

A RARE CASE OF ISCHEMIC PROCTITIS IN THE SETTING OF COVID-19

Niloufar Alimohammadi, MD¹;
Mohamad I. Itani, MD²; Jessica
Hélène Wells, DO³; Fazel Dinary,
MD³

¹Department of Internal Medicine,
Luminis Health Anne Arundel
Medical Center, MD, USA

²Medical Center, Wayne State
University, Detroit, MI, USA

³St. John Medical Center, University
Hospitals, OH, USA

Abstract

This case report presents a rare case of ischemic proctitis (IP) in a patient with COVID-19 and describes her signs and symptoms.

The sigmoidoscopy methodology and images have been demonstrated and the mechanisms involved in IP have also been discussed.

CONTACT

Niloufar Alimohammadi
Luminis Health Anne Arundel Medical Center
2001 Medical Pkwy, Annapolis, MD, 21401
Email: nalimoham@luminishealth.org
Phone: (443) 481 1000
Website: www.luminishealth.org

INTRODUCTION

The association between COVID-19 and GI symptoms has been well-established. Due to the incompletely understood pathophysiology, new GI complications are continuously reported. Ischemic proctitis (IP) is a rare complication as the rectum has excellent collateral blood supply from the rectal arteries. We present a case of an elderly patient with IP in the setting of COVID-19.

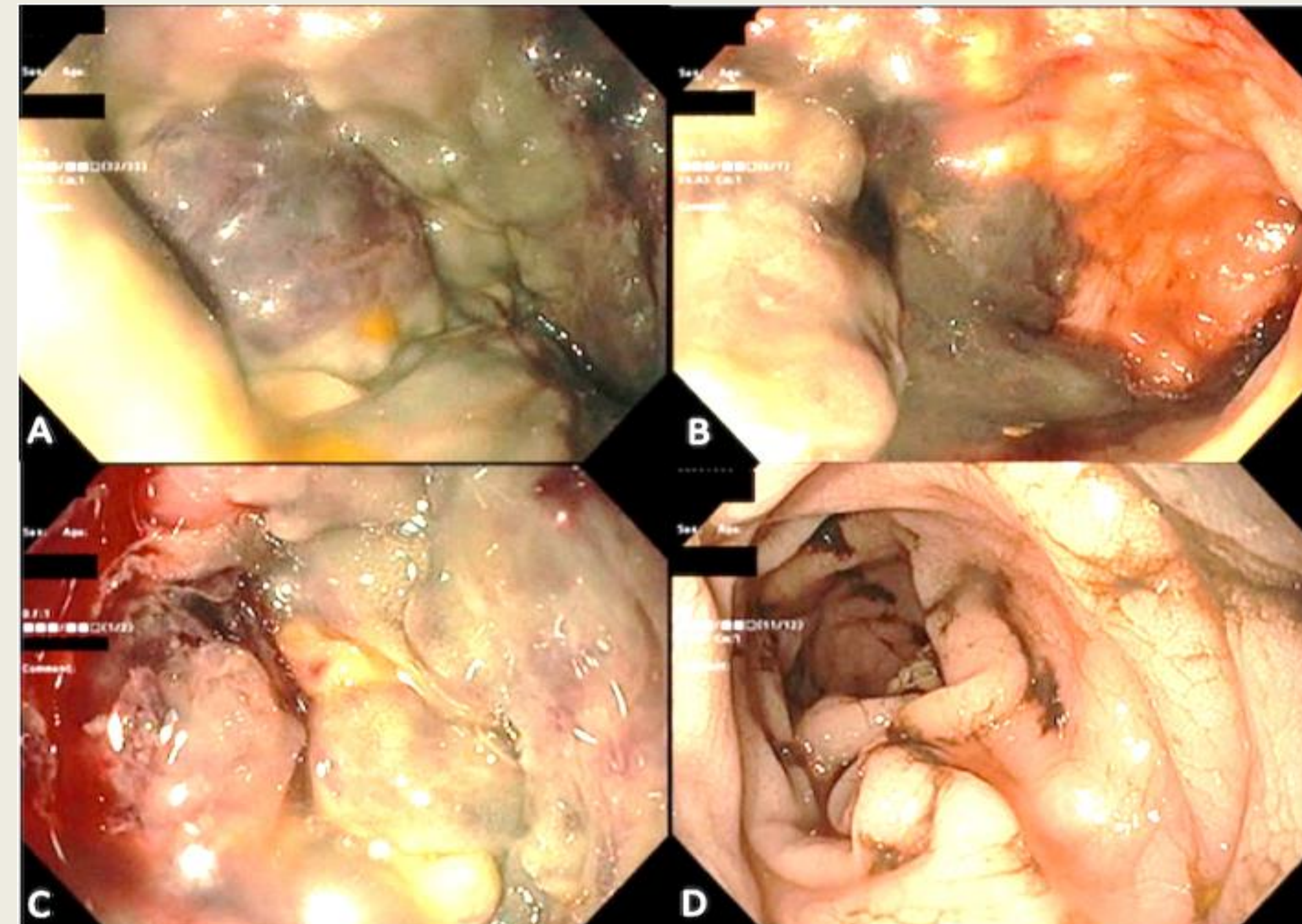
CASE DESCRIPTION/ METHODS

A 66-year-old female with type 2 DM, hypertension, and GERD presented to the ED with severe shortness of breath and cough and was diagnosed with a COVID-19 infection. She was started on dexamethasone, remdesivir, therapeutic-dose enoxaparin and ceftriaxone. Her oxygen requirements increased, and she was transferred to the ICU for intubation and vasopressor support on day 4. Given a persistent decrease in hemoglobin requiring RBC and platelet transfusions on day 6, occult GI bleeding was suspected, and she underwent emergent flexible sigmoidoscopy.

RESULTS

Sigmoidoscopy showed necrotic circumferential mucosa with a large amount of blood clots starting 5 cm from the anal verge and extending to 10 cm in the rectum. The clots were removed, and after injection with epinephrine, no active bleeding was noted. Biopsies were taken from edges of the mucosal necrosis. The endoscope was advanced 50 cm into descending colon and no active bleeding or abnormal mucosa were noted. Pathology showed marked mucosal necrosis and fibroinflammatory exudate.

The patient further decompensated with superposed bacterial pneumonia, shock, AKI requiring hemodialysis, and expired one month after admission.



Endoscopic imaging showing mucosal necrosis of the rectum (A) with visible blood clots (B); mucosal necrosis extending to the rectosigmoid junction (C); without apparent necrosis of the sigmoid (D).

DISCUSSION

COVID-19 causes a variety of respiratory symptoms in different stages of illness. Additionally, GI symptoms such as vomiting and diarrhea were linked to the virus. GI complications, such as mesenteric ischemia or ischemic colitis have also been associated with the virus due to shock and hypercoagulability.

Although superficial ischemic events causing shallow mucosal ulcers are common, IP is extremely rare in the clinical setting.

The protective mechanism against IP includes rectal blood supply by the inferior mesenteric, internal iliac and internal pudendal arteries.

The main underlying causes of IP include severe vascular disease, acute vascular occlusion, previous vascular intervention, aorto-iliac surgery, and vasculitis.

The treatment of ischemic proctitis is largely supportive but may be challenging when managing transmural rectal ischemia or gangrene, often requiring surgery and proctectomy as the definitive treatment.

Kaafarani H, Moheb M, Hwabejire J, et al. Gastrointestinal Complications in Critically Ill Patients With COVID-19—Ann Surg. 2020 Aug; 272(2): e61–e62.
Keshavarz P, Rafiee F, Kavandi H, et al. Ischemic gastrointestinal complications of COVID-19: a systematic review on imaging presentation —ScienceDirect Volume 73, May2021