LETTER TO THE EDITOR

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Inflammatory Bowel Disease or Drug-Induced Colitis? A Diagnostic Challenge in a CML Case with Dasatinib Therapy

Enflamatuvar Barsak Hastalığı mı, İlaç İlişkili Kolit mi? Dasatinib Tedavisi Alan Bir KML Olgusunda Tanısal Zorluk

Hakan Demiröz[1], Yusuf Bünyamin Ketenci[1], Mehmet Akca[1], Mehmet Turgut[2], Ahmet Bektaş[1]

[1]*Ondokuz Mayıs University Faculty of Medicine, Department of Gastroenterology, Samsun, Türkiye*
[2]*Ondokuz Mayıs University Faculty of Medicine, Department of Hematology, Samsun, Türkiye*

To the Editor,

Dasatinib is a second-generation tyrosine kinase inhibitor with demonstrated efficacy in the treatment of Philadelphia chromosome-positive (Ph+) chronic myeloid leukemia (CML) both as first-line therapy and in patients who develop intolerance or resistance to imatinib [1]. In addition to its effect on the BCR-ABL fusion protein, it inhibits a variety of kinases, including the SRC family, achieving a broad spectrum of activity by leading to a reduction in regulatory T-cells. Although pleural effusion and cytopenia are among the most widely recognized adverse effects of dasatinib, gastrointestinal side effects such as diarrhea, bleeding, and colitis are also clinically important [2]. With the aim of contributing to the diagnostic process, we present a case that was initially misdiagnosed as inflammatory bowel disease (IBD) but was ultimately determined to be dasatinib-induced colitis.

A 26-year-old man was diagnosed with Ph+ CML in 2019. He was initially treated with imatinib, followed by nilotinib due to drug resistance, and was later switched to dasatinib (100 mg/day) due to nausea and vomiting. After 3 years of remission under dasatinib, he developed non-bloody diarrhea 5-6 times/day, abdominal distension, and fatigue. A colonoscopy performed at an external facility revealed skip lesions with ulcerations (Figure 1A), and the patient was diagnosed with Crohn's disease, for which budesonide and mesalamine therapy was initiated.

Due to persistent symptoms, the patient was reexamined at our institution. Stool cultures were negative but fecal occult blood was positive. A repeat colonoscopy showed diffuse mucosal hyperemia and loss of vascular pattern in all colonic segments, with a normal terminal ileum (Figure 1B). Histopathologic examination revealed dense neutrophilic infiltration in the lamina propria without crypt abscesses or distortion (Figure 1C). Cytomegalovirus infection was ruled out with negative

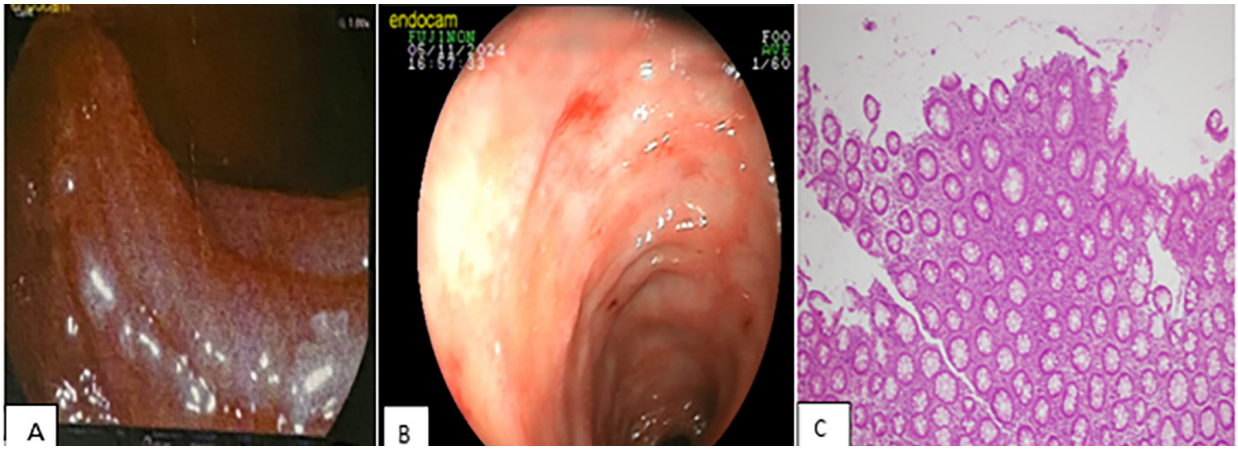

Figure 1. A) Colonoscopy revealed skip lesions with ulcerations. B) Repeat colonoscopy showed diffuse mucosal hyperemia and loss of vascular pattern throughout all colonic segments, with a normal terminal ileum. C) Histopathologic examination demonstrated dense neutrophilic infiltration in the lamina propria without crypt abscesses or architectural distortion.

results for tissue and blood polymerase chain reaction tests. The combination of clinical, endoscopic, and histological findings led to the diagnosis of dasatinib-induced colitis. After discontinuation of the drug, the symptoms resolved completely within about 3 weeks. A follow-up colonoscopy was not performed due to complete and sustained symptom resolution.

Dasatinib-associated colitis has been predominantly described in the literature as hemorrhagic or non-specific colitis [3,4]. However, recent reports have highlighted cases that mimic Crohn's disease, which can lead to misdiagnosis and unnecessary immunosuppressive therapy [5,6]. For patients who have been taking dasatinib for a long time and develop gastrointestinal symptoms, drug-induced colitis should be considered in the differential diagnosis.

This case indicates that dasatinib-induced colitis can be very similar to IBD both clinically and histologically. Thorough pharmacological history is crucial for an accurate diagnosis. Early detection can prevent inappropriate treatment and reduce patient morbidity.

Keywords: Dasatinib colitis, Chronic myeloid leukemia, Gastrointestinal toxicity

Anahtar Sözcükler: Dasatinib kolit, Kronik miyeloid lösemi, Gastrointestinal toksisite

Ethics

Informed Consent: Written informed consent was obtained from the patient for publication of this case report and accompanying images.

Footnotes

Authorship Contributions

Concept: H.D., M.A.; Design: H.D., A.B.; Data Collection and Processing: H.D., Y.B.K.; Analysis or Interpretation: H.D., M.T.; Literature Search: H.D., A.B.; Writing: H.D., Y.B.K.

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Address for Correspondence/Yazışma Adresi: Hakan Demiröz, M.D., Ondokuz Mayıs University Faculty of Medicine, Department of Gastroenterology, Samsun, Türkiye
E-mail: hakandemiroz.90@gmail.com **ORCID:** orcid.org/0000-0002-1713-7682

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