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Protecting patients with IBD during the COVID-19 pandemic

We read with great interest the Correspondence from Ping An and colleagues¹ regarding protection measures against coronavirus disease 2019 (COVID-19) adopted for patients with inflammatory bowel disease (IBD), in Wuhan, China. The pandemic, caused by infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), is rapidly leading to saturation of intensive care units and inpatient beds. The need for full-time physicians and nurses dedicated to patients with COVID-19 is requiring fast and complex reorganisation of clinical activities in many divisions, including IBD units.^{2,3}

IBDs are immune-mediated diseases, which usually require treatment with corticosteroids, immunomodulators, or monoclonal antibodies to induce and maintain clinical and endoscopic remission. The use of these agents can increase the risk of opportunistic infections, but not that of serious infections. Therefore, adoption of adequate measures to prevent and protect patients is an essential part of the quality standards of care in IBD.

An and colleagues stopped biologics (infliximab infusions) and immunosuppressive treatments for all patients with IBD. This decision is challenging. Indeed, a systematic review⁴ showed that the risk of hospital admission (odds ratio 0.48, 95% CI 0.29–0.80) and surgery (0.67, 0.46–0.97) is significantly reduced by use of biologics for patients with IBD. The probability of relapse after stopping effective immunomodulators or biological therapy is about 50% and is associated with an increased need for steroids, and risk of hospital admission and surgery.⁵

Some considerations are needed. First, SARS-CoV-2 infection should be considered as a serious rather than an opportunistic infection, as

the risk of infection is not related to concomitant immunosuppression. Second, severe COVID-19 might be associated with cytokine storm and is possibly related to a hyper-immune response in addition to virus-related damage. Third, around 5% of patients who relapse because of withdrawal of effective therapies will require hospital admission against a backdrop of overwhelmed hospital capacity. Thus, the risk and benefits of continuing or stopping biologics should be carefully balanced and should not be assumed to be a general rule for all patients with IBD, especially given the length of time the pandemic is likely to last.

In conclusion, protection of patients with IBD from COVID-19 is crucial and strongly advisable. Whether stopping or adapting therapies will have substantial positive benefits for patients with IBD requires further, longer-term data from different countries.

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Prevention of COVID-19 in patients with IBD

We read with interest the Correspondence from Ping An and colleagues¹ describing their efforts to prevent coronavirus disease 2019 (COVID-19) in patients with inflammatory bowel disease (IBD) in Wuhan, China. The team reported that of the 318 patients who were registered with IBD during the COVID-19 pandemic in the Wuhan region, only five patients were admitted to hospital because of IBD, and none were reported to have COVID-19. This information was obtained by use of social media and online educational materials, as well as by contacting 100% of their IBD population.

In the UK, this approach would prove difficult, especially as our understanding of all at-risk groups in this pandemic evolves. Indeed, the National Health Service, in conjunction with the British Society of Gastroenterology (BSG), relied on individual health-care trusts to highlight patients at high risk with IBD so advice could be delivered by post regarding shielding and stringent physical distancing.²

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A further challenge for the UK is the large difference in IBD incidence and prevalence between China and the western world. The age-standardised prevalence of IBD in China is 136.2 (95% uncertainty interval 125.4–147.4) per 100 000 population compared with 449.6 (420.6–481.6) per 100 000 in the UK;³ the prospect of protecting this population from COVID-19 is likely to be a much greater challenge.

With concerns regarding a second wave of COVID-19 cases, it is imperative that we protect the most sick and susceptible in our society. An and colleagues¹ show the importance of IBD registries and the ability to contact at-risk groups via innovative means such as social media and the internet. These methods can result in rapid development of virtual telephone clinics, but they still ultimately require people to run them. The UK and other countries should therefore urgently seek to improve their IBD digital resources and staff resources to potentially reduce the burden of further waves of COVID-19.

Of further interest, An and colleagues¹ also reported measures to avoid immunosuppression, including ceasing infliximab infusions in exchange for aminosalicylates or thalidomide. BSG guidance suggests that patients should continue on their current medications, including infliximab, as active disease remains the biggest risk to a patient with IBD.⁴ Furthermore, the use of thalidomide for patients with IBD in the UK is uncommon, with a systematic review highlighting that there is insufficient evidence for its use in IBD and that it is potentially associated with adverse effects.⁵ It would therefore be of interest to see the long-term implications of this practice to guide future health-care systems in their approach to their patients with IBD at risk from COVID-19.

As further evidence accumulates, our understanding of COVID-19-related risks in IBD populations

globally will improve. We could potentially be overprotecting patients with IBD, but overprotection is better than undue risks given the current uncertainties.

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Authors' reply

We thank Gionata Fiorino and colleagues and Jonathan Segal and colleagues for their comments on our Correspondence.¹ Here we seek to clarify some details. The early transmission kinetics of

severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) were described² as a basic reproductive number estimated at 2.2 (95% CI 1.4–3.9) and a doubling of cases every 7.4 days, together with a case-fatality rate of 3.67% in Wuhan, China. Lack of knowledge and community awareness of coronavirus disease 2019 (COVID-19) along with the severity of suspected cases, possible high transmission, and the peak of the Spring Festival in China during the early stages of the outbreak, made the task of minimising the risk of transmission to our patients with inflammatory bowel disease (IBD) urgent and all the more difficult. Because immunosuppressive drugs have previously been shown to increase the risk of opportunistic infections, use of such drugs was put on hold. This approach was subsequently adopted in guidance from the Chinese Gastroenterology Society, which recommended halting biologics in high-risk areas.³

We acknowledge that most published guidelines have advocated for the continuation of biological therapy and we understand the Fiorino and colleagues' concerns about an increased risk of disease recurrence and negative outcomes after stopping immunosuppressive therapy. However, in our study effective communication with our patients allowed us to rapidly give attention to patients with disease flares, such that only 12 (3.8%) of 318 patients were admitted to hospital, with only one requiring emergent surgery (intestinal perforation), during the entire 3-month lockdown period. Our short-term medical transitions did not result in increased recurrence compared with before the outbreak (data not shown). Because the COVID-19 outbreak has come under control in Wuhan, China, and given the emergence of literature regarding COVID-19, we restarted the use of immunosuppressive medications