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Immunological and Genetic Studies of Patients with Atopic Dermatitis

Authors: Alaa Jawad Hassan, Saad Marza Al-Aaraji, Fadil Abbas Hamad

Abstract : The current study was designed to assess some immunological parameters and pedigree analysis for atopic dermatitis patients, as the study included 64 patients (37 males and 27 females) and 24 healthy individuals (12 males and 12 females) with no history of the AD. The cases of this study were divided into two age groups; the first is infant and children (1-10 years), while the second is adolescent and adults (11- 60 years). The number of cases was 51 and 13 in each age group respectively. Sera samples from confirmed AD patients and healthy control were analysed by mean of ELISA for assessment the concentrations of IL-1 β , IL-2, IL-4 and IgE. The study showed that a significant increase (P < 0.05) in IL-1 β , IL-4 and IgE levels in the patients compared with the control group in both age groups and gender, while there was no significant difference (P < 0.05) in the concentration of IL-2. The study of pedigree analysis shows the genetic tendency in the frequency of disease depending on the genetic history of family, where more patients returning to families in which both parents or one of them infected with AD, whereas the patients were no parents infected with AD they are suffering from asthma and the disease recurs in their uncles.

Keywords: atopic dermatitis, cytokines, IgE, molecular biology

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