

# Atypical Polyps Presenting With Occult Bleeding

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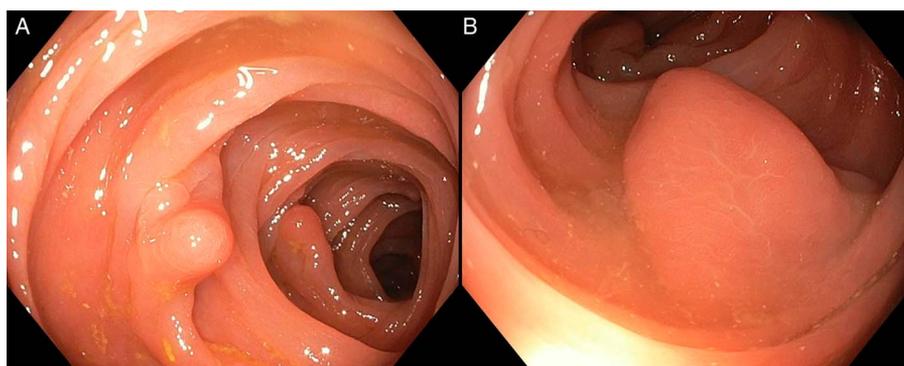
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## CASE REPORT

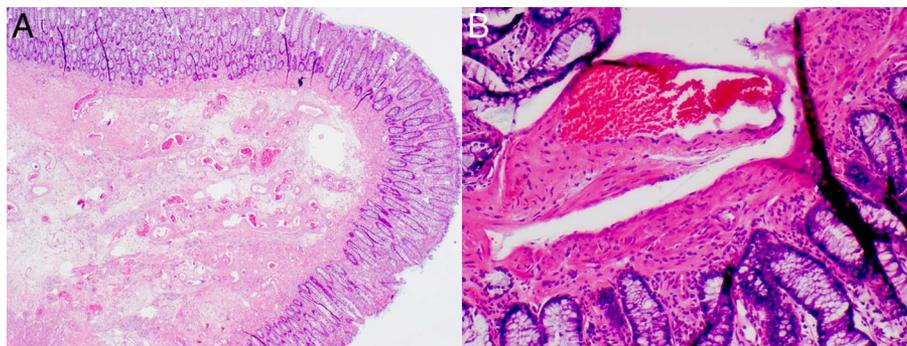
A 54-year-old man presented to the gastroenterology clinic with a several-week history of progressive weakness, dark stools, and vague abdominal discomfort. His medical history was significant for metabolic syndrome, coronary artery disease, steatohepatitis, unexplained pancytopenia, and a bleeding jejunal varix that was treated endoscopically several years prior. During that period, he had been hospitalized for chest pain and dyspnea on exertion due to symptomatic anemia. Subsequent laboratory values were consistent with iron deficiency anemia (hemoglobin 9.4 g/mL, mean corpuscular volume 65, iron 19 µg/dL, transferrin saturation 4%, and ferritin 8.1 ng/mL). Physical examination was unremarkable. He denied any history of alcohol, tobacco, or illicit drug use. Esophagogastroduodenoscopy was unremarkable aside from scattered fundic gland polyps. Colonoscopy was significant for multiple colonic polyps in the transverse colon (2 measuring 5 mm) and descending colon (2 measuring 7 mm and 1 measuring 2 mm), which were resected by snare polypectomy. In addition, there was a sigmoid colon polypoid lesion measuring 15 mm, which was biopsied with subsequent bleeding requiring clip placement to achieve hemostasis (Figure 1).

Histopathology of the resected polyps demonstrated submucosal arteriovenous malformations (AVMs) in polypoid mucosa without adenomatous changes (and submucosal ectatic vessel in the sigmoid lesion, both of which helped explain the patient's anemia [Figure 2]). The patient was treated with iron supplements and referred to the genetics clinic for further evaluation, but germline testing was negative for hereditary predisposition (eg, hereditary hemorrhagic telangiectasia).

To date, there are approximately 15 cases reported of polypoid AVMs in a single colonic segment mimicking colonic polyps.<sup>1</sup> Previous reports suggest that these polyps are more common in men with a mean age of 54.8 years. Patients with cardiovascular diseases have an increased risk of submucosal arteriovenous shunting secondary to mucosal ischemia. Massive bleeding from colonic AVM was reported to be associated with ectopic varices in patients with alcoholic liver disease.<sup>2</sup>



**Figure 1.** Colonoscopy showing (A) multiple colonic polyps in the descending colon and (B) large polypoid lesion in the sigmoid colon.



**Figure 2.** Biopsy of resected polyps from the transverse colon showing (A) submucosal arteriovenous malformation (H&E 20× magnification) and (B) submucosal arteriovenous malformation with thick-walled arterioles juxtaped and joining veins/venules (H&E 100× magnification). H&E, hematoxylin and eosin.

Portal hypertension is present in patients with nonalcoholic fatty liver disease.<sup>3</sup> Comorbidities such as type 2 diabetes and obesity were reported to be important indicators of the presence of portal hypertension and esophageal varices in these patients.<sup>3</sup> Endoscopic resection is safe and reported to improve iron deficiency anemia in some patients.<sup>1</sup> This case is unique because it is the first case that reports the presence of many polypoid AVMs in multiple segments of the colon.

## DISCLOSURES

Author contributions: M. Mouchli reviewed medical records and data and wrote the manuscript. D. Grider reviewed medical records, provided pathology images, and wrote the manuscript. PJ Parekh reviewed medical records and data, wrote the manuscript, and is the article guarantor.

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Informed consent was obtained from the patient for this manuscript.

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