IMAGE | ENDOSCOPY



Schistosomiasis: An Unexpected Cause of Gastrointestinal Bleeding Revealed by Endoscopic Biopsy

Hwewon E. Lee, DO¹, Robinder Abrol, DO², Kyle Humphrey, MD³, Suimin Qiu, MD, PhD⁴, Susan McLellan, MD, MPH³, and Sheharyar K. Merwat, MBBS²

¹Department of Internal Medicine, The University of Texas Medical Branch, Galveston, TX ²Department of Gastroenterology, The University of Texas Medical Branch, Galveston, TX ³Department of Infectious Disease, The University of Texas Medical Branch, Galveston, TX ⁴Department of Pathology, The University of Texas Medical Branch, Galveston, TX

CASE REPORT

A 28-year-old man from Equatorial Guinea presented with debilitating fatigue, persistent shortness of breath for the past year, and notable episodes of hematochezia and melena for the past week. Laboratory workup indicated the presence of iron deficiency anemia as the sole significant finding. Colonoscopy revealed a diffuse area of mildly erythematous mucosa in the rectal-sigmoid colon (Figure 1). Biopsy revealed colonic mucosa with calcified parasitic eggs (Figure 1), initially read by pathology as morphologically suggestive of *Schistosoma* mansoni eggs and later confirmed to be *Schistosoma* intercalatum by gene sequencing. The patient was treated with praziquantel, resulting in improved symptoms, cessation of bleeding, and stabilization of hemoglobin levels. The endoscopic appearance of lesions was variable, ranging from granulomas to polyps to ulcerations.^{1,2} In a case review of 46 patients with colonic schistosomiasis, as many as 12 patients were initially misdiagnosed as ulcerative colitis, Crohn's disease, and ischemic colitis.^{3,4} It is of utmost importance to maintain a low threshold for conducting endoscopic biopsies in patients who are at risk of parasitic infections, particularly those caused by the *Schistosoma* species.

DISCLOSURES

Author contributions: HE Lee: Made the most significant contribution to the case report in terms of drafting, data gathering, and revising the report. R. Abrol: Made significant contribution in revising and guiding the first author by gathering references and editing drafts. K. Humphrey and S. Qiu: Assisted with obtaining pathology, imaging, and explaining histologic findings. S. McLellan and SK Merwat: Helped with review of drafts and overall guidance. HE Lee is the article guarantor.

Financial disclosure: None to report.

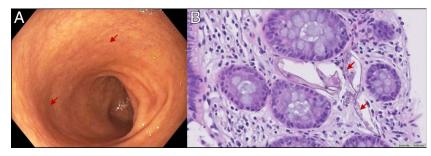


Figure 1. Diffuse area of mildly erythematous mucosa from 30 cm from the anal verge found in the rectal-sigmoid colon (A, arrows). Pathology showing multiple *Schistosoma* eggs (B, arrows).

ACG Case Rep J 2023;10:e01117. doi:10.14309/crj.000000000001117. Published online: August 11, 2023 Correspondence: Hwewon E. Lee, DO (helee@utmb.edu).

Previous presentation: This case was presented at 13th Annual Quality and Research Forum at UTMB; April 2023; Galveston, TX.

Informed consent was obtained for this case report.

Received May 19, 2023; Accepted July 6, 2023

REFERENCES

- Bierman WF, Wetsteyn JC, van Gool T. Presentation and diagnosis of imported schistosomiasis: Relevance of eosinophilia, microscopy for ova, and serology. J Travel Med. 2005;12(1):9–13.
- Jusot JF, Simarro PP, De Muynck A. Schistosoma intercalatum bilharziasis: Clinical and epidemiological considerations. *Med Trop (Mars)*. 1997;57(3):280–8.

- Akere A, Oluwasola AO, Fakoya TO, Lawan A. Schistosomiasis presenting as colonic polypoid masses in a nigerian patient. *Ann Ib Postgrad Med.* 2017;15(1):61–4.
- Koulali H, Zazour A, Khannoussi W, Kharrasse G, Ismaili Z. Colonic schistosomiasis: A case report. World J Gastrointest Endosc. 2022;14(12): 789–94.

Copyright: © 2023 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.