A descriptive study of patients with new onset of inflammatory bowel disease and exacerbations after ChAdOx1-nCoV-19 and inactivated COVID-19 vaccines in a tertiary hospital of North India

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# Abstract

Background Flares of inflammatory bowel disease (IBD) and a few cases of new-onset IBD have been reported after mRNA-based COVID-19 vaccines. Reports are scarce with viral vector and inactivated COVID-19 vaccines. Methods Patients diagnosed with 'flares' and new-onset IBD after receiving ChAdox1-nCoV-19 and inactivated COVID-19 vaccines were recruited from April—July 2022 from the Gastroenterology department of a tertiary hospital of North India. Clinical presentation, colonoscopy findings, treatment, and outcomes were recorded. Results A total of 44 patients were identified. 28 patients had flares of IBD at a median interval of 8.1, 13.2, and 2 weeks since the first, second, and booster doses of COVID-19 vaccines respectively. 16 new-onset cases of IBD occurred at a median interval respectively of 4.8, 9, and 17.8 weeks after the first, second, and booster doses. The majority of the cases occurred after the second dose of ChAdOx1-nCoV-19. With oral amino-salicylic acid (ASA), ASA enema, and systemic steroids, improvement was seen in the majority at a median follow-up of 26-30 weeks. 14 patients had persistent health issues (median follow-up of 73-75 weeks). Conclusion New-onset IBD and exacerbations can occur after 1-3 months of COVID-19 vaccines. Extended surveillance of vaccinated individuals is required to understand the incidence and course of late-onset adverse events and molecular studies are warranted to understand their immunological basis.

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