

# Bowel Ischemia in COVID-19: A Systematic Review

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## Abstract

**Abstract:** Background: Gastrointestinal complications of this COVID-19 have been reported over the last year. One such manifestation is bowel ischemia. This study thus aims to provide a more holistic review of our current understanding of COVID-19 induced bowel ischemia. Method and Results: A meticulous search was performed using different keywords in PubMed, EMBASE, and Google Scholar. Fifty-two articles were included in our study after applying inclusion and exclusion criteria and performing the qualitative assessment of the studies. A total of 25,702 patients were included in our study after the completion of the qualitative assessment. Discussion: COVID-19 commonly presents in the GIT as diarrhea, vomiting, and nausea. The mechanism of bowel ischemia is associated with the formation of emboli which is related to COVID-19's high affinity for angiotensin-converting enzyme-2 on enterocytes, affecting the superior mesenteric vessels. Clinically, patients presented with abdominal pain and vomiting. CT angiography of the abdomen and pelvis showed acute mesenteric ischemia. Management was usually initiated with gastric decompression, fluid resuscitation, and hemodynamic support. Surgical intervention was also sought. Conclusion: Mesenteric ischemia presenting in patients with COVID-19 has to be considered when symptoms of severe abdominal pain are present. More research and guidelines are required to be able to triage patients with COVID-19 to suspect mesenteric ischemia and to help in diagnosis and management.

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