

From Shortness of Breath to Bowel Unrest: COVID-19 Induced Ulcerative Colitis

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Introduction

- COVID-19, well-known for respiratory complications, seldom manifests with gastrointestinal complaints.
- These symptoms are typically transient and rarely progress to chronic disease.

Case

- A 49-year-old female presented with bloody diarrhea and abdominal pain that persisted six weeks after recent COVID-19 infection.
- Patient had otherwise complete resolution of other disease-related symptoms
- CT-imaging revealed colonic wall thickening concerning for colitis.
- Infectious workup and celiac panel were negative.
- Colonoscopy revealed pancolitis and architectural distortion including crypt abscesses.
- Despite rapid resolution after beginning steroid taper, symptoms recurred with completion of treatment course.
- Repeat colonoscopy showed pseudopolyps at the hepatic flexure with segmental biopsies showing moderately active chronic colitis.
- Patient was ultimately diagnosed with ulcerative colitis triggered by COVID-19 infection. She began mesalamine with prednisone induction, eventually requiring ustekinumab for disease control.

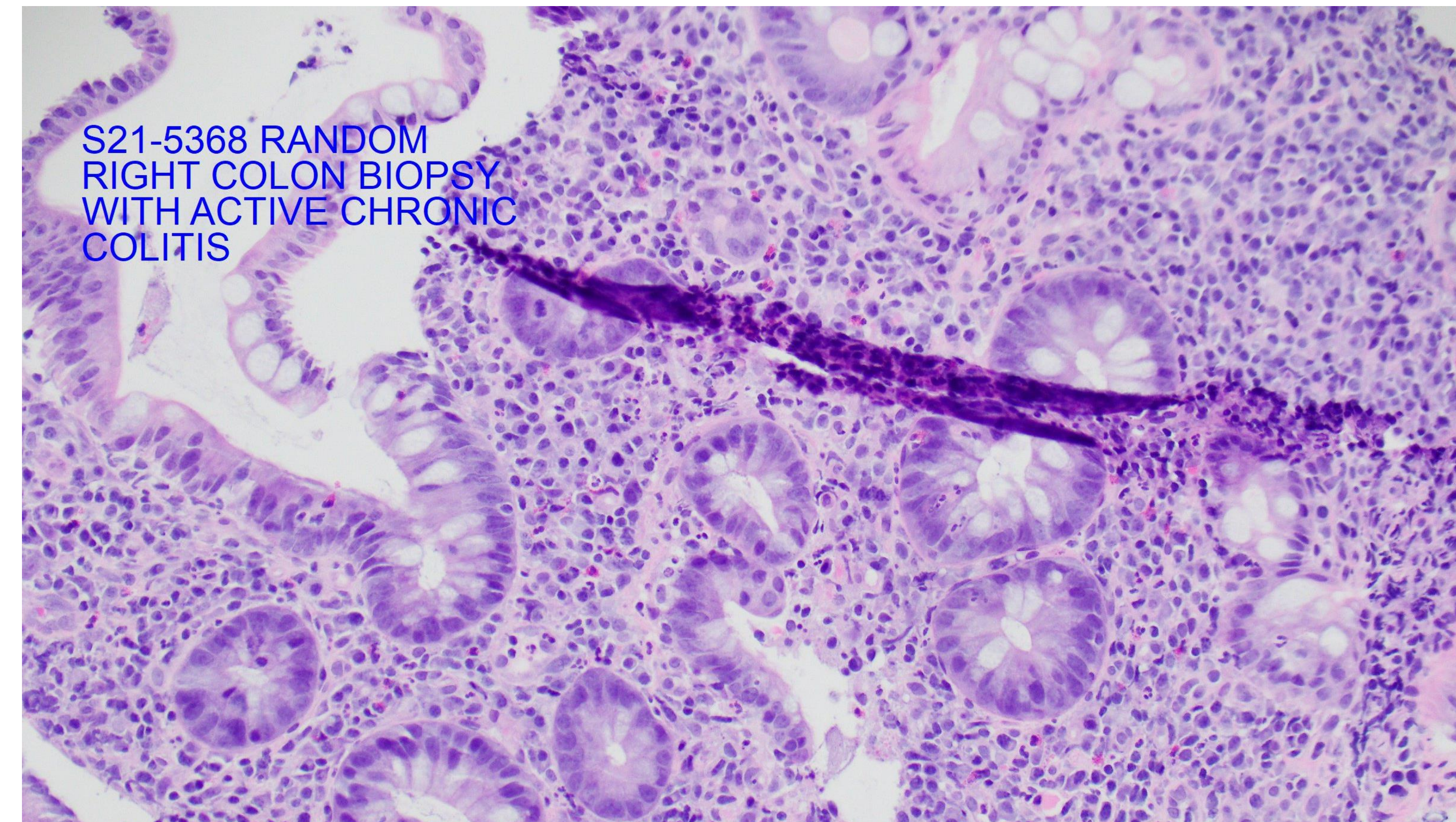
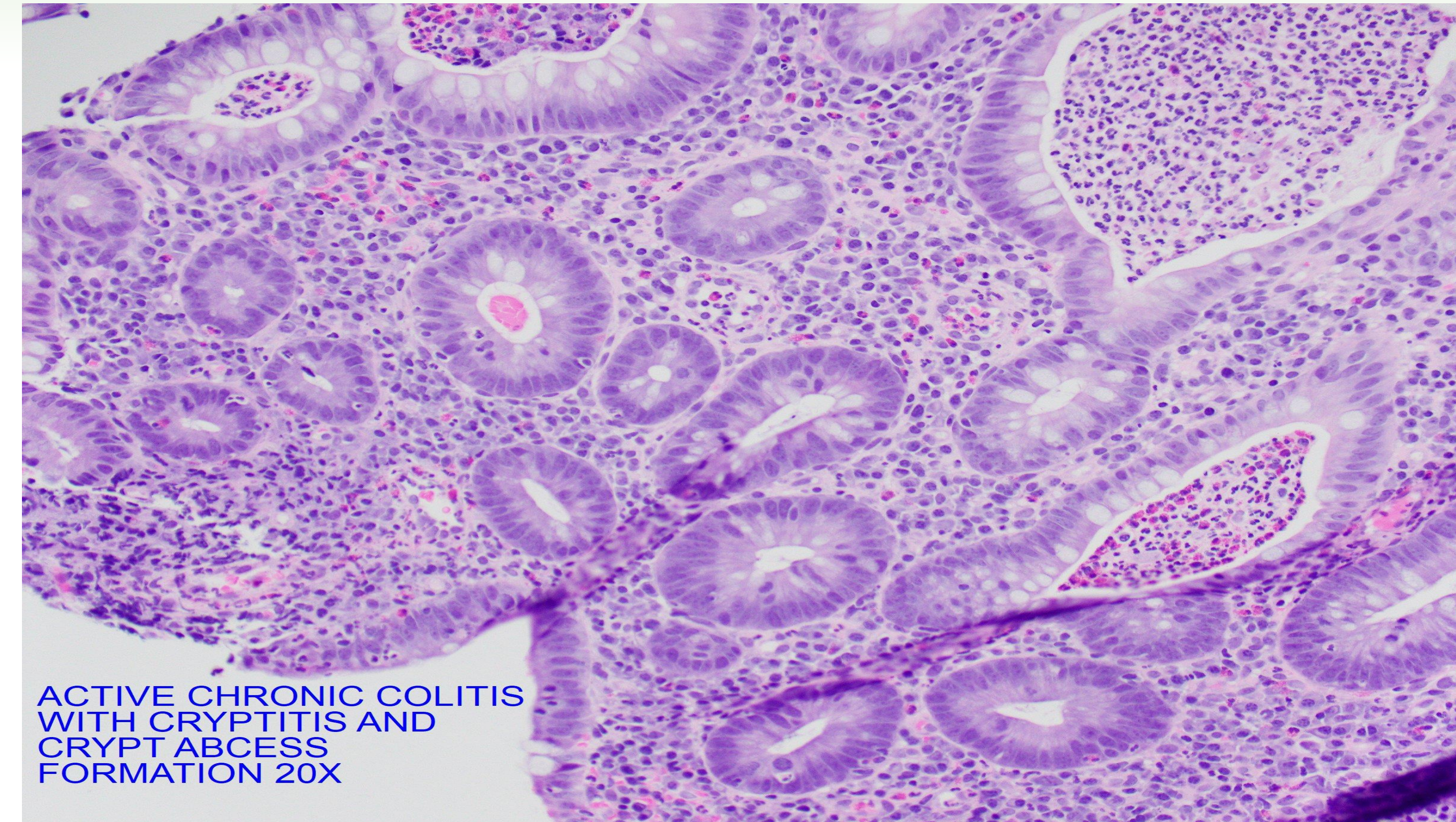


Figure 1: Colonic histologic features of architectural distortion with inflammatory cells in lamina propria, consistent with severe inflammatory colitis.

Photograph Courtesy of HNL- Pathology Department

Discussion

- Incidence of gastrointestinal manifestations in COVID-19 are variable ranging anywhere from 3-50% of cases.
- COVID-19 induced inflammatory bowel disease is exceedingly rare with only a handful of case reports documenting such occurrence.
- Pathophysiology behind COVID-19 related gastrointestinal manifestations likely involves binding of ACE-2 receptors along the epithelium, disrupting the gut barrier.
- Patients who ultimately develop inflammatory bowel disease likely have underlying genetic predisposition that results in chronic intestinal inflammation.

Conclusion

- Recognizing the extrapulmonary manifestations of COVID-19 can have life altering implications, including the induction of de novo inflammatory bowel disease.

References

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