A Delayed Presentation of Immune Checkpoint Inhibitor Colitis

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Received: 2024-08-19

Accepted: 2024-09-16

Published: 2025-06-30

Introduction: Immune checkpoint inhibitors (ICIs) have emerged as a revolutionary option for cancer immunotherapy, becoming increasingly more common as a treatment choice for various malignancies. With this, it is important for providers and patients to be aware of common side effects, especially gastrointestinal adverse events which occur in 35-50% of patients (1). ICI colitis is one such reported adverse event that can occur within weeks to months after starting ICIs and can quickly progress to severe colitis.

Case presentation: An 80-year-old male with a past medical history of urothelial carcinoma presented with severe watery diarrhea for four months. The patient had been started on enfortumab vedotin and pembrolizumab two months prior to onset of diarrhea. *C. difficile* PCR was positive, but he did not respond to oral vancomycin or fidaxomicin. This suggested that he was colonized rather than infected with *C. difficile*. Flexible sigmoidoscopy showed diffuse mild inflammation in the sigmoid colon and rectum with erythema, edema, and erosions. Colon biopsies revealed active colitis with focal crypt distortion and increased apoptosis which favors immune checkpoint inhibitor colitis. The patient was then started on prednisone which significantly improved his symptoms.

Conclusion: Regardless of duration, patients receiving ICI therapy presenting with diarrhea should be evaluated for ICI colitis. If labs are positive for an infectious cause, it is crucial to monitor patients closely for recovery after appropriate treatment and to keep clinical suspicion for underlying ICI colitis high if non-therapeutic. A colonoscopy with tissue biopsies should be performed early to confirm the diagnosis, assess severity, and guide treatment. Given that the majority of ICI colitis cases affect the left colon,

https://dx.doi.org/10.46570/utjms-2025-1374

flexible sigmoidoscopy is sufficient in most cases (2). Treatment includes holding immunotherapy and initiating systemic glucocorticoids. Biological agents, such as Infliximab, may be necessary in refractory cases or patients requiring rapid treatment response (3).

Keywords: Checkpoint Inhibitors, Immunotherapy

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https://dx.doi.org/10.46570/utjms-2025-1374