VIDEO

Interesting cause of massive small-bowel bleed in a tropical country



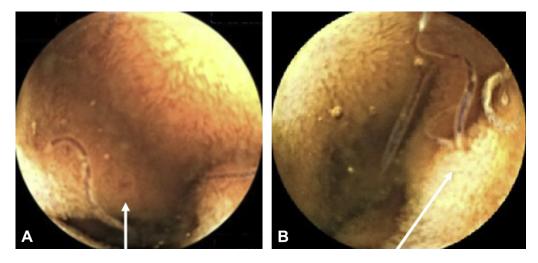


Figure 1. A, Video capsule endoscopy (VCE) showing hemorrhagic spot indicating previous attachment site. B, VCE showing multiple hookworms attached to the mucosa of small bowel, withdrawing blood.

A 55-year-old man presented with recurrent episodes of melena with easy fatigability and shortness of breath for 2 months. Physical examination results were unremarkable except for signs of anemia. Routine investigations revealed hemoglobin 3.2 g/dL, hematocrit 16.4%, mean corpuscular volume 65 fL, and white blood cell count 3100 with 21% neutrophils, 49% lymphocytes, 10% monocytes, and 20% eosinophils (Table 1). The result of a guaiac test for stool was positive. A stool test for ova and parasites yielded negative results. The patient's condition was stabilized with packed red blood cell transfusions (4 units were transfused in total). EGD and colonoscopy showed normal results. The patient

underwent capsule endoscopy (CE) by use of the OMOM capsule endoscopy system (Chongqing Jinshan Science & Technology [Group] Co, Ltd, Chongqing, China) to rule out a small-bowel bleed (Video 1, available online at www.VideoGIE. org). The CE revealed multiple hookworms in the distal duodenum and jejunum. The parasites were seen attached to the mucosa of the intestine, sucking blood, with an adjacent hemorrhagic spot indicating a previous attachment site (Fig. 1). The patient was treated with a single dose of albendazole 400 mg and oral iron supplements. His hemoglobin had normalized at his 6-month follow-up visit (Table 2).

Written transcript of the video audio is available online at www.VideoGIE.org.

TABLE 1. Investigations at the time of presentation

Laboratory determinations	Result
Hemoglobin	3.2 g/dL (normal: 12-16 g/dL)
Hematocrit	16.4% (normal range: 38.8%-50%)
White blood cell	3100 (normal: 4000-10,000/μL)
Differential count	Neutrophils 21%, 49% lymphocytes, 10% monocytes, 20% eosinophils
Mean corpuscular volume	65 fL (normal: 80-96 fL/red cell)
Platelet count	156,000/mm ³ (normal range: 150,000-450,000)
Guaiac test for stool	Positive
Stool microscopy	Negative for ova and parasites

TABLE 2. Hemoglobin at presentation and during course of treatment

At presentation	After 4 units of packed red blood cell transfusion during hospital stay	6-month follow-up; after antihelminthic treatment and iron supplementation for 6 months
3.2 g/dL	6.9 g/dL	12.8 g/dL

DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

Tarun J. George, MD, Kini Ratnakar, MD, DM, Pughazhendhi Thangavelu, MD, DM, Kani Shaikh Mohamed, MD, DM, K. Premkumar, MD, DM, **A. Murali, MD, DM,** Institute of Medical Gastroenterogy, Madras Medical College, Chennai, India

Copyright © 2017 The Authors. Published by Elsevier, Inc. on behalf of the American Society for Gastrointestinal Endoscopy. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

http://dx.doi.org/10.1016/j.vgie.2016.12.002