



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

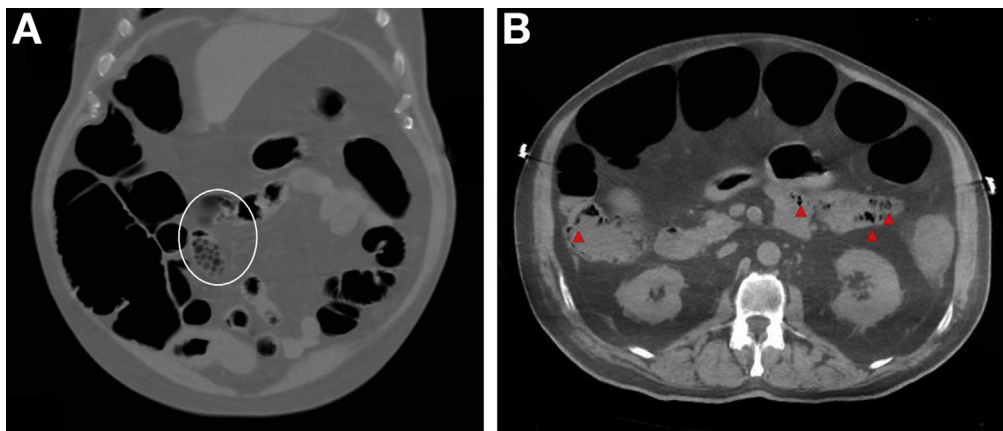
Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

## Pneumatosis Intestinalis in COVID-19

Seetha Lakshmanan\* and Nabil Toubia†



\*Department of Internal Medicine and †Department of Gastroenterology, Roger Williams Medical Center, Providence, Rhode Island



A 72-year-old man with multiple comorbidities presented with diffuse abdominal pain and bleeding per rectum for 1 day. He denied any respiratory symptoms; however, he did test positive for coronavirus disease 2019 (COVID-19) during screening in his nursing home recently. On arrival, he was febrile (104°F) but hemodynamically stable. Physical examination revealed a distended and diffusely tender abdomen without guarding. Computed tomography of abdomen showed descending and sigmoid colon wall thickening and mid-ascending colon pneumatosis without portal venous gas. This was suggestive of COVID-19–induced ischemic colitis with partial bowel obstruction in the absence of other provoking factors. Patient was treated conservatively with bowel rest, adequate hydration, and intravenous antibiotics. Although his gastrointestinal symptoms improved, his condition was subsequently complicated by sepsis, cardiac ischemia, renal insufficiency, and respiratory failure related to severe COVID-19 infection.

Pneumatosis intestinalis is an uncommon condition identified by multiple gas-filled cysts in the intestinal submucosa/serosa on imaging. Rupture of these cysts causes pneumoperitoneum, which mandates emergent surgical intervention. The pathophysiology of this condition is still under speculation; however, it has been associated with many gastrointestinal and pulmonary conditions. Because of this patient's absence of initial respiratory symptoms, the hypercoagulability and thromboinflammation associated with COVID-19 may be the culprit leading to bowel ischemia.

### Conflicts of interest

The authors disclose no conflicts.

### Most current article

© 2021 by the AGA Institute  
1542-3565/\$36.00

<https://doi.org/10.1016/j.cgh.2020.05.048>