



Reactive Lymphocytosis Mimicking Acute Lymphoblastic Leukemia in A Patient with DRESS Syndrome

DRESS Sendromlu Hastada Akut Lenfoblastik Lösemiye Taklit Eden Reaktif Lenfositöz

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A 30-year-old female patient, who had been taking salazopyrine for reactive arthritis for three months, presented with fever and icterus for the last 2 weeks, accompanied with erythematous maculopapular rash located on the proximal areas of the trunk and upper extremities for the last two days. The patient also had facial edema on admission. Oral and genital mucosa appeared normal on inspection. On physical examination, the patient had peripheral cervical, axillary and inguinal lymph nodes not exceeding 2 cm in diameter. There were intrabdominal and mediastinal lymph nodes of 1 to 2 cm in diameter with no signs of hepatosplenomegaly or mass lesion observed in computed tomography evaluation. Hemogram analyses revealed leukocytosis with a white blood cell count of 20300/ μ L, lymphocyte count of 7920/ μ L, absolute neutrophil count of 10960/ μ L and a monocyte count of 790/ μ L with no eosinophilia. Hemoglobin level was 12.1 g/dl and platelet count was 233000/ μ L. Antinuclear antibody (ANA) was positive with a titer of 1/100. Epstein-Barr virus (EBV) DNA was 486 copies/ml. EBV EBNA Ig G and EBV-VCA Ig G were positive, while EBV IgM was negative. Other viral tests (HIV, HBV, HCV, HSV) and Rose Bengal test were negative. CRP was 23 mg/dL and ferritin was 1304 ng/ml. Sedimentation rate was 41 mm/h. In biochemical analyses, transaminases were elevated to 5 times the upper limit of normal (ULN). Lactate dehydrogenase was elevated to 4 times the ULN. Total bilirubin was elevated as 5.6 mg/dL with direct bilirubin level of 4.4 mg/dL. There were slight elevations observed in alkaline phosphatase and gamma glutamyl transferase (1.5 times the ULN). Other biochemical parameters were within the normal limits. In the peripheral smear, mature lymphocytes, neutrophils and large granular lymphocytes were observed, along with large lymphomonocytoid cells (Figure-1A and 1B), which were approximately 4 erythrocytes in size, resembling acute lymphoblastic leukemia blasts with no granules in their basophilic cytoplasm, and having large nuclei, thin chromatin and nucleoli in some of the nuclei. Flow cytometry analysis of peripheral blood revealed no immunophenotypically compatible cells with acute leukemia blasts. Ninety percent of the lymphocytes were identified as T cells immunophenotypically. In the bone marrow biopsy, the cellularity was between 80-85% and the myeloid/erythroid ratio was 7 and increased which favors myeloid predominance. No infiltrative disease or maturation arrest was observed. A diagnosis of DRESS (Drug Reaction with Eosinophilia and Systemic Symptoms) associated with salazopyrine was suspected and Registry of Severe Cutaneous Adverse Reactions (RegiSCAR) scoring system was applied (1). The patient had a score of 6 and was categorized as "definite" according to the RegiSCAR scoring system. With corticosteroid and cyclosporine A treatment, the patient's clinical course has improved and hemogram parameters has returned to normal values within 3 weeks. Her lymphadenopathies have also disappeared.

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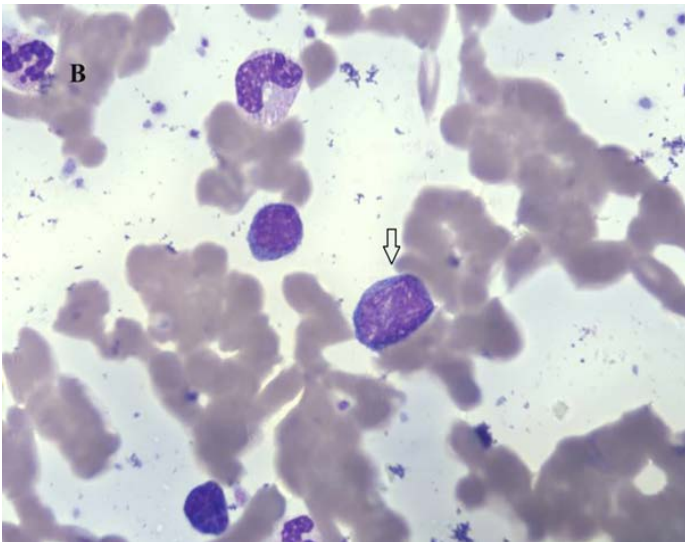
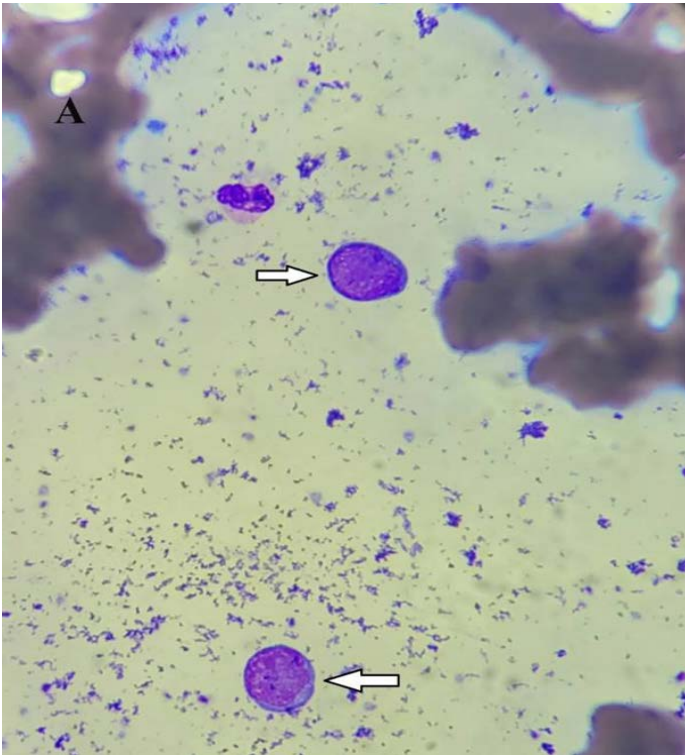


Figure 1A and 1B. Lymphomonocytoid cells mimicking acute lymphoblastic leukemia, (White arrows), Wright-Giemsa stain; x100 objective, original magnification x1000