

Colonic Mucormycosis as a Complication of COVID Pneumonia: A Case Report

Kevin Lamm, MD¹; Samuel Horton, MD²; Christina Bauer, MD¹
¹Prisma Health Gastroenterology and Liver Center, Greenville, SC
²Prisma Health Department of Pathology, Greenville, SC

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UNIVERSITY OF
SOUTH CAROLINA
School of Medicine
Greenville

Introduction

- Gastrointestinal mucormycosis is a rare infection with high mortality.
- Risk factors for invasive mucormycosis infection include uncontrolled diabetes, immunosuppression, and corticosteroid use.
- The most common presenting symptoms include abdominal pain, fever, and perforation.
- Delay in diagnosis by 6 days has been shown to increase 30-day mortality from 35% to 66%.
- We present a case of colonic mucormycosis in a patient recovering from acute hypoxemic respiratory failure due to COVID-19 pneumonia.

Case Report

- A 31-year-old male with a remote history of appendiceal neuroendocrine tumor status post right hemicolectomy and uncontrolled type 1 diabetes presented with acute hypoxemic respiratory failure due to COVID-19 pneumonia.
- He was treated with dexamethasone. His course was complicated by sepsis due to polymicrobial bacteremia.
- Gastroenterology was consulted for diarrhea, characterized as non-bloody, watery stools up to 10 times daily.
- Colonoscopy findings were significant for multiple punched-out ulcers from the rectum to the sigmoid colon.
- Pathology findings were significant for the presence of fungal organisms consistent with colonic mucormycosis.

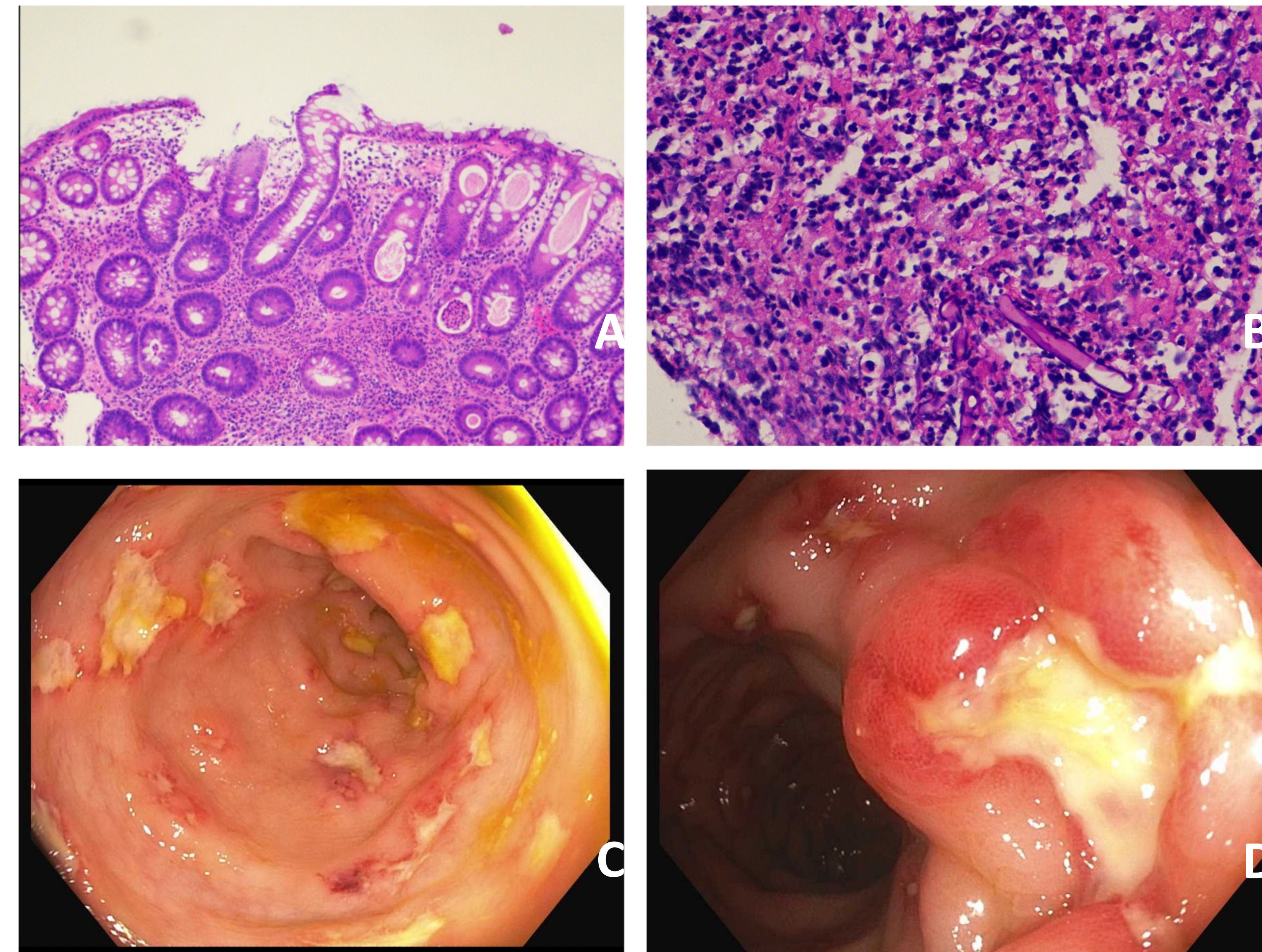


Figure A: Sigmoid biopsy. H&E 200X

Figure B: Sigmoid biopsy, PAS 400X. Fungal organisms present, consistent with mucormycosis in a background of acute inflammation, ulceration, and focal necrosis.

Figure C: Punched out, deep ulcerations of the sigmoid colon

Figure D: Sigmoid colon ulcer with raised borders

Case Report (continued)

- Given significant pathologic findings, ongoing fevers in the setting of broad-spectrum antibiotics, rising inflammatory markers, and positive serum beta-D-glucan assay patient was treated with IV Amphotericin for 2 months.
- His diarrhea improved and he has not had recurrence of disease, now 10 months later.

Discussion

- The COVID-19 pandemic continues to bring unprecedented challenges to all facets of healthcare.
- We presented a rare case of colonic mucormycosis in the setting of uncontrolled Type I diabetes, COVID-19, and systemic corticosteroids.
- According to a systematic review of 70 adult case reports of gastrointestinal mucormycosis, 97% of patients were diagnosed with histopathologic examination whereas culture and molecular methods were used in only 28% and 17%, respectively.
- In our case, eradication of the invasive fungal infection and patient survival were attributable to prompt diagnosis.

References

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