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IMAGE | ENDOSCOPY

Incidental Colonic Ganglioneuroma on Surveillance Colonoscopy

Siddharth Agarwal, MBBS[1], Yaohong Wang, BMed, PhD[2], Prasad G. Iyer, MD[1], and Cadman L. Leggett, MD[1]

[1]*Division of Gastroenterology and Hepatology, Mayo Clinic, Rochester, MN*
[2]*Department of Laboratory Medicine and Pathology, Mayo Clinic, Rochester, MN*

CASE REPORT

A 73-year-old man with a history of diverticulitis after left hemicolectomy and an end-to-end colo-colonic anastomosis underwent a screening colonoscopy with resection of 4, 2-10-mm tubular adenomas. A 10-mm semipedunculated polyp with a normal mucosal pit pattern under narrow-band imaging was found in the splenic flexure (Figure 1). The polyp was resected using a hot snare and submitted for histopathological diagnosis, which demonstrated colonic mucosa with distorted crypt architecture. The lamina propria was expanded by collection of spindle cells within fibrillary matrix, and irregular nests and groups of ganglion cells indicated a ganglioneuroma (GN) (Figure 2). No clinical symptoms were associated with this finding, and a prior colonoscopy revealed no evidence of GN. Surveillance colonoscopy was recommended in 3 years, given the presence of an adenoma of $\geq$10 mm in size.

Ganglioneuromas of the gastrointestinal tract are rare tumors composed of ganglion cells, nerve fibers, and supporting cells. Gastrointestinal GNs are usually confined to the large intestine and are morphologically classified into 3 categories, namely, polypoid GNs, ganglioneuromatous polyposis, and diffuse ganglioneuromatosis.[1] Polypoid GNs are mostly solitary and small (measuring $<$20 mm), with a sessile or pedunculated appearance. Colonic GNs are characterized by a normal colonic pit pattern under narrow-band imaging. These lesions produce no characteristic symptoms and are usually found incidentally during endoscopy. Rarely, they present with abdominal pain, obstruction, ileus, appendicitis, or weight loss depending on their size and anatomical location.[2]

Ganglioneuromatous polyposis and diffuse ganglioneuromatosis are associated with genetic syndromes, such as neurofibromatosis 1, multiple endocrine neoplasia 2B syndrome, and juvenile polyposis. Solitary GNs are generally not associated with familial syndromes, although they have been reported in cases of Cowden disease, tuberous sclerosis, polyposis coli, and juvenile polyposis.[1]

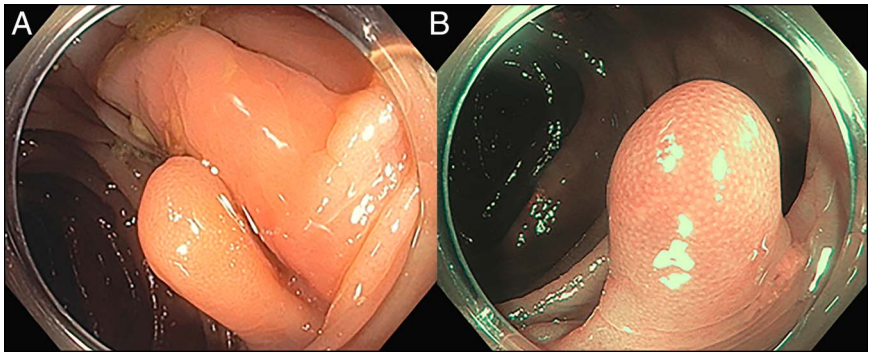

Figure 1. (A) A semipedunculated polyp under white-light imaging in the splenic flexure. (B) A semipedunculated polyp with a normal mucosal pit pattern under narrow-band imaging in the splenic flexure.

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Correspondence: Cadman L. Leggett, MD (Leggett.Cadman@mayo.edu).

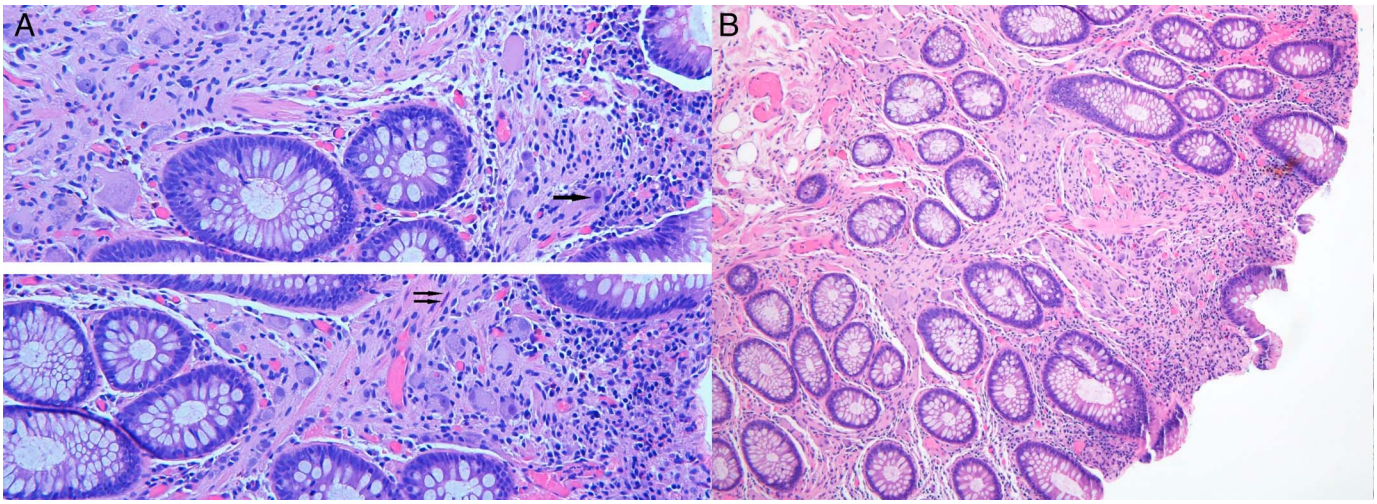

Figure 2. (A) An (H&E original magnification 20×) image of the colonic polyp consisting of abnormal appearing ganglion cells (single arrow) and spindled Schwann cells (double arrows). (B) An (H&E original magnification 10×) image of the colonic polyp consisting of abnormal appearing ganglion cells and spindled Schwann cells. H&E, hematoxylin & eosin.

Gastrointestinal GNs are usually treated with endoscopic resection. Currently, no guidelines exist on the management of solitary GNs or recommendations for interval surveillance colonoscopy. Repeat colonoscopy is not necessary because of the benign nature of these lesions, which tend not to recur.[3]

DISCLOSURES

Author contributions: S. Agarwal and Y. Wang designed and drafted the article and acquired data. PG Iyer drafted and revised the article for intellectual content. CL Leggett designed and drafted the article , acquired data, revised the article for important intellectual content, and is the article guarantor.

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