Common Allergens in Patients with Atopic Dermatitis

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Abstract

Background and objective: Being exposed to different allergens, followed by the production of specific IgE, has an important role in causing atopic dermatitis, recognizing the allergens and applying immunotherapy for treatment. We aimed to determine the frequency of common allergens in the patients suffering from atopic dermatitis.

Material and Methods: In this descriptive- analytical study the serum level of total IgE and frequency of specific IgE were measured by Immunoblotting method against 20 common allergens in 150 atopic dermatitis patients in 2010-2011 .The control group included the individuals who have been diagnosed healthy.

Result: The mean age was 30.02 ± 14.79 ; the participants were male (77; 51.3%) and female (73; 48.7%). In 90% of patients, total IgE was more than the reference range with the mean of 227.51 ± 103 IU/ml. The most frequent allergens related to: Cultivated rye (48.6%), Timothy grass (42.9%), House dust mite (22.7%), Cat (16.7%), Horse (10%), Birch (11.33%), Potato (11.33%), Dog (16.7%), Egg white (8.7%), Cow milk (8.7%). The frequency of positive allergens in plants and fungus group was 54.34%, in animals was 26.8% and in foods was 19.56%. In control group, there was no total IgE elevation.

Conclusion: Based on the recognition of common allergens in east Azerbayjan, Iran, we recommend avoiding of these allergens and providing immunotherapy.

Keywords: Atopic Dermatitis, Allergen, Specific IgE, Total IgE