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increase in ALT level was significantly higher than AST. The ALT increase is the primary indicator of liver injury in COVID-19.^{7,8} The GGT increase was not significant. Before discharge, liver function of the 5 patients could not return to baseline.

Because of the emergence of COVID-19, the report and diagnosis on chronic HBV infection is insufficient, therefore, the impact of HBV infection on liver injury might be underestimated. Most HBV carriers with COVID-19 will not progress to becoming severely or critically ill. However, 26% of patients had abnormal liver function test results at admission, 19% of whom progressed to being severely or critically ill, which was not associated with HBV infection status. Accordingly, we recommend dynamic monitoring of liver function in COVID-19 patients with liver test abnormalities at admission. ALT and AST levels, especially ALT levels, are preferred parameters that should be used to monitor liver function during hospitalization.

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Conflicts of interest

The authors disclose no conflicts.

Most current article

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COVID-19 and Inflammatory Bowel Disease: Questions on Incidence, Severity, and Impact of Treatment?



Dear Editor:

Since the emergence of coronavirus disease 2019 (COVID-19) (severe acute respiratory syndrome-

associated coronavirus 2 [SARS-CoV-2]) infection in December 2019, numerous questions arise on the specific risk of COVID-19 in patients with inflammatory bowel disease (IBD), in particular those treated by immunosuppressants and/or biologics.

In a large cohort of IBD patients from Nancy University Hospital (France) and Humanitas (Milan, Italy), Allocca et al¹ reported 15 COVID-19-positive patients (9 Crohn's disease [CD] patients, 3 with active disease, 14 with immunosuppressants and/or biologics), representing a cumulative incidence of 0.0025; all had a favorable outcome (only 5 were hospitalized, not requiring intensive care support). During the same period, we identified 7 patients with proven infection. Four were male, median age was 54 years (34–60), 5 had CD, 5 had inactive disease, and 4 had comorbidities (obesity in 4, hypertension in 1, chronic pulmonary obstructive disease in 1). Diagnosis was based on polymerase chain reaction nasopharyngeal swab testing in 4 and enzyme-linked immunosorbent assay in 3. One patient was asymptomatic. Two needed short-term hospitalization without intensive care support. Two patients were on combination therapy (ustekinumab/azathioprine and vedolizumab/methotrexate), 1 had ustekinumab and 20 mg a day prednisolone for CD flare-up, 2 had anti-tumor necrosis factors (TNFs) (1 infliximab, 1 adalimumab), 1 had tofacitinib (10 mg twice a day), and 1 was on no treatment. Taken together, these results are reassuring for IBD patients and their treating physicians.

However, IBD patients with COVID-19 can have negative outcomes. Bezzio et al² reported endotracheal intubation in 8% and death in 8% of 79 COVID-19-infected IBD patients. Negative outcome was associated with age older than 65, comorbidities, and active disease.² The association with older age and comorbidities has also been reported in the international IOIBD SECURE registry (<http://www.covidibd.org>).^{3,4} In describing the characteristics and outcomes of the first 525 cases in IOIBD SECURE registry, older age and having ≥ 2 comorbidities were positively associated with COVID-19 severity.³ Systemic corticosteroids or mesalazine increased the risk of severe infection (adjusted odds ratio, 6.9; 95% confidence interval [CI], 2.3–20.5, and 3.1; 95% CI, 1.3–7.7, respectively), whereas anti-TNFs were not associated with worse outcome.³ These results seem to persist (although with no statistical analysis yet) in the updated data from the IOIBD SECURE registry, showing that among 1170 reported IBD patients with COVID-19 infection, 4% had died, with a clear increase in patients older than 60 and/or having ≥ 2 comorbidities.⁴ The difference in risk of severe infection and/or death related to treatment is more difficult to analyze with these raw data.⁵ In fact, it would be of outstanding interest to have data from whole IBD patients' cohort(s) including both infected and noninfected patients to better outline the protective (or harmful) effect of the different treatments after adjusting for the other known risk factors.⁶

Finally, disease activity was identified as a risk factor for COVID-19 in the study by Bezzio et al² but not by Allocca et al¹ or by the SECURE-IBD registry.⁴ This association should be interpreted with caution. The data reporting that SARS-CoV-2 binds to the angiotensin I-converting enzyme 2 (ACE2) before cleavage by the host transmembrane serine protease 2 (TMPRSS2) and virus-cell fusion lead to several questions because ACE2 is also expressed in gastrointestinal epithelial cells. This may explain the digestive symptoms reported in up to 30% of infected patients but also raise the question of fecal-oral transmission. In addition, the impact of inflammation and of immunomodulators and biologics on ACE2 expression (and its pathogenetic consequences) in IBD patients is important to consider. Burgueño et al⁷ have confirmed that the viral entry molecules ACE2 and TMPRSS2 are highly expressed on IBD patients' enterocytes and colonocytes with no difference with controls. They also showed that anti-TNFs, vedolizumab, ustekinumab, and steroids, decreased ACE2 expression in CD-11b-enriched cells, whereas TMPRSS2 expression is increased in vedolizumab-treated patients compared with those taking other medications and down-regulated in ustekinumab-treated patients.⁷ Therefore, it appears that most of the IBD medications may not adversely influence ACE2 intestinal expression.

In conclusion, the current data suggest that IBD patients may not have a higher risk of COVID-19 infection or severe infection and may indeed be protected from severe infections by several IBD medications. However, the true incidence of COVID-19 infections in IBD patients remains unclear because they can be asymptomatic as reported in one of our cases. Therefore, large-scale studies on patients with IBD may provide more precise answers about the risk of infection in IBD and identify potential therapeutic targets and drugs such as recently reported for tocilizumab.⁸

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Conflicts of interest

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Most current article

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Follow Your Gut: Challenges in Nutritional Therapy During the COVID-19 Pandemic



Dear Editor:

We have read with great interest the article entitled “Donning a New Approach to the Practice of Gastroenterology: Perspectives from the COVID-19 Pandemic Epicenter” by Dr Sethi et al.¹ Their review comprehensively discussed the different implications of coronavirus disease 2019 (COVID-19) to the gastrointestinal (GI) practice from the repurposing of endoscopy units and GI services to the care of patients with preexisting GI diseases and even to the emotional and leadership aspects of the pandemic. We are particularly interested in their discussion of enteral nutrition and access, because we also receive referrals for percutaneous endoscopic gastrostomy (PEG) placements even in this time of pandemic. As gastroenterologists, aside from providing nutritional access, we also encounter several challenges in the nutritional therapy of our patients. We aim to highlight these nutritional dilemmas while also providing evidence-based recommendations.

Despite the viral effects of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in the GI