A Slippery Slope: Inflammatory Bowel Disease & Transitions in Care

Cody Ashcroft[1], Michael Craig[1], David Dulaney[2], Anish Patel[2]

1. Department of Internal Medicine, Brooke Army Medical Center, San Antonio, TX
2. Department of Gastroenterology, Brooke Army Medical Center, San Antonio, TX

Background

- Multiple studies have showed the benefits of timely access to care in Inflammatory Bowel Disease (IBD), and lapses or delays in care can result in serious complications.
- Military members and dependents with IBD are a unique population with frequent transitions in care due to work-related relocations (also known as a PCS).
- The following cases are illustrative of the potential adverse events associated with such transitions in care.

Case Presentation

The following patients were incidentally identified during a retrospective cohort study.

- Three patients were identified who experienced delayed treatment with biologic therapy due to a PCS.
  - Two with Crohn's disease (CD) were unable to receive their scheduled infusions on time. Patient 1 and 2 were 22 days late and 4 months late, respectively, for their scheduled infusions.
  - Patient 1 required a course of oral corticosteroids to induce remission, while patient 2 required inpatient admission for intravenous (IV) corticosteroids, followed by a prolonged taper.
  - Patient 3 was unable to finish the induction phase of his biologic for treatment of ulcerative colitis (UC) after a delay in care of 32 days, and was subsequently admitted for acute severe UC, requiring IV steroids and ultimately undergoing a total colectomy.
- An additional two patients with CD were identified who experienced flares shortly after a PCS, ultimately requiring surgical intervention (ileocecectomy; right colectomy, partial small bowel resection, washout, and an end ileostomy).

When patients with IBD have an upcoming transition in care, a multidisciplinary and coordinated approach to treatment should be adopted to minimize the impact of these transitions in care.

Age	Sex	CD/UC	Medication	Delay Time	Outcome
24	Female	CD	Infliximab	22 days	Flare --> required oral steroid taper
17	Male	CD	Infliximab	4 months	Flare --> required admission for IV corticosteroids, prolonged steroid taper, ultimately switched to Adalimumab
43	Male	UC	Adalimumab	32 days	Flare --> Switched to Tofacitibib with minimal improvement --> Started on steroid taper. --> Admitted and started on Infliximab --> Total colectomy within 3 months
42	Female	CD	Infliximab	N/A	Flare --> Ex-lap, right colectomy, partial small bowel resection, washout, end ileostomy
40	Male	CD	Mesalamine	N/A	Flare --> Ileocecectomy

Discussion

- IBD is a complex disease, with recent research advocating early treatment with biologic medications.
- While these medications can be effective at inducing remission and improving patients' quality of life, patients may experience secondary loss of response due to anti-drug antibodies.
- One factor that may contribute to this is a missed or late dose. Notably, delays in refills of subcutaneous biologics by only 2 days have been associated with an increased risk of flare.
- Additionally, the patients discussed above contribute to the growing body of evidence that demonstrates psychological stress (commonly associated with work-related relocations) as a risk factor for relapsing IBD.
- When patients have an upcoming transition in care, a multidisciplinary and coordinated approach to treatment should be adopted to minimize the impact of these transitions in care.

References

1. Sauk J, et al. High Perceived Stress is Associated with Increased Risk of Ulcerative Colitis Clinical Flares. Clin Gastroenterol Hepatol. PMID: 35952942.
2. Mawdsley, J. E., & Rampton, D. S. (2005). Psychological stress in IBD: new insights into pathogenic and therapeutic implications. Gut, 54(10), 1481–1491. https://doi.org/10.1136/gut.2005.064261
3. Sun, Y., Li, L., Xie, R., Wang, B., Jiang, K., & Cao, H. (2019). Stress Triggers Flare of Inflammatory Bowel Disease in Children and Adults. Frontiers in pediatrics, 7, 432. https://doi.org/10.3389/fped.2019.00432
4. Li Y, Chen L, Chen S, Liu X. Delayed Infliximab Treatment Affects the Outcomes of Patients With Crohn's Disease During the COVID-19 Epidemic in China: A Propensity Score-Matched Analysis. Front Med (Lausanne). 2022 Jan 12;8:819557. doi: 10.3389/fmed.2021.819557. PMID: 35096910; PMCID: PMC8790060.
5. A McCulloch, M Abbas, A Bannaga, P McDowell, T Bate, M Kandathil, J Shah, Q Sharif, M Love, N Sharma, R Cooney, P174 System delays have real consequences: Impact of timing of biologic commencement on inflammatory bowel disease patient response, Journal of Crohn's and Colitis, Volume 13, Issue Supplement_1, March 2019, Page S176, https://doi.org/10.1093/ecco-jcc/jjy222.298