

Letter to the Editor

Care of the Patient With IBD Requiring Hospitalisation During the COVID-19 Pandemic



Aysha H. Al-Ani^o, Ralley E. Prentice, Britt Christensen^o

Department of Gastroenterology, Royal Melbourne Hospital, Melbourne, VIC, Australia

Corresponding author: Britt Christensen, MB BS, Royal Melbourne Hospital, Gastroenterology Department, 300 Grattan St, Parkville, VIC, Australia. Email: britt.christensen@mh.org.au

We read with interest the article by Allez *et al.* representing the International Organization for the study of Inflammatory Bowel Disease [IOIBD] expert panel regarding care of the patient with inflammatory bowel disease [IBD] requiring hospitalisation during the COVID-19 pandemic.¹ The recommendations outline criteria for hospitalisation of IBD patients with severe or complicated disease; refer to SARS-CoV-2 screening and evaluation; support timely surgical referral where necessary; and provide a table summarising treatment of IBD in the context of COVID-19. Notably, the IOIBD panel surmises in the latter that cyclosporin be preferentially used as induction or salvage therapy for moderately-severely active ulcerative colitis. However, although evidence regarding safety of biologics in this setting continually accumulates, we argue that infliximab is overall a more favourable medical therapy for hospitalised patients with acute severe ulcerative colitis [ASUC] and COVID-19.

Allez *et al.* justify the preference for cyclosporin over biologics for the treatment of ASUC in the setting of COVID-19 based on previous in vitro data demonstrating cyclosporin's inhibition of coronavirus replication proteins such as cyclophilin.² However, concerns have been raised about cyclosporin use in patients with COVID-19, given its strong immunosuppressive properties.³ Consequently, an alternative non-immunosuppressive analogue, alisporivir, is being tested in vitro for SARS-CoV-2.³ Furthermore, recent experience with hydroxychloroquine as treatment for COVID-19, where in vitro data initially appeared promising, reinforces the relatively limited clinical applicability of such observations as they fail to be reproduced in vivo and hence are not currently endorsed by the World Health Organization.

Although the equivalent efficacy of cyclosporin and infliximab in the treatment of ASUC is established,⁴ we argue that infliximab may actually be preferable in a hospitalised patient with ASUC and COVID-19, from both therapeutic and logistic perspectives. The safety profile of cyclosporin has not been demonstrated in patients with COVID-19, and cyclosporin may result in adverse cardiovascular events⁴ which have been associated with poorer outcomes in COVID-19.⁵ Contrastingly, there is growing interest in the role of tumour necrosis factor alpha [TNFa] in the aberrant inflammatory phase of COVID-19,⁵ with the SECURE database suggesting that anti-TNF therapies are safe and may confer benefit in IBD patients who develop COVID-19.⁵ Finally, concerns regarding health care acquisition of COVID-19¹ also lend to infliximab being advantageous

by negating the requirement for frequent trough level monitoring, thereby reducing health setting exposure to SARS-CoV-2 and enabling shorter duration of initial hospitalisation.⁴

Allez *et al.* have neatly presented a set of recommendations for the management of IBD patients during COVID-19. Whereas we agree with the majority of these suggestions, we wish to emphasise the importance of expedient biologic therapy in ASUC to avoid prolonged hospitalisation, excessive monitoring, and rapid corticosteroids taper, and believe that infliximab should be considered in preference to cyclosporin in most cases in hospitalised patients with ASUC and COVID-19.

Conflict of Interest

BC has received speaking fees from Abbvie, Jannsen, Pfizer, Takeda, and Ferring, research grants from Janssen and Ferring Pharmaceuticals, and served on the advisory board of Gilead and Novartis.

Author Contributions

AA-A drafted the response in coordination with RP. BC revised and edited the letter. All the authors approved the final version of the letter.

References

- Allez M, Fleshner P, Gearry R, Lakatos PL, Rubin DT; International Organization for the study of Inflammatory Bowel Disease. Care of the patient with IBD requiring hospitalization during the COVID-19 pandemic. J Crohns Colitis 2020, Jul 29. doi: 10.1093/ecco-jcc/jjaa150. Online ahead of print.
- de Wilde AH, Zevenhoven-Dobbe JC, van der Meer Y, et al. Cyclosporin
 A inhibits the replication of diverse coronaviruses. J Gen Virol
 2011;92:2542–8.
- Softic L, Brillet R, Berry F, et al. Inhibition of SARS-CoV-2 infection by the cyclophilin inhibitor alisporivir [Debio 025]. Antimicrob Agents Chemother 2020, Jun 23. doi: 10.1128/AAC.00876-20. Online ahead of print.
- Laharie D, Bourreille A, Branche J, et al.; Groupe d'Etudes Thérapeutiques des Affections Inflammatoires Digestives. Ciclosporin versus infliximab in patients with severe ulcerative colitis refractory to intravenous steroids: a parallel, open-label randomised controlled trial. Lancet 2012;380:1909–15.
- Brenner EJ, Ungaro RC, Gearry RB, et al. Corticosteroids, but not TNF antagonists, are associated with adverse COVID-19 outcomes in patients with inflammatory bowel diseases: results from an international registry. Gastroenterology 2020;159:481–91.e3.