

Bridging the Gap: Impact of Gender-Affirming Care on IBD Flare Rates



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IBD

This summary reviews Bennett A, Field J, Newman KL, et al. Gender-Affirming Hormone Therapy and Risk of IBD Flare in Transgender and Gender Diverse Adults. Am J Gastroenterol. 2025 May 16. doi: 10.14309/ajg.0000000000003543.

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STRUCTURED ABSTRACT

Question: What is the impact of gender-affirming hormone therapy (GAHT) on rates of inflammatory bowel disease (IBD) flares in transgender and gender-diverse adults?

Design: This was a retrospective cohort study of adult patients diagnosed with IBD who were prescribed GAHT. Patients were stratified based on disease activity at the time of hormone initiation (active disease vs remission) and the type of hormone initiated (estrogen vs testosterone). Clinical data were reviewed for 12 months before and after the initiation of GAHT.

Setting: Five tertiary care centers across the United States. Data were collected for the 12 months preceding and following GAHT initiation.

Patients: Patients were identified using ICD-10 codes and keyword searches

including “Crohn’s disease,” “ulcerative colitis,” “transgender,” and “gender dysphoria.” Inclusion criteria required a diagnosis of IBD prior to GAHT initiation, with available clinical data both pre- and post-hormone therapy.

Intervention: Initiation of GAHT.

Outcome: Rate of IBD flares following GAHT initiation.

Data analysis: Statistical analyses included univariate comparisons using Pearson’s chi-square test and multivariable logistic regression. The Wilcoxon rank-sum test for patients with available C-reactive protein and fecal calprotectin data.

Funding: This research was made possible in part by the Mayo Clinic Robert D. and Patricia E. Kern Center for the Science of Health Care Delivery to Victor Che-did.

Results: A total of 85 transgender and gender-diverse adults with IBD who initiated GAHT were included. The cohort was predominantly White (95.3%) with a median age of 23.5 years. Slightly more than half were diagnosed with Crohn’s disease (55.3%), while the remainder had ulcerative colitis (44.7%). At the time of GAHT initiation, 52.9% of participants were in clinical remission.

Overall, the proportion of patients experiencing an IBD flare decreased from 49% before GAHT initiation to 32% after ($P = 0.06$). However, when stratified by hormone type, patients receiving testosterone experienced a significantly higher flare rate post-GAHT (53%) compared to pre-GAHT (26%, $P = 0.01$). Similarly, individuals with active disease prior to GAHT initiation had significantly more flares post-treatment (58%) compared to those in remission at baseline (26%, $P = 0.003$). These findings remained significant in multivariable logistic regression: testosterone use (odds ratio [OR] 3.1, 95% confidence interval [CI] 1.2–8.1; $P = 0.015$) and active disease at baseline (OR 5.1, 95% CI 1.7–15.2; $P = 0.002$) were independently associated with increased flare risk (**Figure 1**).

COMMENTARY

Why Is This Important?

Approximately 1.6% of the US population identify as transgender, with the prevalence rising to 5.1% among young adults.¹ As this population ages, clinicians are increasingly likely to encounter transgender individuals in routine clinical practice. Limited studies suggest that the prevalence of

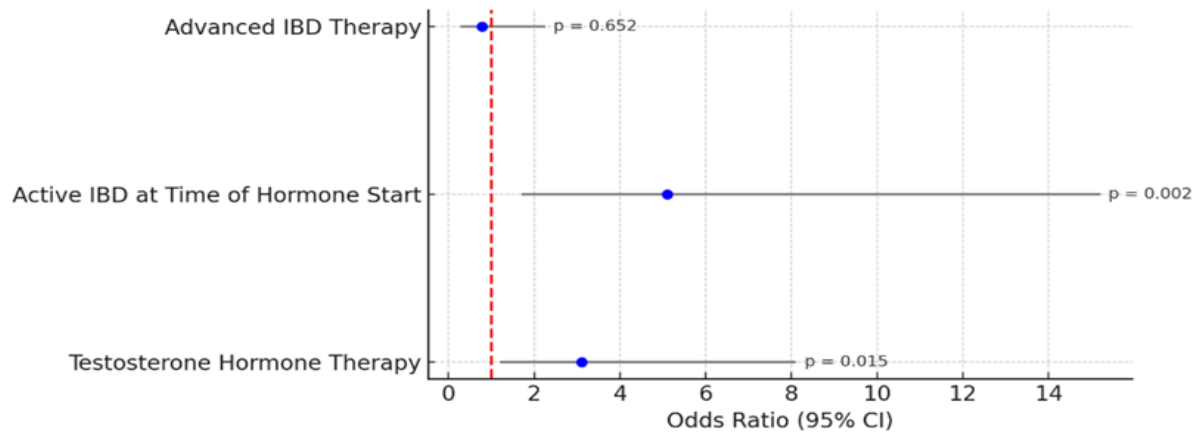


Figure 1. Factors associated with inflammatory bowel disease flares after gender-affirming hormone treatment.

inflammatory bowel disease is similar between transgender and cisgender individuals.²

There is limited evidence on the impact of gender-affirming hormone therapy on the clinical course of IBD. Most available data relate to hormone replacement therapy in older, cisgender populations, often at different dosages and risk profiles.^{3,4} Sexual and gender minorities remain underrepresented in IBD research, despite facing unique clinical and psychosocial challenges. GAHT is a medically necessary and often life-saving intervention; thus, understanding its implications for chronic inflammatory diseases such as IBD is essential for delivering inclusive, comprehensive, and patient-centered care.^{5,6,7}

Key Study Findings

There was no overall significant increase in the risk of IBD flares following initiation of GAHT. However, patients with active IBD at the time of hormone initiation and those who received testosterone were significantly more likely to experience disease flares.

Caution

This study has several limitations. First, it lacked detailed information on GAHT dosing, which may influence both flare risk and treatment response. The specific years included in the chart review were also not reported, which could affect the interpretation of both GAHT and IBD therapies used, given evolving standards of care. Additionally, a key objective marker of IBD flare—endoscopic findings—was unavailable, and serum hormone levels were not reported to determine adequacy of GAHT dosing. Lastly, the absence of patient-reported outcomes limits the ability to assess disease activity beyond objective clinical measures.

My Practice

In patients with IBD who are initiating GAHT, it is important to recognize that GAHT is a life-saving treatment for transgender and gender non-conforming individuals. Therefore, the approach to managing IBD should be focused on planning treatment and monitoring of IBD around the initiation of GAHT. According to this study, it is

important to ensure that a patient with IBD is in remission at time of initiating GAHT, since the risk of flare one year after initiating GAHT is higher in patients with active IBD. This is similar to the practice for patients with IBD who are planning to conceive.

When initiating GAHT, a multidisciplinary approach involving both the GAHT prescribing provider and the IBD provider is essential to coordinate an appropriate IBD management plan at the time of hormone initiation. For patients starting testosterone, an individualized, non-invasive IBD monitoring strategy may be warranted. This could include fecal calprotectin testing every 3 months during the first year, with consideration of radiologic and/or endoscopic evaluation within 6 to 12 months of initiation of GAHT.

For Future Research

Future research should include prospective studies that comprehensively capture IBD outcomes, including both objective clinical markers and patient-reported symptoms, as well as detailed data on GAHT dosing and duration. Further investigation is also needed to determine whether proactive monitoring of IBD patients initiating GAHT is warranted, particularly in those with active disease or those receiving testosterone. Such research will be essential to inform guidelines and optimize care for transgender and gender-diverse individuals living with IBD.

Conflicts of Interest

The authors have no reported conflicts

of interest.

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Abbreviations

GAHT, gender-affirming hormone therapy; IBD, inflammatory bowel disease.

Happy Pride Month! Rainbows in Gastro is a group of physicians who aim to uplift the LGBTQIA+ community by increasing understanding of the unique digestive health needs of this population via research, advocate for patients on a national platform, and build community amongst our current and future LGBTQIA+ providers and our allies. Visit rainbowsingastro.org to learn more and support this organization as a participant or ally.

REFERENCES

1. Pew Research Center. About 5% of young adults in the U.S. say their gender is different from their sex assigned at birth. Published June 7, 2022. Accessed December 23, 2024. <https://tinyurl.com/PewResearchJune2022>
2. Abramovich A, De Oliveira C, Kiran T, et al. Assessment of health conditions and health service use among transgender patients in Canada. *JAMA Netw Open*. 2020;3(8):e2015036.
3. Hassan B, Suchan A, Brown M, et al. The impact of hormone therapy on inflammatory bowel disease in transgender and nonbinary individuals. *Inflamm Bowel Dis*. 2024: ize236.

4. Newman K, Chedid V, Boden E. A systematic review of inflammatory bowel disease epidemiology and health outcomes in sexual and gender minority individuals. *Clin Gastroenterol Hepatol*. 2023;21(5):1127-1133.
5. Scheim AI, Baker KE, Restar AJ, et al. Health and health care among transgender adults in the United States. *Annu Rev Public Health*. 2022;43:503–523.
6. Restar A. Gender-affirming care is preventative care. *Lancet Reg Health Am*. 2023;24:100544.
7. Coleman E, Radix AE, Bouman WP, et al. Standards of care for the health of transgender and gender diverse people, Version 8. *Int J Transgend Health*. 2022;23(Suppl 1):S1-S259.