

Letter: paying attention to the comorbidities or extraintestinal complications in patients with inflammatory bowel disease during the COVID-19 pandemic

Editors,

We read with interest the article by Hadi Y et al. "Incidence, outcomes, and impact of COVID-19 on inflammatory bowel disease: propensity-matched research network analysis".¹ The authors reported no increase in risk for coronavirus disease 2019 (COVID-19) amongst patients with inflammatory bowel disease (IBD) and no differences in need for mechanical ventilation or mortality between COVID-19-infected patients with IBD and COVID-19 cases without IBD. However, the impact of ulcerative colitis and Crohn's disease, main subtypes of IBD, on COVID-19 the severity was not assessed based on disease activity, severity, extraintestinal complications and other comorbidities. We do understand that there have been few studies to conduct rigorous clinical trials on these issues.

Acute severe IBD is likely to be associated with severe COVID-19 outcomes. Recently, studies have reported that IBD disease activity and severity were negatively correlated with COVID-19 outcomes.^{2,3} Acute IBD is correlated with severity of COVID-19, especially in younger patients.² The study showed that the ICU/ventilation/death percentages for remission/mild, moderate and severe IBD were 3.6%, 4.9% and 8.8%, respectively ($p < 0.001$).² These results are not fully consistent with the study by Hadi Y et al.,¹ so further subgroup analysis of disease severity is warranted.

Extraintestinal manifestations of IBD or other comorbidities were associated with negative COVID-19 outcomes.³⁻⁵ For example, thrombosis was associated with increased risk of mortality and critical status induced by COVID-19.⁴ In addition, studies have shown that the presence of chronic liver diseases, such as the metabolic dysfunction-associated fatty liver disease or non-alcoholic fatty liver disease, was associated with a more severe COVID-19.^{5,6} Although Hadi Y et al. statistically controlled the effects of body mass index, autoimmune/inflammatory arthropathies, type 1 diabetes, coeliac disease, autoimmune thyroid disease and a composite of autoimmune skin diseases by covariance analysis, they did not mention these extraintestinal manifestations or comorbidities as confounders.¹ Therefore, it is necessary to exclude confounding factors or avoid incomplete medical records.

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During the COVID-19 pandemic, it remains important to understand the impact of IBD disease activity and comorbidities on COVID-19 severity. Interestingly, the effects on COVID-19 outcomes may be different for patients with ulcerative colitis and Crohn's disease, so more attention should be paid to risk stratification, individualised prevention and treatment of acute flares.^{7,8} In addition, studying the relationship between different diseases is helpful for exploring the mechanism of COVID-19 and the new use of old drugs.⁸⁻¹⁰ Considering the limitations such as selection bias and confounders in medical record registration,¹ further rigorous research is required with large sample sizes.

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Declaration of personal interests: None.

LINKED CONTENT

This article is linked to Hadi et al papers. To view these articles, visit <https://doi.org/10.1111/apt.16730>.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available.

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