detailed clinic history was collected in all cases. The statistical analysis was performed with the program SPSS14.

Results: We obtained a total of 519 patients with positive skin prick test between January 2009 and March 2011. This group comprised 47% females and 53% male, with a mean age of 19 years between 3 to 79 years. We have 253 patients with allergic rhinitis (AR) and asthma (A), 173 with RA and 93 with A. 55% of the patients reacted to one allergen extract (AE) and 45% of the patients reacted with 2 or more AE. The most frequently indoor allergens  with positive skin prick test were Dpt (65.1%), Dermatophagoides farinae (DF) in 32.3%, CE(31.7%), Cockroach (11.5%). Among the outdoor allergens ash was positive in 23.3%, Ligustrum (18.8%) oak (17.7%) birch (13.6%) Western Juniperus (9.6%), Ulm (8.6%).

Conclusions: The most frequently positivity skin prick test were Dpt, Df, CE, Ash, Pruvet, Oak. The reactivity to allergens was more common in males, and there are 3 peaks of age of positivity on prick test (7–12 years, 25–29 years and 36 years).

224 Risk Factors and Their Impact on Development and Severity of Allergic Diseases in the CIS-Region

Tatiana Slavynskaya, PhD, MD, 1,2, Allergology & Immunology, University of Russia, Moscow, Russia; 1 Department of Allergology and Clinical Immunology, Institute of Immunophysiology, Moscow, Russia.

Background: This paper presents the results of influence of risk factors (RF) on development and severity of allergic diseases (ADs) in the CIS-region (CIS-R).

Methods: ISAAC and ARIA studies results, data on atopic dermatitis, Republic Ministries of Health Statistical Reports as well as literature data has been analyzed.

Results: It has been established that in industrialized areas, ADs are 2 to 3 times higher than the incidence in rural areas. The highest incidence is noted in ecologically unfavorable regions of low mountains where suffering from ADs is more often met. In the medium mountains ADs appear with less intensity, in conditions of high mountains ADs are extremely rare. The maximum prevalence of ADs has been observed at the experience of working in hazardous conditions from 5 years and above. A high degree of contamination airpollutions (CO2, NO2, SO2 etc.) in the industrial cities correlated with the prevalence of respiratory allergies and other ADs were observed. Frequent cause and significant allergens, as identified in patients with different ADs in CIS-R were domestic, epidermal, pollen and fungal allergens. The main triggers which involved in the development or exacerbation of ADs in Azerbaijan, Armenia, Russia and Uzbekistan are: house dust mites, pollen of trees and plants, pet allergens. In Belarus, Kazakhstan, Turkmenistan, Ukraine, Moldova, the cause-important allergens are: pollen of trees, grasses and weeds. Among the most significant risk F for ADs should be noted: burdened by heredity (65,5–75,9%), high frequency of SARS in history (16,2–77%), passive smoking (43,1–62,5%), poor social conditions (17–42%) the presence of pets in the apartment (12,5–17%). Children (7–8 years) were more susceptible to environmental RF as compared with teens (13–14 years). In Tajikistan and Turkmenistan, ADs were closely related with poor social conditions, low household income and large-family.

Conclusions: Epidemiologic studies are of great theoretical and practical significance as they provide impartial evaluation and reliable data on ADs prevalence and the most important allergens. Climatic and geographical conditions of the environment and ecological situation in the region are significant RF, requiring consideration in determining the probability of a genetic predisposition to ADs.

225 Monitoring of Air-Pollutants Concentration in Children with Allergic Diseases

Manana V. Chikhladze, and Revaz I. Sepiashvili, MD, PhD. National Institute of Allergology, Asthma and Clinical Immunology, Georgian Academy of Sciences, Tskhaltubo, Georgia; Department of Allergology and Clinical Immunology, Institute of Immunophysiology, Moscow, Russia.

Background: All over the world, increases the incidence of allergy, asthma and autoimmune diseases. Both young and elderly people are at risk. Therefore, on time diagnostics of these changes and the improvement of patient’s quality of life is the most important task for doctors worldwide.

Methods: Patients by random selection were interviewed and subsequently examined: 535 schoolchildren of Kutaisi, aged 7 to 14. Stepwise diagnostics of allergic factors included: 1. Questionnaire screening according to the international ISAAC questionnaire. 2. To identify the specific allergens in serum. 3. To define air pollutant concentration in the environment with the help of Burkard Trap (Burkhard Pollen Trap donated by the WAO).

Results: Investigation included questionnaire screening with the use of the international ISAAC questionnaire. The questionnaires for children aged 7 to 10 years were filled in by their parents; school children of 11 to 14 answered the questions themselves. Questionnaire screening allowed select the group of children with already diagnosed and with primarily diagnosed allergic diseases. From mentioned above 3 groups of children: I group 57 persons (10.7%) children with primarily diagnosed allergic diseases; II group-68 persons (12.7%) children with already diagnosed allergic diseases; III group-410 persons (77.6%) practically healthy children with no deviations according to ISAAC questionnaire. The next phase of the examination consisted of ImmunoCAP100 tests in II group 68 children with already diagnosed allergic diseases. There was determined the highest level of Phadiatop (inhaled environmental allergens) was positive in 35% of patients. We gave them the information and recommendation of air –pollens concentration according to Burkard Trap research. The use of allows accurately define the concentration of air pollutants in the environment including the pollen of trees, grass and weeds in particular geographical area in different seasons of the year.

Conclusions: Burkard Trap is committed to helping physicians identify the causative allergens in this complex mini environment, there are necessary condition for final verification of allergic diseases, which makes it possible to form successfully the basis of preventive therapy and appropriate undertake preventive measures.

226 Analysis of an After-Care Questionnaire in Allergic People to Dust Mites Using Anti-Dust Mites Bed Covers

Nabile Boukhettala, PhD, and Solveig Bourgeon. Laboratoire Protec’Som, Valognes, France.

Background: The goal of the study was to assess in a declarative way, the symptoms felt by the patients and the impact of micro-woven cotton (MWC) and a non woven polyester polyamide (NWP) anti-dust mites bed covers on allergic volunteers to dust mites. 109 questionnaires have been used. Regarding the allergy, we asked questions in order to assess the most annoying symptoms. The discomfort level felt was assessed using scores that ranged from 0 (no discomfort) to 10 (severe discomfort). Values, expressed as mean ± SEM, were compared using 2-way ANOVA.

Results: The discomfort level felt by the allergic volunteers to dust mites has significantly decreased after the anti-dust mite’s bed cover use (7.1 ± 0.2 versus 2.6 ± 0.2). After the anti-dust mites bed cover use, the discomfort level noticed significantly decreased and in a similar way no matter the age brackets. Thus, after the use of an anti-dust mites bed cover, it ranged between 2.1 and 2.3. The discomfort level felt after the anti-dust mites bed cover use was similar whatever the symptom. The reduction of the percentage of the discomfort level in volunteers having used MWC anti-dust mites bed covers was similar to the percentage of the volunteers having used NWP anti-dust mites bed covers (62.9 ± 3.1% vs. 60.7 ± 4.2%).