

## **Cutaneous Infiltrates of Acute Myelogenous Leukemia Simulating Inflammatory Dermatoses.**

### **Abstract:**

Some cases of specific cutaneous manifestations of acute myelogenous leukemia (AML) may mimic inflammatory dermatoses both clinically and histopathologically, presenting with an inconspicuous maculopapular eruption and with only sparse dermal infiltrates. The authors studied the histopathological and immunohistochemical features of 17 biopsies from 16 patients (11 men and 5 women, age range 15-85 years) presenting with minimal skin infiltrates as the first manifestation of AML or as first sign of recurrence after complete remission of the disease. In all cases, the diagnosis of leukemia has been confirmed by bone marrow examination. Two of these cases had been sent to one of us for second expert consultation. Patients presented with generalized, exanthematic maculopapular eruptions, sometimes with a hemorrhagic note, that were mostly interpreted clinically as drug reactions. Histopathologically, the lesions showed sparse, superficial, and mid-dermal infiltrates with minimal perivascular and periadnexal accentuation. Infiltrating cells consisted mostly of neoplastic monocytoid elements with only few reactive lymphocytes and histiocytes. Immunohistochemical stainings revealed in the majority of cases positivity for CD68 (14 of 16 patients), naphthol chloroacetate esterase (NaSDCl) (7 of 10 patients), and myeloperoxidase (6 of 9 patients). Other markers tested were positive only in a minority of cases. These cases represent a pitfall both in the clinical and in the histopathological diagnosis of cutaneous AML. Accurate morphologic and phenotypic correlation together with a high index of suspicion allows a precise diagnosis in these unconventional cases.