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Case Report

A CASE OF BULLOUS ACRAL ERYTHEMA DUE TO BLEOMYCIN

Tatlıparmak A[1], Aksoy B[2], Koç E[3]
[1] Bahcesehir University, Faculty of Medicine, Department of Dermatology, Istanbul, Turkey; Fatih Medicalpark Hospital, Dermatology Clinic, Istanbul. Turkey.
[2] Bahcesehir University, Faculty of Medicine, Department of Dermatology, Istanbul, Turkey; VM Medicalpark Hospital, Dermatology Clinic, Kocaeli, Turkey.
[3] Bahcesehir University, Faculty of Medicine, Department of Dermatology, Istanbul, Turkey; Medicalpark Hospital, Dermatology Clinic, Ankara, Turkey.

Corresponding author
Tatlıparmak A
Bahcesehir University, Faculty of Medicine, Department of Dermatology, Istanbul, Turkey; Fatih Medicalpark Hospital, Dermatology Clinic, Istanbul. Turkey.
e-mail: drasligunaydin@yahoo.com.tr

ABSTRACT
Acral erythema is a cutaneous reaction that is frequently caused by chemotherapy agents. Bullous acral erythema is a rare variation of this condition and the reported cases in the literature are related mostly to cytarabine and methotrexate. A 50-year-old male patient presented to our dermatology outpatient clinic with painful lesions of the hands and feet that is present for five days. In his medical history, there was an operation with the diagnosis of right testicular seminoma two years ago and history of taking bleomycin chemotherapy due to a recurrence two months ago. There were painful erythematous plaques and bullae on palmoplantar areas in dermatologic examination. When bullae were drained with a sterile injector, the content is detected to be serous-hemorrhagic fluid. With the current anamnesis and clinical findings the patient was diagnosed to have bullous acral erythema and topical Triticum vulgare extract therapy was started. Acral erythema is a common dermatosis secondary to chemotherapeutic agents and bullous acral erythema is a rare variant. Bullous acral erythema related to bleomycin is rarely reported in the literature, while methotrexate and cytarabine are the frequently accused agents.

Key words: Acral, bleomycin, bullous, chemotherpy, erythema

ÖZET
Akral eritem sıklıkla kemoterapi ajanlarından kaynaklanan kutanöz bir reaksiyondur. Büllöz akral eritem bu durumun seyrek bir varyasyonudur ve literatürde bildirilen vakalar çoğunlukla sitarabin ve metotreksat ile ilişkilidir. Elli yaşında erkek hasta dermatoloji polikliniğimize el ve ayaklarında beş gündür var olan ağrılı lezyonlar ile başvurdu. Tıbbi özgeçmişinde iki yıl önce sağ testiküler seminom operasyonu geçirme ve iki ay önce nüks nedeni ile bleomisin tedavisi alma öyküsü vardı. Dermatolojik muayenede palmoplantar bölgelerde ağrılı eritemli plaklar ve büller vardı. Büller steril bir enjektörle boşaltıldığında, içeriğin seröz hemorajik karakterde olduğu saptandı. Mevcut anamnez ve klinik bulgularla hastaya büllöz akral eritem tanısı kondu ve topikal Triticum vulgare ekstraktı tedavisine başlandı. Akral eritem, kemoterapötik ajanlara sekonder sık bir dermatozdur ve büllöz akral eritem nadir bir varyanttır. Bleomisin ile ilişkili büllöz akral eritem nadiren literatürde bildirilirken, sıklıkla suçlanan ajanlar metotreksat ve sitarabindir.

Anahtar kelimeler: Akral, bleomisin, büllöz, kemoterapi, eritem

INTRODUCTION

Acral erythema is a relatively common cutaneous reaction associated with chemotherapeutic agents.[1] Bullous variation of acral erythema due to chemotherapy or bullous acral erythema is rare. In the literature, cytarabine and secondly methotrexate are the responsible agents in most of the reported cases of bullous acral erythema.[1] Here, we present a case of bullous acral erythema secondary to bleomycin, which is more rarely found in bullous acral erythema etiology.

CASE REPORT

A 50-year-old male patient presented to our dermatology outpatient clinic with painful lesions of the hands and feet that is present for five days. His medical history revealed presence of diabetes mellitus and operation for right testicular seminoma diagnosis two years ago. The patient was commenced on bleomycin chemotherapy two months ago due to seminoma recurrence and current dermatological complaints were developed on the fifth day of the second chemotherapy. Similar lesions developed following first cure of bleomycin chemotherapy and spontaneously resolved in about a week. There were painful erythematous plaques and bullae located on pressure points in palmoplantar areas in his dermatologic examination (Figure 1). Lesions were more tense on palmar areas (Figure 2).

Figure 1. Erythematous bullous lesions on plantar areas.

Figure 2. Erythematous bullous lesions on palmar areas.

When bullae were drained with a sterile injector, contents were observed to have a serous-hemorrhagic character. Patient's informed consent was taken. With the current anamnesis and clinical findings the patient was diagnosed to have bullous acral erythema and topical Triticum vulgare extract therapy was started.

DISCUSSION

The acral erythema associated with chemotherapeutic agents was first described in 1982 and reported in the range of 6-42% of patients receiving chemotherapy after that date.[1] Bullous acral erythema induced by chemotherapy; palmoplantar erythrodysesthesia syndrome with the name given in some sources is a much more rare cutaneous drug reaction. Reported cases of bullous acral erythema were related to administration of cytarabine and methotrexate.[1] Additionally fluorouracil, doxorubicin, nitrozole, vincristine, melphalan, cisplatin, paclitaxel induced bullous acral erythema have been reported.[2-4] We could not detect any similar case related to bleomycin administration in the literature. It has been reported to develop between 1-21 days after administration of the chemotherapeutic agent. It is characterized with painful, erythematous bullae symmetrically localized on palmoplantar areas. Histopathological examination of the lesions reveals subepidermal bullae, keratinocyte necrosis and associated lymphocytic perivasculitis.[2] In the differential diagnosis, linear IgA dermatosis, erythema multiforme,

hyperacute graft versus host disease, bullous impetigo, toxic epidermal necrolysis should be kept in mind.[1,2] Differential diagnosis of early stages of acute graft-versus-host disease and bullous acral erythema can sometimes be difficult. However, graft versus host disease has a more progressive clinical course, gastrointestinal and hepatic involvement.[5] Although the pathogenesis is still unclear, it has been suggested that the accumulation of the chemotherapeutic agent in the sweat glands in the palmoplantar area may trigger the immunological reaction.[1] Local cold application, emolient and topical corticosteroids may be preferred for treatment.[1,2] Intravenous immunoglobulin, systemic corticosteroids are also recommended in resistant cases.[1,6]

CONCLUSION

Acral erythema is a common dermatosis secondary to chemotherapeutic agent administration and bullous acral erythema is a rare variant. Bullous acral erythema related to bleomycin is rarely reported in the literature, while methotrexate and cytarabine are the frequently accused agents reported in the literature.

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