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Abstracts

Guest-Editors: M. Debelić, Bad Lippspringe
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890 consecutive school children in Eboloi and surroundings were examined over a three-month period (Nov. 1988-Jan. 1989). Subjects belonging to three age classes (6-7, 11-12, 16-17 years) entered this pilot study mean 11.8 years. 61 % were males, 39 % females. Well trained investigators visited the schools and collected demographic and clinical informations from the children's parents. SPT with 12 Dome/holister Stier extracts were performed. 244 (27.4 %) of the subjects showed a skin reactivity to one or more allergens (males 30 %, females 23.1 %). The frequency of positive skin reactions was: Dermatophagoides (72.1 %), Animal dander (9.4 %), Alternaria (7.4 %), Food (9 %), Pollen (60.2 %). Among pollens: Grasses (74.8 %), Fellitory (51.7 %), Olive (29.2 %), Mugwort (25.8 %), Chestnut (15.6 %), Trees mix (14.9 %). Age distribution of SPT reactivity pollen was: 10 years (32.4 %); 11-13 (61.2 %); 14 (67.9 %). Sex distribution was equal (60.3 % males v. 60 % females).

Bronchial asthma was recorded in 17.0 % of the subjects with positive skin reactivity to pollens compared with 38.7 % of the pollen negative subjects. Rhinitis was recorded in 61 % of the pollen skin positive and in 50.3 % of the pollen skin negative subjects. (Sensitization dermatophagoides plays a major role in eliciting symptoms).

P2 15.12
Respiratory allergies – long-term evaluation of allergic children

We studied a group of 81 patients, 59 males and 22 females, for more than 10 years. In a first approach in the pediatric section, 68 (85 %) patients were between 5 and 9 years old. In 76 (94 %) patients, the symptoms appeared before they were 6 years old. 78 (96 %) patients had asthma, that was accompanied by rhinitis in 27 (34 %) cases. Skin tests were positive in 79 (96 %) patients for house dust and mites, in 14 (17 %) for grass pollen and in 16 (20 %) for other pollens. 74 (96 %) patients received immunotherapy. 56 (76 %) for Dermatophagoides Pteronyssinus, 13 (18 %) for house dust and mites and 5 (7 %) for grass pollen. The treatment period lasted from 3-6 years. When they were transferred to the adult Section, 69 (85 %) patients were 13-16 years old. Everybody repeated the skin tests. These continued to be positive for house dust and mites in 78 (96 %) patients. 32 (40 %) cases were also positive for grass pollen and 17 (25 %) for Candida Albicans. 75 (93 %) patients continued suffer from asthma, 35 (40 %) had rhinitis and 12 (15 %) had pollen allergy. 32 (40 %) patients repeated immunotherapy 23 (72 %) for D. pteronyssinus and 9 (28 %) for grass pollens. We can infer from this the great importance of a second approach in adolescence.

P2 15.13
Prevalence of asthma and allergic rhinitis in Saudi Arabia
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To investigate the prevalence of bronchial asthma and allergic rhinitis in school-age children, a comprehensive epidemiological survey based on an international standard protocol comprising thirty-five questionnaires were conducted involving one thousand children in each of the three cities of the kingdom. Prevalence of both bronchial asthma and allergic rhinitis, though varied between these cities, were higher compared to some western parts of the world. Nationally, 11.5 % children were found to have recurrent wheezing, ranging from 6.6 % to 15.9 % in the three areas. School-age children suggestive of allergic rhinitis were found to be 18 % nationally, ranging from 12.1 % to 25 %, 21.7 % of wheezy children had fathers who smoke compared to 8.1 % of non-wheezy children. Similarly, 18.8 % of wheezy children had pets compared to 9.2 % of non-wheezy children. The study suggests that there is a high prevalence of asthma in school children in Saudi Arabia.

P2 15.14
Exercise-induced anaphylaxis: the clinical profile in a Mediterranean country
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The present project was undertaken in order to study exercise induced anaphylaxis (EIA) and outline the clinical profile of the entity as it occurs in our area.

122 patients presenting with systemic anaphylaxis of unknown etiology were evaluated with special emphasis upon signs and symptoms of EIA. 41 patients (33.6 %), 19 men and 22 women, fulfilled the clinical criteria of the EIA-syndrome; their ages ranged from 7-41 years, the vast majority (80 %) being 10-20 years old. Most subjects exercised regularly, 4 being professional athletes. The episodes dated back up to 11 years and 4-5 occurred in the warm season (spring through fall); food and/or aspirin ingestion had preceded most episodes.

Based upon family and/or personal history as well as skin tests and RASTS, 94.3 % of EIA-subjects were found to be highly atopic. In this group, 90.6 % of episodes occurred in the appropriate pollination season.

Conclusions: EIA appears to affect young atopic individuals ages (10-20 years) most of them that who happen to exercise post-prandially. Symptoms are likely to occur if pollen-sensitive individuals exercise when pollen counts are high.

P2 15.15
Immunological indices of adolescents suffering from collagenosis and bronchitic asthma
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Our aim was to carry out a complex investigation of the indices of cellular and humoral immunity, healthy adolescents (Group 1), and in those suffering from bronchitic asthma (Group 2) and collagenosis (Group 3). Ages ranged from 10 to 15 years. Apart from general analysis we determined certain indices of cellular immunity: the count of T lymphocytes, subpopulations of helper and suppressor T cells as well as the number of B lymphocytes and the activity of phagocytes. The level of immunoglobulins A, M, G was assessed by the method of radial immunodiffusion. In the blood of adolescents of Group 2 changes were only observed in the T immune system: there was a decrease in the total number of T cells and their subpopulations. Studying humoral immunity only the number of IgA was found to be decreased. In adolescents of Group 3, a disbalance in cellular and humoral immunity was found: there was a decrease in the number of all indices, while the number of phagocytes and that of IgG in the blood were slightly increased (in comparison with the indices of Group 1). Immune changes are more markedly expressed in children with collagenosis and their systemic analysis enabled us to detect deep changes that might be of great clinical importance.

P2 15.16
B-lymphocytes and their relation to serum immunoglobulins in children with respiratory diseases
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A group of more than 220 children (their age ranging from 6 months to 17 years) with respiratory diseases was investigated. Laboratory tests of the immune system including the determination of serum IgG, IgA and IgM by radial immunodiffusion and the determination of B-lymphocytes in samples of peripheral blood by antibody anti surface IgD of B-lymphocytes in FACS 440 (Becton-Dickinson) were performed. The values of B-lymphocytes found in children depended in dependence upon the age. Little correlation was sound between the values of B-lymphocytes and the values of IgG (r = -0.32), IgA (r = -0.27) and IgM (r = -0.26). The mean values of B-lymphocytes in children with recurrent respiratory infections and with bronchial asthma were similar: 13.2 ± 5.1 % and 14.8 ± 10.3 %, respectively. The mean values of B-lymphocytes in children suffering from complicated as well as uncomplicated courses of respiratory diseases did not differ either.
Prevalence of asthma and allergic rhinitis in Saudi Arabia

A.R. Al-Frayh*, S.M. Hasnain**, T.Q. Jawadi, and M. Al-Nahdi, College of Medicine, King Saud University*, King Faisal Specialist Hospital and Research Centre**, Saudi Arabia

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