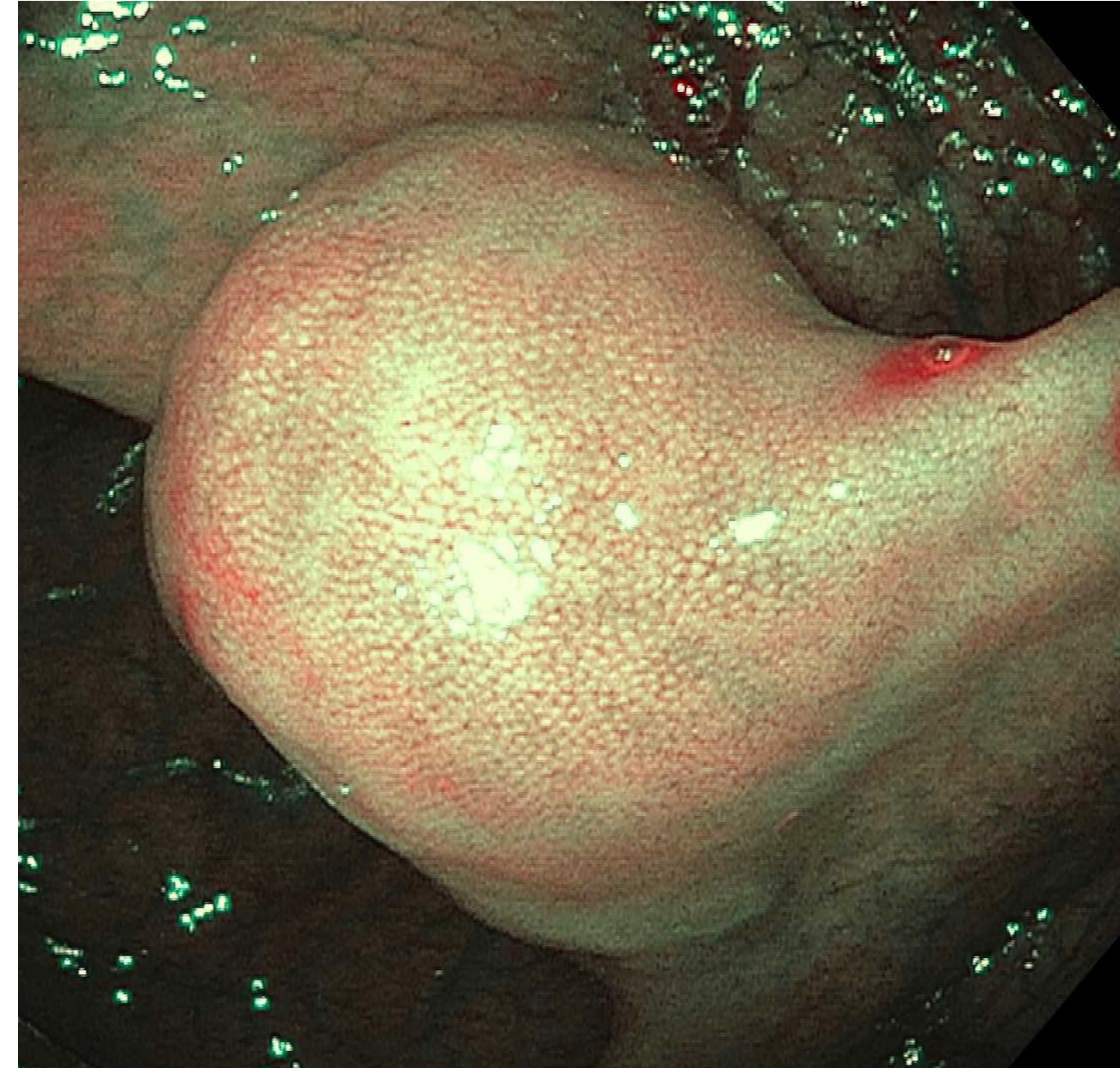


## INTRODUCTION

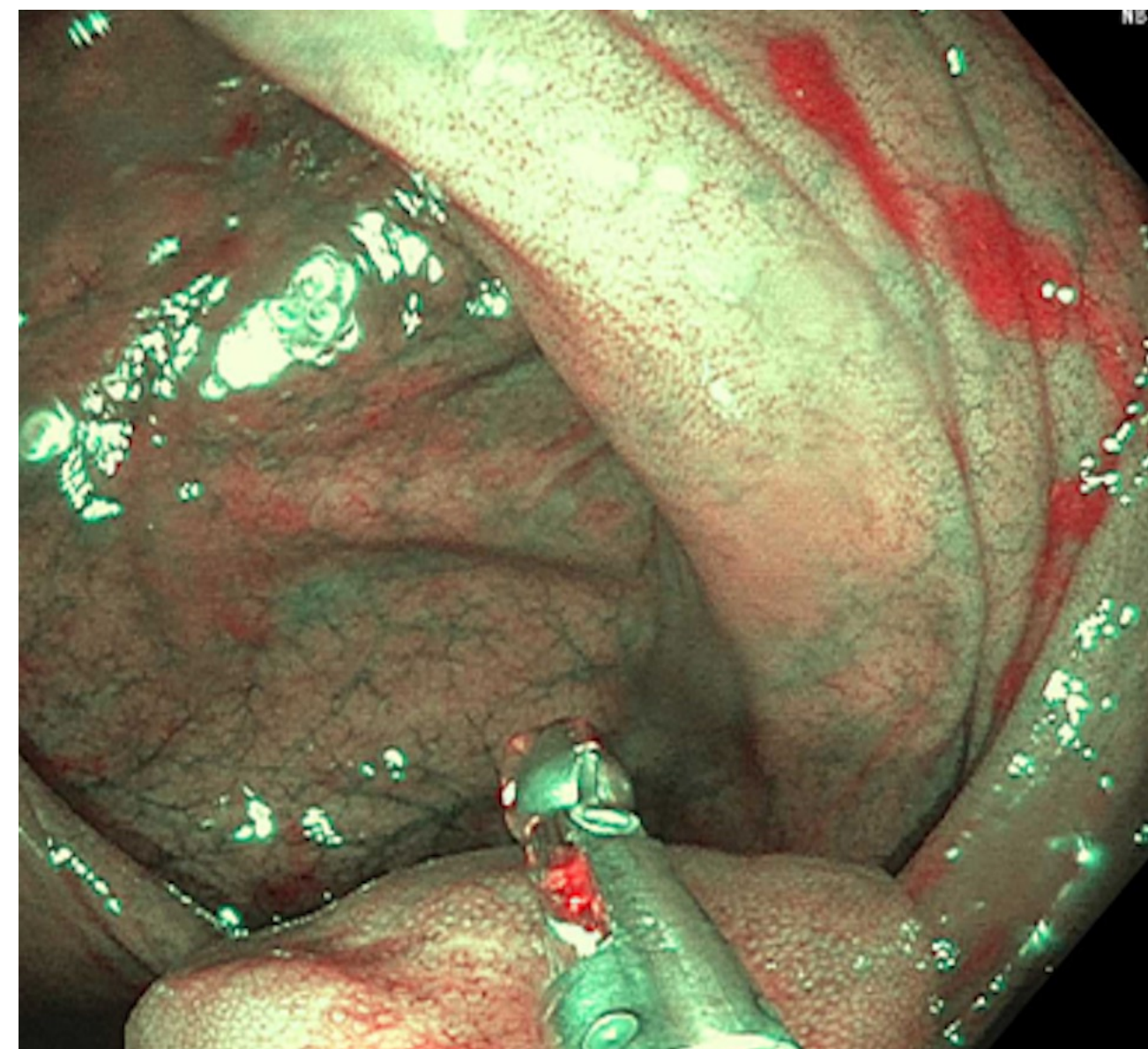
- Granular cell tumors (GCT) are rare submucosal tumors of Schwann cell origin.
- These tumors are typically benign but have malignant potential in up to two percent of cases.
- GCTs are most commonly found in the oropharynx, skin, subcutaneous tissue, and breasts.
- If found in the gastrointestinal tract, they are most likely to be found in the middle to lower third of the esophagus.
- Due to the rarity of colonic GCTs, our understanding of these tumors are limited to case reports.

## CASE DESCRIPTION

- A 53 year-old woman with a past medical history of uterine fibroids complicated by iron deficiency anemia s/p hysterectomy, GERD, and IBS presented for her first screening colonoscopy.
- The patient previously suffered from blood loss anemia secondary to her leiomyomas, which corrected after a hysterectomy in 2017.
- She visited her primary care physician in June 2021 without any acute complaints. Labs at the time were notable for normal hemoglobin and no evidence of iron deficiency.
- Given her age she was recommended for a screening colonoscopy.
- At the time of colonoscopy, the patient was found to have a submucosal non-obstructing large mass in the ascending colon.
- The mass was non-circumferential and measured one cm in length and 1.5 cm in diameter.
- A closed forceps was used to probe the lesion and pillow sign was negative.
- The lesion was biopsied with a cold forceps for histology. Histologic examination of the resected tissue revealed a granular cell tumor with positive S-100 staining.



**Figure 1.** EGD with evidence of 1.0 x 1.5 cm colonic granular cell tumor



**Figure 2.** Negative pillow sign seen on EGD

## DISCUSSION

- Colonic GCTs usually appear as small, isolated nodules or polyps located in the gastrointestinal tract with overlying mucosa and a yellowish hue.
- In patients with colonic GCT, the most common location typically involves the ascending colon, cecum, appendix and rectum.
- Oftentimes patients are asymptomatic and GCTs are incidentally found on screening colonoscopy, as was the case in our patient.
- Patients with larger colonic GCTs may experience symptoms such as hematochezia and abdominal pain.
- Endoscopic ultrasonography is crucial in determining the invasion depth and nature of GCTs.
- Typically, colonic GCTs are characterized by homogeneous or mild heterogeneous hypoechoic nodules with a growth pattern within the mucosa or submucosa.
- Definitive diagnosis of GCTs is based on histopathology, with the most typical findings include positive staining for S-100 protein.
- Endoscopic mucosal resection is considered the best strategy for tumors < 2 cm in diameter.

## REFERENCES

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2. Brady PG, Nord HJ, Connor RG. Granular cell tumor of the esophagus: natural history, diagnosis, and therapy. *Dig Dis Sci*. 1988 Oct;33(10):1329-33. doi: 10.1007/BF01536687. PMID: 2844480.