

## Poster Presentations

### Adult Hematology Abstract Categories, Acute Leukemias

#### PP 01

#### PETECHIAL RASH ON THE SKIN DUE TO THE USE OF POLYMYXIN B: A RARE CASE REPORT

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**Objective:** Polymyxins are bactericidal drugs that bind to lipopolysaccharides (LPS) and phospholipids in the outer cell membrane of gram-negative bacteria (1,2). The most important side effect of intravenous polymyxins is nephrotoxicity, neurotoxicity. Hypersensitivity reactions including rash, itching, urticaria, and fever have also been reported. It can also cause skin hyperpigmentation (3,4,5). We will present the rash thought to have developed due to polymyxin in an elderly patient diagnosed with AML. **Case report:** A 77-year-old male patient diagnosed with AML was admitted to the hospital for a chemotherapy session. After the initial examination, he was hospitalized due to complaints of dyspnea, weakness, and cough. Polymyxin B was started upon recommendation to the patient, who was consulted with the department of chest diseases and infectious diseases regarding his current infection status. **Results:** During the follow-up, petechial rashes and itching began to occur on both lower legs, starting from the ankle and spreading upwards, and it was noted that the rash and itching occurred after the use of polymyxin B. After the suspected drug was discontinued, the itching gradually decreased, and the rash was observed to become widespread and change color. The patient's rashes were photographed, and his follow-up continued and after completing the treatment he was discharged. **Conclusion:** In

this multidrug-resistant Gram-negative bacteria era, the use of polymyxins has spread. Due to the use of these agents, adverse events such as pruritus, maculopapular rashes, and urticaria may occur (6). Patients should be observed for hypersensitivity reactions related to polymyxin B use, and the cause of these symptoms should be enlightened with the right anamnesis.





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PP 02

#### ACUTE MYELOID LEUKEMIA DIAGNOSED WITH CUTANEOUS INVOLVEMENT; A RARE CASE

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**Objective:** Acute myeloid leukemia (AML) is a heterogeneous hematologic malignancy characterized by clonal expansion of myeloid blasts in peripheral blood, bone marrow, and/or other tissues. It is the most common type of acute leukemia in adults with an age-adjusted incidence of 3.6/100,000 in the population (1). Extramedullary leukemia (EM AML), also known as myeloid sarcoma, is a rare manifestation of acute myeloid leukemia and is usually accompanied by bone marrow involvement (2). Leukemia cutis characteristically demonstrates the infiltration of the skin by neoplastic leukocytes (3). While the extramedullary collection of leukemic cells is generally regarded as myeloid sarcoma (previously chloroma/granulocytic sarcoma), leukemia cutis is a generic term to describe specific cutaneous involvement. Although any subtype of leukemia can involve the skin, the most common types seen in clinical practice are chronic lymphocytic leukemia (CLL) and acute myeloid leukemia (AML) with monocytic or myelomonocytic morphology (4). We present a case diagnosed with Extramedullary AML with skin involvement, but without bone marrow involvement.

**Case report:** Case: A 60-year-old female patient who presented to the dermatology outpatient clinic in March 2023 due to painful lesions on the trunk for the past 3 months. Physical examination revealed widespread palpable firm nodular lesions on the trunk and back (figure-1). **Methodology:** The patient underwent a punch biopsy with differential diagnoses including eosinophilic angiomatous hyperplasia, cutaneous metastasis, lupus tumidus panniculitis, T/B-cell lymphoma. CD68, Lysozyme, CD 33, CD16, CD123, TCL-1, TdT were investigated as antibodies. Immunohistochemical examination revealed widespread positivity for lysozyme, CD68, and faint diffuse CD33 in infiltrative cells. CD16, TdT, CD123, TCL-1 were negative. Histopathological diagnosis suggests compatibility with myeloid sarcoma characterized by blast cells with myelomonocytic features, demonstrating infiltration of immature atypical hemolymphoid cells in the skin and subcutaneous biopsy material. The patient was referred to our clinic due to compatibility with myeloid sarcoma and extramedullary myeloid leukemia. Initial tests during admission showed: WBC:  $3.6 \times 10^3/\mu\text{L}$ , HGB: 11.2 g/dL, PLT:  $215 \times 10^3/\mu\text{L}$ , NE:  $2.3 \times 10^3/\mu\text{L}$ , EO:  $0.1 \times 10^3/\mu\text{L}$ , BA:  $0.0 \times 10^3/\mu\text{L}$ , LDH: 297 U/L, with other biochemical values within normal range. In the bone marrow biopsy pathology of the patient revealed increased cellularity in the bone marrow elements, grade 1 increase in reticulin and reticular fibers, positive CD34 in vascular structures, blast cell ratio of 2-3%, mild increase and aggregation of megakaryocytes with CD61, decrease in myeloid series with MPO, and increase in erythroid cell islands with Glycophorin A. Flow cytometry showed 4.6% blast cells. The cytogenetic evaluation of the patient resulted in FLT3 negative, t (15, 17), (q22, q21) PML/RARA negative. The patient received ARA-C+Mitoxantrone (7+3) induction chemotherapy for extramedullary AML and recovered from neutropenia on the 18th day of treatment. Subsequent evaluations showed near-complete improvement (figure-2). **Results:** After the patient's discharge, BMT was planned. However, the patient was excluded at the center where they applied for BMT. **Conclusion:** A variant of extramedullary leukemia is leukemic skin involvement. This condition may or may not be accompanied by bone marrow involvement. The case presented here is a rare instance of Leukemia Cutis without bone marrow involvement. The patient received a myeloid leukemia treatment protocol,