

Serum levels of soluble CD30 in patients with atopic dermatitis: correlations with age, disease duration and severity

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Atopic dermatitis (AD) is a chronic, inflammatory skin disease in which a pathogenetic role of Th2 cells has been supposed. CD30 molecule has been linked to Th2 responses. Elevated serum levels of soluble CD30 (sCD30) are associated with atopic disease, however, little is known about the effect of age, duration of disease, family history (FH) of atopy and scoring atopic dermatitis index (SCDRAD) on the levels of serum sCD30 in AD patients. In the present study, the serum level of sCD30 in 40 patients with AD and 15 non atopic persons, matched for sex and age were studied. Serum sCD30 levels were significantly higher in AD patients (23.1-83.9 IU/ml) than in healthy control (7.5-14.5 IU/ml) ($P < 0.001$). The sCD30 levels correlated positively with the severity of AD as assessed by SCORAD ($r = 0.45$; $P = 0.004$). Levels were higher in AD patients with +ve FH than those with -ve FH ($P > 0.05$) and in AD patients with shorter disease duration than longer duration ($P > 0.05$). In conclusion the presence of high levels of sCD30 in AD patients support the view that Th0/Th2- type response predominates in AD patients. The correlation observed with the clinical score indicates a role of sCD30 as a marker of disease severity in AD patients.