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Imatinib-Associated Hyperkeratotic Eruptions: A Rare Extensor Surface Manifestation

İmatinib ile İlişkili Hiperkeratotik Döküntüler: Nadir Bir Ekstansör Yüzey Bulgusu

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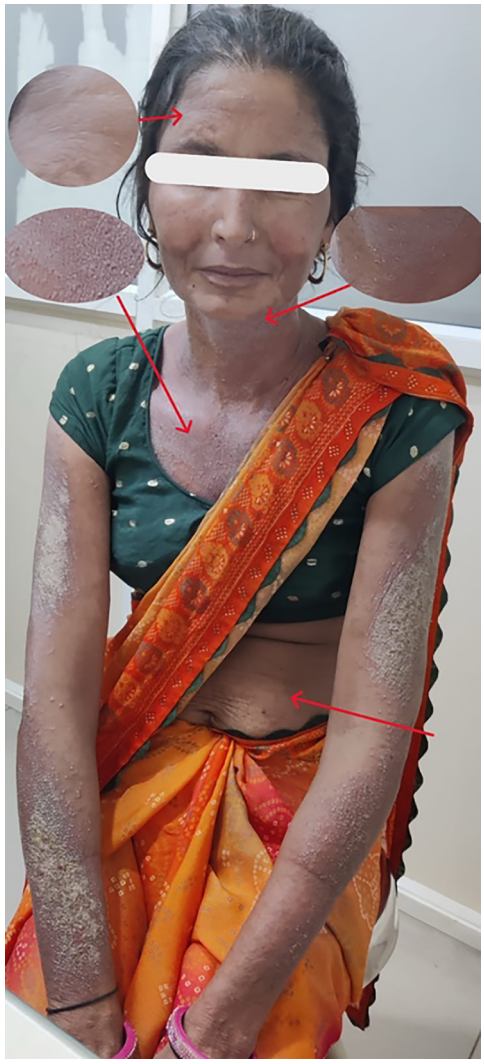

Figure 1. Lesions were also present on the chest, abdomen, and back, with mild involvement of the face (red arrows).

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Figure 2. The hyperkeratotic, crusty lesions were most prominent on the extensor regions (red arrows).

Imatinib is one of the fundamental chemotherapeutic agents used in the treatment of Philadelphia chromosome-positive chronic myelogenous leukemia (CML), gastrointestinal stromal tumors, and acute lymphoblastic leukemia. It selectively inhibits receptor tyrosine kinases [1]. Imatinib-associated pruritic lesions often manifest as exanthematous maculopapular eruptions [2], typically appearing on the forearm or torso [1]. These reactions may vary with dosage [1]. Evidence suggests that these skin pathologies could arise from the inhibition of KIT or PDGFR [3]. However, no specific pathology has been identified as the cause within specific populations.

In the presented case, there was development of hyperkeratotic, crusty lesions with scaling and pruritus in a 39-year-old female patient who was receiving no other medication and undergoing treatment for CML with imatinib (400 mg orally, once a day) after 6 months. The lesions were most prominent on the extensor regions (Figure 1), a distribution seldom mentioned in the literature, along with the chest, abdomen, and back, with mild involvement of the face (Figure 2). Skin biopsy was not done due to the patient's unwillingness and the lesions already being well documented. The lesions were treated with oral steroids and topical emollients, with the exanthema lasting for 15 days. Imatinib discontinuation was not done since most lesions were self-limited [4].

In a comprehensive review by Amitay-Laish et al. [5], various dermatological side effects associated with imatinib treatment were identified, including superficial edema (48%-65%), erythematous maculopapular rash (66.7%), pigmentary changes, and rare severe reactions such as Stevens-Johnson syndrome.

Keywords: Chronic myeloid leukemia, Chronic leukemia, Neoplasia, Allergy and hypersensitivity, Immunology

Anahtar Sözcükler: Kronik miyeloid lösemi, Kronik lösemi, Neoplazi, Alerji ve aşırı duyarlılık, İmmünoloji

Ethics

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

Footnotes

Authorship Contributions

Surgical and Medical Practices: V.S.; Concept: V.S.; Design: A.K.; Data Collection or Processing: V.S., P.J.; Analysis or Interpretation: V.S., P.J.; Literature Search: P.J.; Writing: P.J., A.K.

Conflict of Interest: No conflict of interest was declared by the authors.

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References

1. Albayrak M, Celebi H, Albayrak A, Can ES, Aslan V, Onec B, Coban I. Serious skin reaction associated with imatinib in a patient with chronic myeloid leukemia. Eurasian J Med. 2011;43:192-195.
2. Pasadyn SR, Knabel D, Fernandez AP, Warren CB. Cutaneous adverse effects of biologic medications. Cleve Clin J Med. 2020;87:288-299.
3. Pretel-Irazabal M, Tuneu-Valls A, Ormaechea-Pérez N. Adverse skin effects of imatinib, a tyrosine kinase inhibitor. Actas Dermosifiliogr. 2014;105:655-662.
4. Scheinfeld N. Imatinib mesylate and dermatology part 2: a review of the cutaneous side effects of imatinib mesylate. J Drugs Dermatol. 2006;5:228-231.
5. Amitay-Laish I, Stemmer SM, Lacouture ME. Adverse cutaneous reactions secondary to tyrosine kinase inhibitors including imatinib mesylate, nilotinib, and dasatinib. Dermatol Ther. 2011;24:386-395.