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Colonic Mucosal Schwann Cell Hamartoma on Incidental Screening Colonoscopy

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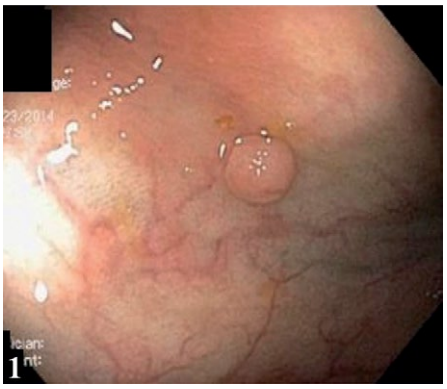

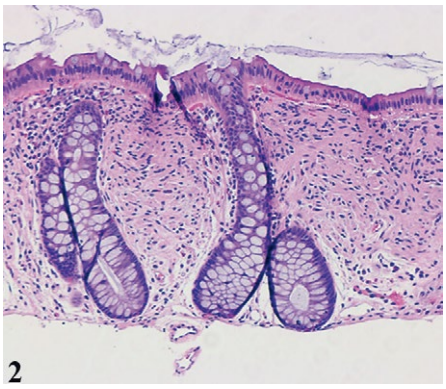

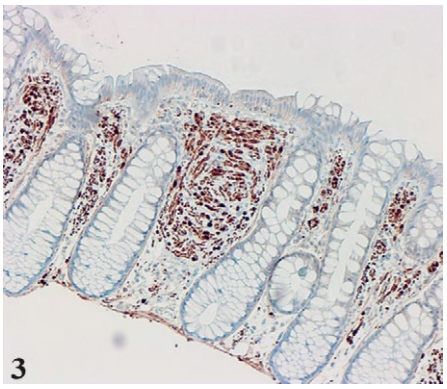

A 67-year-old African-American male with a tubulo-villous adenoma resection in 2010 and repeat colonoscopy one year later showing four tubulo-villous polyps presented for routine follow-up colonoscopy screening three years after repeat colonoscopy. The patient was asymptomatic and had no complaints. Physical exam was unremarkable. He had normal bowel movements and denied melena, nausea, vomiting, or weight loss. Family history was remarkable for colon cancer at age 65 on the mother's side, but he had no family history of familial adenomatous polyposis, multiple endocrine neoplasia type IIb, neurofibromatosis type I, or Cowden syndrome. On repeat screening colonoscopy, two polyps were found with one polyp in the descending colon (4 mm) and one in the sigmoid colon (6 mm) (Fig. 1). There was no evidence of any dysplasia in the mucosa surrounding the biopsy site. Histologically, H&E staining displayed a polypoid fragment of colonic mucosa and numerous spindle cells with elongated nuclei within the lamina propria (Fig. 2). The sigmoid colon biopsy showed proliferated cells that were uniformly positive for S-100, and negative for CD117 and CD34 (Fig. 3). Histopathology of the descending colon polyp and sigmoid polyp confirmed tubular adenoma and colonic mucosal Schwann cell hamartoma, respectively.

Colorectal polyps of mesenchymal origin are rare and mucosal Schwann cell hamartomas have pure Schwann cell proliferation in the lamina propria and S-100 protein immunoreactivity [1]. They have no association with any of the inherited polyposis syndromes, and have recently been characterized as a new disease entity to help differentiate from multiple neurofibromas associated with hereditary diseases [1]. Although the histological differential diagnosis of a mucosal Schwann-cell hamartoma can include a gastrointestinal stromal tumor (GIST), neurofibroma, mucosal neuroma, ganglioneuroma, or mucosal schwannoma, a mucosal Schwann-cell hamartoma is composed of single Schwann cells without other cells, such as axons or fibroblasts, and is uniformly stained for S-100 [1, 2]. As in our case, solitary colonic neurofibromal polyps without evidence of neurofibromatosis 1 (NF1) are very uncommon [1, 2].

Although mucosal Schwann-cell hamartomas often present as any polyp in the gastrointestinal tract with bright red blood, obstructive symptoms, or altered bowel movements, many times they may be incidentally found [1, 2]. It is imperative to differentiate this tumor from a GIST, as the latter may be malignant and warrants complete resection. As there was no evidence that our patient's mucosal Schwann cell hamartoma had the potential to become malignant, the patient was counseled to repeat a colonoscopy in five years with possible surveillance biopsies, in light of prior polyp detections. As with any polyp or masses found in the colon it is imperative to use pathology as a guide to diagnosis and management.

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Conflicts of interest: None to declare.

REFERENCES

1. Gibson JA, Hornick JL. Mucosal Schwann cell "hamartoma": clinicopathologic study of 26 neural colorectal polyps distinct from neurofibromas and mucosal neuromas. Am J Surg Pathol 2009; 33: 781–787. doi: 10.1097/PAS.0b013e31818dd6ca
2. Bae MN, Lee JE, Bae SM, et al. Mucosal schwann-cell hamartoma diagnosed by using an endoscopic snare polypectomy. Ann Coloproctol 2013; 29: 130-134. doi: 10.3393/ac.2013.29.3.130