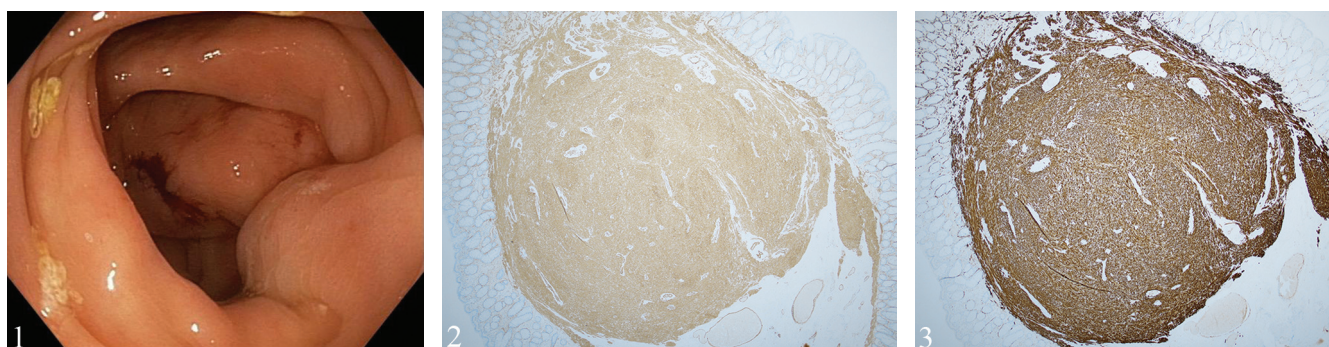


An Extremely Rare Case of Colonic Leiomyoma Disguised as Pedunculated Colonic Polyp

Nguyen Pham¹, Elise Y. Nguyen², Noam Jacob^{3,4}

1) Department of Medicine, University of California, Los Angeles; 2) Department of Pathology, Veterans Affairs Greater Los Angeles Healthcare System, Los Angeles; 3) Department of Gastroenterology, Veterans Affairs Greater Los Angeles Healthcare System, Los Angeles; 4) Vatche and Tamar Manoukian Division of Digestive Diseases, University of California, Los Angeles, United States



A 62-year-old male presents for surveillance colonoscopy. Prior colonoscopies revealed diminutive hyperplastic polyps and tubular adenomas. His exam, vitals and laboratory results were normal except for elevated blood pressure. The colonoscopy revealed a 10-mm pedunculated sigmoid polyp which was removed by hot snare polypectomy (Fig. 1). Three other sub-centimeter ascending, transverse and sigmoid colonic polyps were also removed by cold forceps. The patient tolerated the procedure well without complications. Immunohistochemical stains of the collected pedunculated tissue were positive for smooth muscle actin (SMA) (Fig. 2, 20x) and desmin (Fig. 3, 20x), with a low Ki67 index, while negative for CD117, DOG1, CD34, and S100, confirming diagnosis of a leiomyoma. The remaining colonic polyps were tubular adenomas. The patient remained asymptomatic following his colonoscopy and a repeat surveillance colonoscopy was scheduled in three years given the presence of several tubular adenomas.

Colonic leiomyoma is extremely rare [1]. Its endoscopic appearance is indistinguishable from gastrointestinal stromal tumor (GIST) but may be differentiated by contrast-enhanced endoscopic ultrasound whereby GIST exhibits hyperenhancement compared to hypoenhancement of leiomyoma [2]. The gold standard for differentiation is by histopathology in which GIST displays positive c-kit (CD117) stain while leiomyoma exhibits positive desmin and SMA stains reflecting its smooth muscle origin [3]. Colonic leiomyomas are typically benign and evolve from the muscularis mucosae. They are frequently asymptomatic in most patients before or after resection and are most commonly found incidentally. Local recurrences or remnants of resected lesions are not

typically seen on repeat surveillance colonoscopy. Therefore, surveillance colonoscopy is not routine recommended for colonic leiomyoma alone [4, 5].

An awareness of colonic leiomyomas and especially in differentiating them from GIST is important for the appropriate management of these benign colonic tumors.

Corresponding author: Nguyen Pham, nvpham@mednet.ucla.edu

Conflicts of interest: None to declare.

REFERENCES

1. Björnsdóttir H, Björnsson J, Gudjónsson H. Leiomyomatous colonic polyp. *Dig Dis Sci* 1993;38:1945-1947. doi:[10.1007/BF01296125](https://doi.org/10.1007/BF01296125)
2. Ignee A, Jenssen C, Hocke M, et al. Contrast-enhanced (endoscopic) ultrasound and endoscopic ultrasound elastography in gastrointestinal stromal tumors. *Endosc Ultrasound* 2017;6:55-60. doi:[10.4103/2303-9027.200216](https://doi.org/10.4103/2303-9027.200216)
3. Miettinen M, Sarlomo-Rikala M, Sobin LH. Mesenchymal tumors of muscularis mucosae of colon and rectum are benign leiomyomas that should be separated from gastrointestinal stromal tumors--a clinicopathologic and immunohistochemical study of eighty-eight cases. *Mod Pathol* 2001;14:950-956. doi:[10.1038/modpathol.3880417](https://doi.org/10.1038/modpathol.3880417)
4. Choi HH, Cho YS, Choi SK, et al. Clinical Outcomes of Endoscopic Removal in Patients with Colorectal Polypoid Leiomyomas. *Korean J Gastroenterol* 2016;68:179-185. doi:[10.4166/kjg.2016.68.4.179](https://doi.org/10.4166/kjg.2016.68.4.179)
5. Sharzei K, Sethi A, Savides T. AGA Clinical Practice Update on Management of Subepithelial Lesions Encountered During Routine Endoscopy: Expert Review. *Clin Gastroenterol Hepatol* 2022;20:2435-2443.e4. doi:[10.1016/j.cgh.2022.05.054](https://doi.org/10.1016/j.cgh.2022.05.054)