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Disseminated Scabies During Induction Chemotherapy for Acute Promyelocytic Leukemia

Akut Promyelositik Löseminin İndüksiyon Tedavisi Sırasında Gelişen Yaygın Scabies

Ali Zahit Bolaman, Ayşe Hilal Eroğlu Küçükdiler, İrfan Yavaşoğlu

Aydın Adnan Menderes University Faculty of Medicine, Department of Internal Diseases, Division of Adult Hematology, Aydın, Türkiye

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Dear Editor,

A 34 years-old woman was admitted to the hematology department with complaints of fatigue and pancytopenia. On physical examination, she was pale and there was sternal tenderness. There was no evidence of skin lesions. Her white blood cells count was 2100x10^3/µL, hemoglobin level was 8.5 gr/dL platelet count was 54000x10^9/L. The differential counts revealed blasts 8%, promyelocytes 42%, metamyelocytes 8%, bands 6%, neutrophils 28%, and lymphocytes 8%. Coagulation parameters were normal. Leukemic promyelocytes rates were 42% and blastic cells 46% in the bone marrow. The leukemic promyelocytes contained multiple Auer rods (Phaggot cells) (Figure 1, x100). Flow cytometer analysis marked myeloid leukemia. FISH analysis showed t(15;17)(q22;q11-12) positivity. The patient was diagnosed with acute promyelocytic leukemia (APL). We started patient as induction treatment trans retinoic acid (ATRA) 45 mg/m^2 until remission, cytosine arabinoside (Ara-C) 200 mg/m^2 for 7 days, and daunorubicine 60 mg/m^2 for 3 days (1).

On the seventh day, prominent multiple cutaneous erythematous papules appeared on the thigh and periumbilical region with a diameter of 2-3 mm (Figure 1B). The lesions progressed on the body on day 9. Firstly, we thought of them as chemotherapy toxicity. Some papules had typical burrows suggesting scabies. The aspiration of dermal papules showed that live Sarcoptes Scabiei forms and egg in the evaluation under the microscope. Aspiration from dermal papules was made with standard syringe 25G. Diagnosis of disseminated scabies was confirmed by visualization of mites in aspiration material (Figure 1C x10). Topical permethrin as scabicide is applied

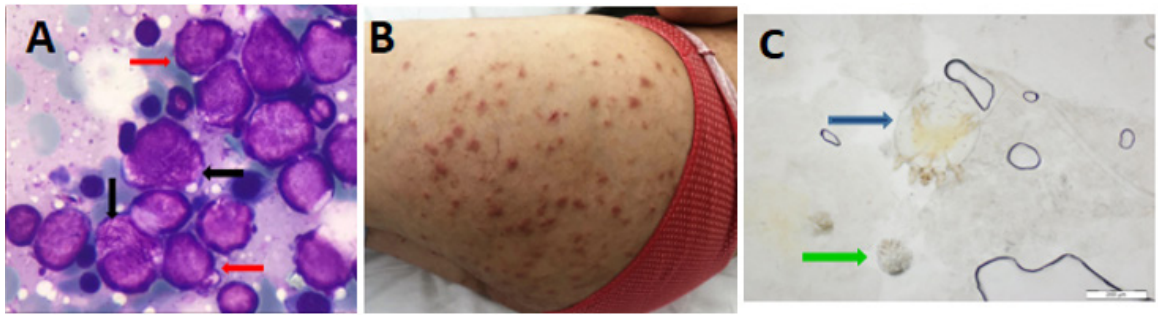

Figure 1. A: Superficial erythematous scabetic lesions of 0.2-0.4 mm in diameter on the skin of the tight. B: Faggot cells (black arrows) and blast cells (red arrows) at bone marrow aspiration (May-Grunwald and Giemsa), C: Alive sarcoptes scabiei with 0.3 mm length which oval, ventrally flattened, tortoise-like bodies and multiple cuticuler spines (blue arrow) and its egg in size 0.7 mm (green arrow) in aspiration fluide from dermal papules

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Address for Correspondence/Yazar Adresi: Ali Zahit Bolaman, Aydın Adnan Menderes University Faculty of Medicine, Department of Internal Diseases, Division of Adult Hematology, Aydın, Türkiye
Phone/Tel: +90 532 275 30 05 **E-mail/E-Posta:** zahitb@yahoo.com **ORCID ID:** orcid.org/0000-0003-0651-5462

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from the jawline down after bathing and is removed 12-16 hours later with soap (2). Treatment repeated after 1 week. The papules began do disappear after 5th day. The patient was discharged from our clinic after induction treatment with complete remission. Then she completed consolidation and maintenance treatment. Now, she has been living a normal life leukemia-free for 5 three years.

The skin lesions can develop during the treatment of patients with leukemia and they can be evaluated for leukemia cutis and drug adverse effects (3,4). Cutaneous papules are not usual with intermediate-dose Ara-C treatment in leukemic patients. Leukemia cutis is a cutaneous infiltration with leukemic cells. It can appear as papules, nodules, plaques and bullae on the skin (5). The patient had no signs of scabies at the time of admission, and it was thought that the scabies was in the incubation period during this time. We believe that induction therapy with Ara-C and ATRA of APL accelerates the emergence of disseminated scabies.

Information about the coexistence of acute myeloid leukemia (AML) and scabies is very limited in the literature. The association of AML and scabies has been reported in only two cases so far. The first case was reported 52 years ago in a case with monocytic leukemia (4). The second case is the disseminated scabies case, which developed during antileukemic chemotherapy, similar to our patient (6).

In conlusion, scabies should be remembered in the development of papular lesions during induction therapy in patients with AML.

Keywords: Leukemia, scabies, skin

Anahtar Kelimeler: Lösemi, skabies, deri

*** Ethics**

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