

Clinical and Psychological Issues in Children with Inflammatory Bowel Disease During COVID-19 Pandemic

Key words: COVID-19, inflammatory bowel diseases, lockdown, pediatrics

To the Editors,

We read with great interest the article from Occhipinti et al.¹ The coronavirus disease 2019 (COVID-19) outbreak presents exceptional challenges to the inflammatory bowel disease (IBD) health care providers both in adults and in children. Although it is still uncertain whether children with IBD may be more susceptible to the infection,² the lockdown together with the COVID-19 fear may have potential clinical and psychological impact on disease course.³

Herein, we report the experience of an Italian regional pediatric IBD referral center. We conducted an observational study including a cohort of 180 children diagnosed with IBD. Clinical characteristics are summarized in [Supplementary Table S1](#). Data on hospital admission performed during the lockdown were compared with those of the previous 8 weeks. From March 9 to April 24, 2020, parents and children were interviewed during visits or contacted by phone. The following information were collected: personal history of suspected or confirmed COVID-19 and/or contacts with infected subjects, disease activity, current therapy, and compliance. Health-related quality of life (HR-QoL) in 10 years and older children was evaluated through the IMPACT III questionnaire.⁴

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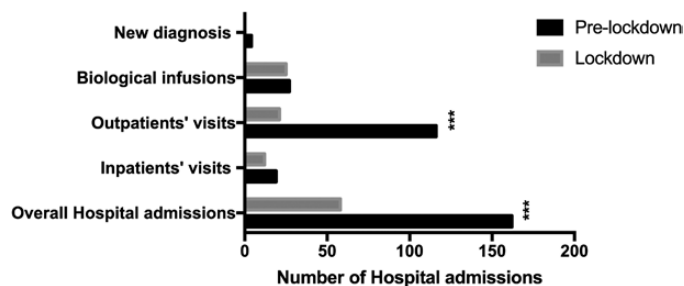


FIGURE 1. Number and type of hospital admission 8 weeks before and during the COVID-19 lockdown; Fisher Exact Test (* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$).

We experienced a significant reduction in the number of children admitted to our hospital when compared with the previous 8 weeks (29 of 180 [16.1%] vs 109 of 180 [60.5%]; $P < 0.01$). Overall hospital admissions were decreased by 64.2% during the lockdown (58 vs 162; [Fig. 1](#)). We did not report any cases of COVID-19. Seven out of 158 (6.9%) telephonic interviews revealed symptoms compatible with disease flare, not referred before. In 44 of 102 (43.1%) children undergoing immunoregulatory (IM) therapies, the parents expressed concerns about the possibility of continuing IM during COVID-19 pandemic. Three out of 60 (7%) children under conventional IM had spontaneously suspended the therapy, and 4 of 22 (18.1%) patients undergoing biologics infusions postponed their visit without medical advice. Two out of 20 (10%) children undergoing combined biologics and IM decided to stop IM. Median total HR-QoL score was 76.7 (range 39.2–97.1) without significant differences between Crohn's disease and ulcerative colitis. Systemic functioning domain showed the lowest scores (median 62.5, range 8.3–100), whereas social functioning registered the highest score (median 79.1, range 43.7–95.8).

To our knowledge, this is the first report detecting preliminary consequences related to COVID-19 lockdown in IBD children. We found a considerable percentage of patients underreporting IBD symptoms and an increased risk of reduced compliance to immunoregulatory therapies.

Of note, we did not identify any new incident IBD cases, suggesting a potential diagnostic delay, as already reported for other diseases.⁵ However, we did not register specific HR-QoL red flags, with overall scores not differing from previous cohorts.⁴ The satisfying social functioning may be partially related to decreased stressful events, such as school, or to an increased parental closeness.

SUPPLEMENTARY DATA

Supplementary data is available at *Inflammatory Bowel Diseases* online.

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