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## Impact of Medication Discontinuation on Patients With Inflammatory Bowel Disease During the COVID-19 Outbreak



Dear Editors:

D'Amico and colleagues<sup>1</sup> recommend that all patients of inflammatory bowel disease (IBD) should continue medication if they are not suspected of coronavirus disease 2019 (COVID-19). Medication discontinuation will increase the risk of recurrence or aggravate the disease, which may lead to hospitalization or even surgery. Our data support this idea. In the past 3 months, COVID-19 has swept Wuhan and other cities in China.<sup>2</sup> Due to the limitation measures during the epidemic, many patients with IBD had to discontinue their medication. In this case, Chinese doctors provided timely and standardized guidelines for chronic management of IBD,<sup>3</sup> and tried to help patients with IBD via mobile phone apps and Internet-based service.<sup>4,5</sup> Despite their efforts, the epidemic still exerted a great impact on patients with IBD.

We used the electronic medical record system to obtain the diagnosis and treatment information of outpatients and inpatients in the IBD Center of the Sixth Affiliated Hospital of Sun Yat-sen University, one of the largest IBD centers in South China. From January 23, 2020, to April 23, 2020, the number of registered patients with IBD was 1294, which is 49.3% lower than that in the same period of 2019.

We then collected complete data of 386 patients with IBD on maintenance therapy during the epidemic from patient record, telephone follow-up and questionnaires. The patients, including 75 with ulcerative colitis and 311 with Crohn's disease (CD), were from 43 cities of 12 provinces. Among them, 272 patients were men. The average age were (32.8 ± 6.8) years. Medication discontinuation was defined as no medication up to 2 consecutive weeks in all patients except those treated with infliximab (IFX). For patients on IFX treatment, medication discontinuation refers to delayed medication for more than 1 week in the induction period and more than 2 weeks in the maintenance period.

In our survey, 107 (27.7%) patients with IBD discontinued their medication during the epidemic, including interruption of glucocorticoid (4 patients, 3.7%), mesalazine (18, 16.8%), immunosuppressants (19, 17.8%), biological agents (54, 50.5%), and total enteral nutrition (12, 11.2%). Approximately 86.9% (93 of 107) patients with IBD had to discontinue medical treatment because of the COVID-19 epidemic, such as traffic restrictions and hospital regulations for infection prevention and control; 13.1% (14 of 107) patients spontaneously discontinued medication because of concern about COVID-19 infection or adverse drug reactions. Among patients with ulcerative colitis with drug discontinuation, the condition of 17 (22.7%) patients was aggravated, among whom 13 (76.5%) needed hospitalization and 1 (5.9%) required surgical treatment. Among patients with CD, 29.3% (91 of 311) suffered aggravated condition after drug discontinuation, in whom 52.7% (48 of

91) needed hospitalization and 4.4% (4 of 91) required surgical treatment. A total of 12 patients with CD developed intestinal complications, including symptomatic intestinal obstruction (5.5%, 5 of 91) and intestinal fistula/intestinal abscess (7.7%, 7 of 91).

During the epidemic, our center provided guidance of IBD management via various platforms (WeChat official accounts, WeChat group, and QQ group), and conducted online medical consultation and prescription; however, the results of this survey showed the effect was not as satisfactory as we thought. During the epidemic, the chronic management strategy was challenged. Therefore, improvement is needed in information sharing, methods of drug purchase, adverse drug reaction monitoring, and feedback route for the management strategy of IBD.<sup>6-8</sup> Telemedicine and community health services also should be promoted in the future.<sup>6</sup>

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## Conflicts of interest

The authors disclose no conflicts.

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**Reply.** We thank Chen and colleagues for their letter<sup>1</sup> that shows the association between therapy discontinuation and worsening of symptoms and outcomes (eg, hospitalization, surgery, and intestinal complications) in patients with inflammatory bowel disease (IBD) during the coronavirus disease 2019 (COVID-19) pandemic. In