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INVITED EDITORIAL

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Editorial: IBD medications during the COVID-19 pandemic—are they safe to use?

The global pandemic caused by Coronavirus disease 2019 (COVID-19) has, to date, infected over 160 million people worldwide. Since COVID-19 was first recognised, concerns have been raised about the safety of inflammatory bowel disease (IBD) medications on COVID-19 outcomes.[1-6] Patients with IBD frequently require treatment with medications that suppress the immune system, that are associated with an increased risk of serious infections.[7,8]

Recently, a French study by Meyer et al investigated the association between commonly prescribed IBD medications and severe COVID-19 (a composite of hospitalisation, mechanical ventilation and/or death).[9] The authors identified 268 185 IBD patients in the French national health database who were followed for 6 months between February and August 2020, corresponding to the first 'wave' of COVID-19 in Europe. Consistent findings were observed in this population-based study compared to other published studies. Older patients, those with multiple comorbidities, and those taking systemic corticosteroids were at increased risk of severe COVID-19.[1-6,9]

With regard to other IBD medications, there was no difference in the risk of hospitalisation for COVID-19 with adjusted hazard ratios (aHR) of 0.94 (95% CI 0.66-1.35) for immunomodulator monotherapy (thiopurines, methotrexate), 1.05 (95% CI 0.80-1.38) for anti-TNF monotherapy and 0.80 (95% CI 0.38-1.69) for combination therapy (anti-TNF and immunomodulator), compared with IBD patients on no medications. There was no significant difference in aHR noted between anti-TNF and newer 'biological agents', including interleukin-12/23 and integrin antagonists. Although not common, the risk of mechanical ventilation or death for COVID-19 did not differ between IBD medications.[9]

Existing literature on the safety of IBD medications in patients with COVID-19 includes two large studies from SECURE-IBD, an international registry of voluntary, physician-reported cases of IBD patients with COVID-19.[1,2] Compared to the early SECURE-IBD reports, which suggested that thiopurines are associated with a significantly increased risk of severe COVID-19; Meyer *et al* found no such association.[1,2,9] Similarly, a number of other emerging population-based studies have failed to show this association, albeit in smaller or less well-described cohorts.[4,5]

The reasons for these disparate findings are likely many. Firstly, the study by Meyer et al is population-based and, therefore, less likely to be prone to selection and reporting biases. On the other hand, the clinician-reported case finding in the SECURE-IBD registry could lead to over-reporting of IBD cases who see their clinician more frequently and, perhaps, those with more severe COVID-19 infections requiring medical attention. However, 73.7% of IBD patients in the French national health database were on neither anti-TNF or immunomodulators, which is consistent with a previous French study[10] but may make extrapolation to other IBD populations difficult. This French, population-based study is also large with 189 289 IBD patients, though the primary endpoint was incident lymphoma.

The key principle emerging from this and other studies is that remission should be maintained with steroid-sparing agents. Cessation of immunomodulators or anti-TNF drugs places patients with IBD at increased risk of requiring steroids or hospitalisation for disease flare, both of which may increase the risk of contracting COVID-19 and experiencing severe, life-threatening disease.

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LINKED CONTENT

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