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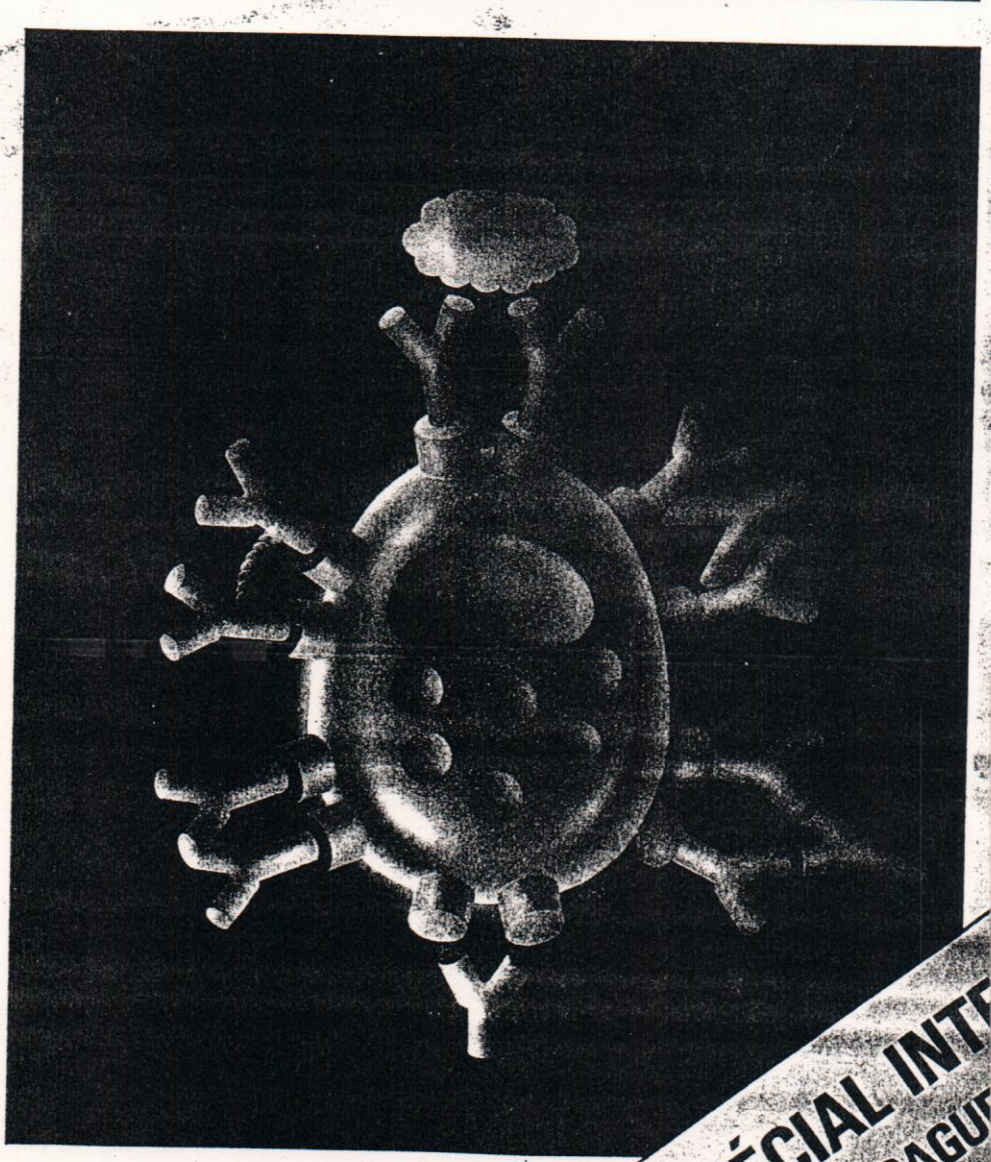

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W1-11

PREVALENCE OF BRONCHIAL ASTHMA AMONG PEDIATRIC POPULATION IN VARIOUS REGIONS OF THE AZERBAIJAN SSR

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According our longterm observations bronchial asthma is widely spread in the Azerbaijan SSR and has a tendency to become more frequent. The mass examination demonstrated that morbidity depends on the number of climatogeographical and social factors. Such high incidence of bronchial asthma and asthmatic bronchitis is observed in industrial towns of our Republic within the value of 2.1-6.6%, in subtropical region - 2.5-2.7%, but in highlands and foothills this value becomes 2-5 times less. Thus, the incidence of bronchial asthma is influenced by the air space polluted by industrial automobile effluents. As to the clinical form of the disease one may note that atopic form is more frequent than infectious-allergic one. Revealing the etiologic factors of the disease by means of specific allergologic methods we determined that under the conditions of the industrial towns they were everyday allergens. High proportion of pollen allergy among the children of school age and of food allergy among infants and preschool children attracts one's attention. It is characteristic that morbidity varies widely within one and the same region depending on the proximity of the place of children's residence to the industrial objects. The preventive measures of bronchial asthma among children are based in the report with regard to the factors of the place of their inhabitance.

W1-12+

PREVALENCE OF ASTHMA IN SAUDI ARABIA

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To investigate the prevalence of bronchial asthma and allergic rhinitis in school age children, and the possible environmental agents of their atopic responses, 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. Outdoor environmental allergens were studied using Burkard volumetric spore trap and indoor allergens by immunochemical technique using ELISA. Prevalence of both bronchial asthma and allergic rhinitis, though varied between these cities, were surprisingly higher in comparison to some western part of the world. Nationally about 12% children were found to be with recurrent wheezing, ranging from 6.5% to about 16% in the three areas. School age children suggestive of allergic rhinitis were found to be around 18% nationally, ranging from 12% to 27%. 21.7% of wheezing children had fathers who smoke compared with 8.1% of non-wheezing children. Similarly, 18.8% of wheezing children had pets compared with 9.2% of non-wheezing children. Analyses of airborne particles revealed various allergenic fungal spores and pollen grains with seasonal and regional variations. Immunochemical ELISA study of house dust samples obtained from 200 patients and control subjects identified the presence of cockroach and cat antigen in a large proportion of homes. Fungal cultures study also revealed a further higher number of homes with allergenic fungi. The major environmental factor(s) still being analysed by skin testing and other immunological techniques, the results indicate that various allergy producing factors are present in this area and our younger population have a high prevalence of respiratory allergic disease.

W1-13

PREVALENCE AND CLINICAL COURSE FEATURES OF BRONCHIAL ASTHMA IN RURAL POPULATION

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A screening test of 5558 rural population of Uzbekistan engaged in poultry farming, tobacco growing and cotton growing was performed. Bronchial asthma detected in 0.8% of poultry farmers, 1.3% of tobacco growers and 0.7% of cotton growers. In examined patients symptoms of bronchial asthma associated with the work environment (tobacco and cotton dust, tobacco leaves and cotton fibres, bird's feather) which had been confirmed by allergologic analysis data and specific allergologic test to industrial allergens. Skin test showed half-late reaction to these allergens. The cytogram of bronchoalveolar wash off was characteristic with the evidence of mucus, bronchial and alveolar epithelium, erythrocytes, lymphocytes as well as dust particles. Parallel with the differentiated epithelial cells there were found also immature, deformed swelling cells with poorly expressed nuclei and weak cytoplasm with microvacuoles, there was noted a complete lysis of cytoplasma in epithelial cells. Immunologic and cytochemical study indicated the process of secondary immunodeficiency which had been more expressed among bronchial asthma patients in tobacco growing regions. As a local features of bronchial asthma in rural population of Uzbekistan it is worth to be mentioned the appearence of first symptoms in industrial conditions, long absence of catarrhal manifestation in bronchopulmonary apparatus, development of secondary immunodeficiency and polysensibilization to noninfectious, infectious and workplace allergens, existence of half-late reaction to workplace allergens.

W1-14

ROLE OF PUTATIVE ASTHMA INDUCING FACTORS IN ONSET OF ASTHMA

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Upper respiratory airway infections (URI) and atopic symptoms are known as factors responsible for worsening bronchial asthma (br.A.). Therefore, the aim of a retrospective case-control study in 300 asthmatic patients and 300 healthy controls has been to investigate the possible association of these factors with the primary occurrence of br.A. The latter was defined as the first attack of breathlessness confirmed by a positive nonspecific bronchial challenge test. Individuals without any history of bronchial obstruction were recruited as controls. Data collection was provided by application of a standardized self administered questionnaire followed by a standardized interview. A distinct higher frequency of URI (common cold, tonsillitis, sinusitis, bronchitis, bronchopneumonia) has been observed in the asthmatic group (mean 5.05 URI) during the last 2 years before the onset of br.A. compared to healthy controls (mean 2.24 URI) in the same period. 123 asthmatics (41.3 %) but only 38 controls (12.6 %) reported at least 5 URI in this time ($p<0.01$). By using a descriptive analysis it was demonstrated that among the asthmatic group 54.3 % of the patients mentioned their first asthma attack during or immediately after an URI (within 14 days). 119 patients (39.7 %) reported allergic rhinitis in the preanifestation time versus 23 controls (7.7 %) ($p<0.01$). 65 of the asthmatics (21.8 %) suffered from severe allergic symptoms (rhinitis, conjunctivitis, eczema, urticaria) as well as from at least 3 URI in these 2 years compared with only 7 controls (2.3 %) ($p<0.01$). Our results indicate a major direct asthma inducing role of respiratory diseases whereas the differences in atopy occurrence suggest that allergy act just as a predisposing or risk factor in the asthma disease.

W1-2* Whezzing in infants
(D. Sole, M.S. Guedes, E.C. Toledo, C.K. Naspitz, Brazil)

W1-3* Spectrographic analysis of cough sounds in asthma
(L.J. Toop, K.P. Dawson, C.W. Thorpe, New Zealand)

W1-4* Growth hormone deficiency and bronchial asthma
(R. Suffos, M. Vera, Cuba)

W1-5* Obstructive lung disease in Northern Sweden- decreased lung function in individuals with airway symptoms
(B. Lundback, N. Stjernberg, L. Nystrom, L. Rosenhall, M. Lindstrom, K. Lundback, Sweden)

W1-6 Epidemiological study on the prevalence of atopy markers in a scholastic population of Cassano Murge (BA)
(E. Iaia, V.S. Digilio, V. Cuomo, M. Aliani, Italy)

W1-7 Influence of climatic and ecological factors on prevalence of childhood bronchial asthma
(I.I. Balabolkhin, N.V. Avdeyenko, M.M. Brczhezovsky, M.N. Djutayev, USSR)

W1-8* Bronchial asthma in children and adults: A comparative clinical study
(G. Patriarca, A. Romano, E. Nucera, D. Schiavino, V. Di Rienzo, S. Pellegrino, G. Fais, A. Milani, Italy)

W1-9* Age diagnostics of bronchial asthma and individual therapy
(G.B. Fedoseyev, S.S Zhikharev, V.I. Trofimov, B.M. Uslontsev, T.M. Sinicina, M.A. Petrova, USSR)

W1-10 Epidemiological aspects of allergic bronchial asthma in school age children in Tarni
(L. Petrolini, G. Miconi, A. Falorni, Italy)

W1-11 Prevalence of bronchial asthma among pediatric population in various regions of the Azerbaijan USSR
(A.A. Eyubova, L.I. Allakhverdiyeva, T.A. Ismailov, USSR)

W1-12* Prevalence of asthma in Saudi Arabia
(A.R. Al-Frayh, S.M. Hasnain, T.Q. Jawadi, M. Al-Nahdi, Saudi Arabia)

W1-13 Prevalence and clinical course features of bronchial asthma in rural population
(A. Davidyan, USSR)

W1-14 Role of putative asthma inducing factors in onset of asthma
(E. Beck, S. Muller, W. Meiske, M. Glende, J. Slapke, GDR)

W1-15 Allergy to Artemisia vulgaris in children
(K.L. May, Poland)

W1-12+

PREVALENCE OF ASTHMA IN SAUDI ARABIA

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