

HAIR DISORDERS

SERUM CYTOKINE PROFILE IN PATIENTS WITH ALOPECIA UNIVERSALIS

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Background: Alopecia universalis (AU) is an uncommon form of alopecia areata that involves the loss of all haed and body hair. The cause of AU is unknown, although most evidence supports the hypothesis that AU is a T-cell mediated autoimmune disease of the hair follicle and that cytokines play an important role.

Objective: The aim of our study was to evaluate serum concentrations of interleukin-1a (IL-1a), IL-1 β , IL-2, interleukin-2 soluble receptor (IL-2 sR), IL-4 and IL-6 in patients with AU and healthy subjects and also to asses a possible association between these cytokines and duration of the disease.

Material & Methods: Twenty two patients with AU and 20 healthy controls were enrolled in the study. Serum concentrations of cytokines were measured using enzyme-linked immunoassay techniques.

Results: Serum concentration of IL-2, IL2 sR, IL-6, were significantly higher in AU patients as compared with the healthy control subjects (p<0.05). IL-1 α and IL-1 β levels were greater in patients with AU than in controls but the difference was not significant (p>0.05). There was significant positive correlation between disease duration and the serum levels of IL-4, but not other cytokine levels. A negative correlation has been seen with IL-6 and disease duration.

Conclusion: Our results showed hight serum levels of IL-2, IL2 sR and IL-6 among AU patients which may highligth a functional role of these cytokines in the pathogenesis of this disease.





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