Gastrointestinal Pyogenic Granuloma Causing Obscure Gastrointestinal Bleeding

Vorada Sakulsaengrapha, BS¹, Curtis A. Gravenmier, MD², and Saowanee Ngamruengphong, MD³

¹*Johns Hopkins University School of Medicine, Baltimore, MD*

²*Department of Pathology, Johns Hopkins University School of Medicine, Baltimore, MD*

³*Department of Gastroenterology & Hepatology, Johns Hopkins University School of Medicine, Baltimore, MD*

CASE REPORT

A 76-year-old woman with new onset iron deficiency anemia presented for video capsule endoscopy for occult gastrointestinal (GI) bleeding. Previous upper endoscopy and colonoscopy were negative for sources of bleeding. On capsule endoscopy, she was found to have a polypoid lesion with mild active bleeding in the proximal to middle small bowel. Subsequent antegrade double-balloon enteroscopy revealed an 8-mm erythematous sessile polyp in the proximal jejunum (Figure 1). Biopsy of this lesion showed granulation tissue. Further antegrade double-balloon enteroscopy was performed. The polyp was resected using the endoscopic mucosal resection (EMR) technique (Figure 2). More specifically, the polyp was resected with a 10-mm snare using the ENDOCUT mode after saline submucosal injection. Mild oozing was seen at the EMR site without evidence of perforation. The EMR site was closed using 5 end clips, and hemostasis was achieved. The patient did well after the procedure with a resolution of her anemia.

Histology revealed a lobular proliferation of small blood vessels with bland endothelial lining consistent with a lobular capillary hemangioma, also more broadly known as a GI pyogenic granuloma. Although flattened, the epithelial surface contains goblet cells characteristic of intestinal mucosa. There is ulceration of the epithelial surface and formation of a fibrinous exudate (Figure 3). Ulceration is frequently present in lobular capillary hemangiomas, regardless of the location. This lesion is a benign vascular tumor, typically occurring in the skin or oral mucosa. It is rarely reported in the GI tract, where it is known to bleed if unresected.¹ It is an under-recognized entity causing iron deficiency anemia and may bleed significantly even in the setting of minor trauma.²

Figure 1. Antegrade double-balloon enteroscopy revealed an erythematous sessile polyp in the proximal jejunum.

Figure 2. The polyp was resected using the endoscopic mucosal resection technique.

Figure 3. Histology revealed (A) lobular proliferation of small blood vessels with bland endothelial lining (blue arrow) consistent with a lobular capillary hemangioma along with the epithelial surface containing goblet cells (red arrow) characteristic of intestinal mucosa and (B) ulceration of the epithelial surface and formation of a fibrinous exudate (black arrow).

DISCLOSURES

Author contributions: V. Sakulsaengprapha wrote and revised the manuscript. CA Gravenmier provided the pathology images. S. Ngamruengphong contributed to the study concept and design, provided images, approved the final version, and is the article guarantor.

Financial disclosure: None to report.

Informed consent was obtained for this case report.

Received June 2, 2019; Accepted September 11, 2019

REFERENCES

1. Meeks MW, Kamal UM, Hammami MB, et al. Gastrointestinal pyogenic granuloma (lobular capillary hemangioma): An underrecognized entity causing iron deficiency anemia. *Case Rep Gastrointest Med.* 2016;2016:1–8.
2. Mills SE, Cooper PH, Fechner RE. Lobular capillary hemangioma: The underlying lesion of pyogenic granuloma. A study of 73 cases from the oral and nasal mucous membranes. *Am J Surg Pathol.* 1980;4(5):471–9.

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.