

Pseudotumor of the Sigmoid Colon Causing Bowel Obstruction

Gurbir Sehmbey, MD¹, Layth Al-Jashaami, MD^{1,2}, and Rakesh Nanda, MD, FACP, FACG²

¹Department of Internal Medicine, Banner University Medical Center, Phoenix, AZ

²Department of Gastroenterology, Carl T Hayden VA Medical Center, Phoenix, AZ

CASE REPORT

A 48-year-old man with a history of chronic diverticulitis without complications, colorectal polyps, and tobacco dependence was admitted to our hospital with left-sided abdominal pain and inability to have a bowel movement for 3 days. At arrival, his vital signs were normal and on physical examination, the patient was found to have a distended abdomen with generalized tenderness and hyperactive bowel sounds. Notable laboratory data included a white blood cell count of $12.4 \times 10^3/\mu\text{L}$ and a hemoglobin level of 17.0 g/dL. Complete metabolic panel, coagulation studies, liver function tests, and carcinoembryonic antigen were all within normal limits. Computed tomography of the abdomen revealed a 3×6 cm apple-core lesion in the sigmoid colon with a complete large bowel obstruction (Figure 1). The patient then underwent flexible sigmoidoscopy revealing extensive diverticulosis and at 25 cm, distinct inflamed mucosa protruding into the lumen was seen (Figure 2). No stricture or mass was identified. Biopsy revealed acute-on-chronic inflammation with edema, and the patient was started on antibiotics for suspected diverticulitis. The patient continued to have abdominal pain and intractable vomiting; therefore, on day 4, an exploratory laparotomy was performed. A $10.5 \times 8 \times 5$ cm segment of the mid-sigmoid colon containing a mass with ring-like stricture was resected (Figure 3). Pathology of the removed specimen revealed inflammation and extensive diverticulosis interposed with a fibrotic muscularis propria (Figure 4). The patient was diagnosed with inflammatory pseudotumor (IPT) related to chronic diverticulitis, and antibiotics were discontinued. The patient quickly recovered after surgery. On follow-up, the patient was noted to have improved energy along with 2–3 loose stools daily via colostomy.



Figure 1. Contrast-enhanced computed tomography of the abdomen showing 3×6 cm apple-core lesion in the sigmoid colon; proximal wall thickening with extensive diverticulosis can also be seen.

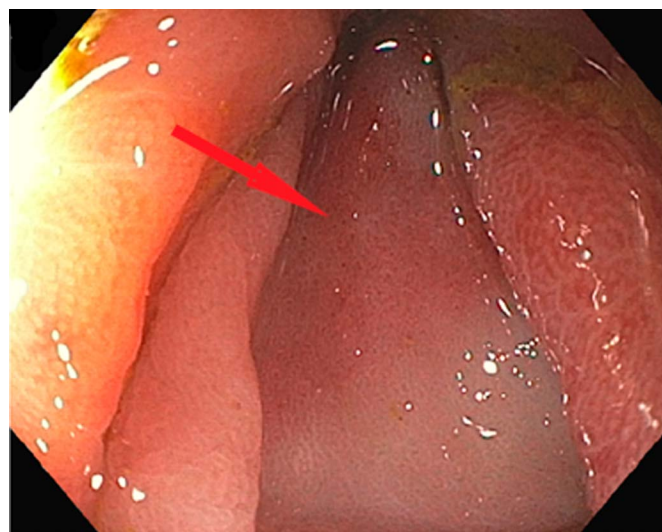


Figure 2. Sigmoidoscopy showing raised erythematous and protruding lesion with surrounding inflammation in the mid-sigmoid colon.

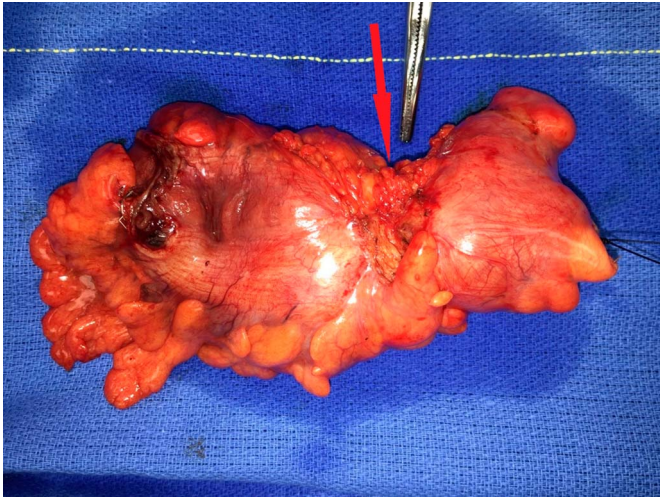


Figure 3. The resected portion of the mid-sigmoid colon with pseudotumor and associated ring-like stricture.

IPT is a rare benign lesion that closely mimics malignancy clinically and on imaging.¹ It is a reactive or regenerative entity that may be related to chronic infection, intraparenchymal hemorrhage, or autoimmune disorder.² Although IPT most commonly originates in the lungs and orbit, it can be found in any organ.³ IPT of the colon is particularly rare and can present with the complication of bowel obstruction or ileocecal intussusception.³ Chronic diverticulitis has also been implicated with the development of IPT in the colon.⁴ This occurs because inflammation causes the release of cytokines, which in turn lead to cell proliferation and angiogenesis.⁴ Fibrosis can also occur, creating a stricture, causing a partial or complete obstruction that may appear as a malignant mass.⁴ Colonoscopy can be an important tool used to investigate IPT in the colon; however, surgical resection is the treatment of choice to confirm the diagnosis.⁵

DISCLOSURES

Author contributions: G. Sehmbey wrote and edited the manuscript. L. Al-Jashaami wrote and edited the manuscript. R. Nanda edited the manuscript and is the article guarantor.

Financial disclosure: None to report.

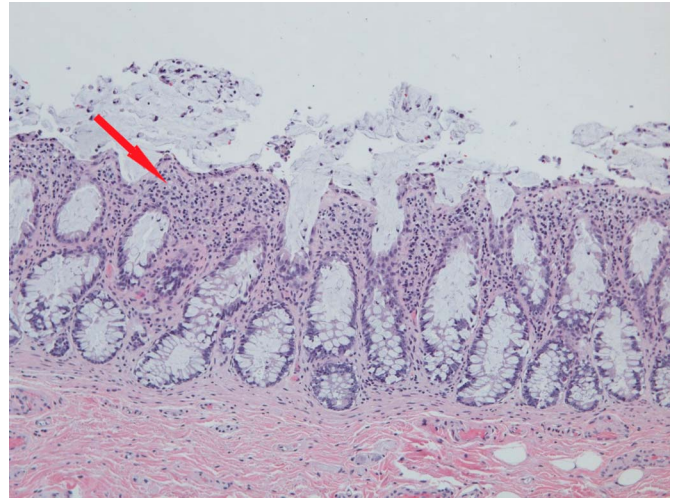


Figure 4. A medium-power photograph of the mucosa of sigmoid colon specimen showing inflammatory cell infiltration with mesenteric fibrosis.

Informed consent was obtained for this case report.

Received May 30, 2018; Accepted January 11, 2019

REFERENCES

1. Uysal S, Tuncbilek I, Unlubay D, et al. Inflammatory pseudotumor of the sigmoid colon mesentery: US and CT findings. *Eur Radiol.* 2005;15:633–5.
2. Hosler GA, Steinberg DM, Sheth S, Hamper UM, Erozan YS, Ali SZ. Inflammatory pseudotumor: A diagnostic dilemma in cytopathology. *Diagn Cytopathol.* 2004;31:267–70.
3. Huang Y, Li LP, Wang J, Lun ZJ, Li W, Yang Z. Inflammatory pseudotumor of the colon causing intussusception: A case report and literature review. *World J Gastroenterol.* 2015;21:704–10.
4. Rosenbaum A, Arnold JC, Rebel M, Riemann JF. Pseudotumor of the sigmoid mimicking carcinoma. *Endoscopy.* 2000;32:546–8.
5. Aalbers AGJ, De Wilt JHW, Zondervan PE, Ijzermans JN. A colon-derived inflammatory pseudotumor. *Dig Dis Sci.* 1999;44:578–81.

Copyright: © 2019 The Author(s). Published by Wolters Kluwer Health, Inc. on behalf of The American College of Gastroenterology. This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.