Oral Session 5

Dermatological Allergy

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Relationship between atopic dermatitis and manifestation of other allergic diseases among Polish adults and children. ECAP study

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Introduction: Association between asthma and atopic rhinitis is well known. But there is little data on relationship between atopic dermatitis (AD) and asthma and atopic rhinitis.
Aim: We aimed to review the association between atopic eczema and asthma and atopic rhinitis in Polish population.
Material and methods: Epidemiology of Allergic Diseases in Poland study (ECAP) was randomized, multicentre, cohort study, based on PESEL (personal national identification number), performed in 2006–2008. The whole 20 449 participants of ECAP study were evaluated. A total of 18 589 valid questionnaires based on ECRHS II and ISAAC were returned: 9372 adults (20–44 year old) and 4504 children (6–7 year old) and 4713 children (13–14 year old). A total of 4783 (25.7%) random selected participants were examined by allergologist and diagnosis was made by actual symptoms.
Results: Based on questionnaire, the prevalence of atopic dermatitis was 38.0% (n = 7059), asthma 4.62% (n = 859), atopic rhinitis 22.56% (n = 4186). As a doctor's diagnosis eczema was observed in 311 patients (6.5%), asthma was in 505 patients (10.6%) and atopic rhinitis in 1353 patients (28.3%). The prevalence of AD based on questionnaire in patients with asthma was in 486 (56.6%) and without asthma in 6573 (37.1%) (OR = 2.21; 95%CI: 1.92–2.54; $P < 0.005$). A total of 2250 (53.7%) patients with atopic rhinitis and 4791 (33.3%) patients without atopic rhinitis presented AD symptoms (OR = 2.32; 95%CI: 2.17–2.49; $P < 0.005$). Eczema as doctor's diagnosis was observed in 63 (12.5%) patients with diagnosed asthma and in 248 (5.8%) patients without diagnosis of asthma (OR = 2.32; 95%CI: 1.73–3.11; $P < 0.005$). The prevalence of eczema made by doctor was in 128 (9.5%) with diagnosed atopic rhinitis and in 183 (5.3%) without such diagnosis (OR = 1.85; 95%CI: 1.47–2.35; $P < 0.005$).
Conclusions: The prevalence of AD is strongly associated with presence of symptoms of asthma and atopic rhinitis. The same dependence was observed in the occurrence of eczema, asthma and atopic rhinitis as a doctor's diagnosis.

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Levothyroxine treatment in chronic urticaria patients associated with thyroid autoimmunity

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Introduction: There is growing evidence that some cases of chronic urticaria (CU) are associated with thyroid autoimmunity even in euthyroid patients, but there are no data suggesting that any of the antithyroid antibodies are directly responsible for the pathogenic mechanism.
Aim: Evaluate the levothyroxine response in patients with CU associated to thyroid autoimmunity.
Methods: From the chronic urticaria outpatient department we selected 27 patients with demonstration of thyroid autoimmunity (tested positive for at least one type of thyroid antibody) and normal levels of thyroid hormones. All the sample had positive autologous intradermal serum tests. The patients were divided in two groups, group A (treated with levothyroxine during 1 year) and group B (without treatment), in order to evaluate clinical score, antihistamine consume, thyroid function and thyroid antibodies (Wilcoxon signed rank test) before (1st) and after 1 year (2nd).
Results: Twenty-seven patients (25 female) with a mean age of 39.48 ± 13.12 years and 4.59 ± 7.88 years of disease evolution. Twenty patients on group A and seven patients on group B. Additionally to the significant reduction of thyroid antibody levels in group A patients, there was a clinical improvement in 15 : 20 patients, and a reduction in antihistamines consumption during the 1st year trial period, without changes in the other parameters. In group B, three patients increased the severity of clinical scores, two patients remained with no changes and the other two had spontaneous clinical resolution, despite an increase in antibody titers in one of them.
Discussion: In spite of the euthyroid status of these patients, treatment with levothyroxine for at least 1 year, lead to a clinical improvement in chronic urticaria and a reduction in the thyroid autoantibody levels. The specific mechanism of these changes remains unclear.

Table 1. For abstract 26.

	Group A (n = 20)		Group B (n = 7)	
	Mean	P	Mean	P
T3 – 1st.	266.05 ± 137.48	0.467	255.27 ± 74.02	0.028
T3 – 2nd.	286.22 ± 139.81		342.00 ± 58.70	
T4 – 1st.	4.25 ± 3.97	0.070	2.33 ± 2.78	0.271
T4 – 2nd.	2.17 ± 2.17		1.20 ± 0.21	
TSH – 1st.	2.76 ± 3.29	0.246	2.54 ± 2.33	0.799
TSH – 2nd.	1.72 ± 1.45		2.34 ± 1.69	
Anti-Tg Ab. – 1st.	734.55 ± 969.49	0.006	338.29 ± 734.66	0.310
Anti-Tg Ab. – 2nd.	357.10 ± 736.53		2559.57 ± 4336.05	
Anti-TPO Ab. – 1st.	1383.05 ± 1616.29	0.010	683.71 ± 770.77	0.612
Anti-TPO Ab. – 2nd.	973.70 ± 1971.52		2077.71 ± 3599.18	