



SKIN MANIFESTATIONS OF INTERNAL DISEASE

## RARE PRESENTATION OF LEUKEMIA CUTIS AS THE FIRST CLINICAL SIGN OF T-CELL ACUTE LYMPHOBLASTIC LEUKEMIA (T-ALL) IN AN 8 YEAR OLD: CASE REPORT

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**BACKGROUND:** Leukemia cutis (LC) is defined as cutaneous infiltration by neoplastic leukemic cells. Skin lesions commonly manifest as papules, nodules or plaques with coloration varying from red-brown to violaceous. According to literature, LC occurs more frequently in acute myeloid leukemia than in ALL, with incidence ranging from 10 to 15% and 1% respectively. The majority of patients develop LC after being diagnosed with leukemia. Initial manifestation is exceptional.

**OBSERVATION:** A previously healthy 8-year-old male was admitted to the pediatric department with the manifestation of gingival hyperplasia and multiple violaceous soft nodules of 1-3 cm diameter, generalized distribution, being the scalp lesions the only ones with mild pruritus. According to anamnesis, nodules had 2 months of evolution without other symptoms. During examination, preauricular, cervical and supraclavicular lymph nodes were enlarged. Abdomen examination showed hepatomegaly, 2 cm below costal margin, whereas spleen was not palpable. Peripheral blood exam had not found abnormalities. Chest radiography showed mediastinal opacity. Histopathology of skin biopsy revealed an accentuated dermal infiltration constituted by medium size lymphocytes, lacking epidermotropism. Parakeratosis, discreet acanthosis, and mild basement membrane degeneration was noticed. The bone marrow aspirate concentrate was represented by 65% hypercellularity of atypical pleomorphic lymphocytes. Flow cytometry demonstrated positivity of T-cell antigens CD1a, CD3, CD4, CD5, CD7 and TCR gamma delta positive, leukocyte common antigen CD45, early precursors CD38 and TdT and single expression of B cell antigen CD10. Immunophenotypic analysis was compatible with T-ALL. Structural and numerical chromosome aberrations weren't detected. The findings listed above





corroborated the lesions diagnosis as LC. Patient is currently under chemotherapy, presenting gradual involution of the nodules and maintaining clinic stability.

**KEY MESSAGE:** The diagnosis of LC is a challenge for the dermatologist as it may have various clinic presentations. Early recognition is essential for adequate treatment and prognosis.

