

patients of the 1st and 2nd group was 568 ± 98.6 and 887 ± 108.1 IU/mL ($p > 0.05$). The results showed that total immunoglobulin E content in the serum of the representatives of the 2nd clinical group was by 1.6 times higher than that of the children with hypogranulocytic inflammatory phenotype, that is consistent with the results of the skin allergotest in this cohort of children.

At the same time, it was established, that in patients with hypergranulocytic inflammatory blood pattern the parameters of total E immunoglobulin content in the blood serum significantly correlates with clinical indicators of severity of the disease (in particular with daytime symptoms, the frequency of the use of β_2 -agonists and with limited physical activity: $r = 0,9$; $p < 0,05$). These relations were not obvious in the 1st clinical group.

Conclusions. 1. The presence of hypergranulocytic inflammatory blood pattern increases the chances of registering atopic skin reactivity by 5-9 times. 2. In the presence of asthma hypergranulocyte phenotype, values of total immunoglobulin E content in the serum correlated obviously with clinical indicators of disease severity ($r = 0,9$; $p < 0,05$).

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**NONSPECIFIC BRONCHIAL HYPERRESPONSIVENESS IN
ADOLESCENTS WITH DIFFERENT SEVERITY SCORES OF
BRONCHIAL ASTHMA ATTACKS**

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The Aim. Rate indices of nonspecific bronchial hyperresponsiveness to direct and indirect stimuli in adolescents with varying severity of asthma attacks was evaluated.

Materials and methods. 42 teens suffering from bronchial asthma were examined in postattack period. At admission to hospital severity of bronchial obstruction was studied using point scale: increasing of manifestations of bronchial obstruction was displayed with increasing of total attack score. Study of bronchial hyperreactivity was performed using standardized inhaled histamine spirometric test ($PC_{20}H$) taking into account the recommendations for the standardization of research. Indices of bronchial nonspecific hyperresponsiveness were investigated with regard to their lability in response to exercise and bronchodilatory effect of salbutamol on average during 4,6

months of prospective observation before the development asthma attack.

The Results. There was estimated that in a severe attack rate of bronchial lability, showing the severity of bronchospasm on physical stress and bronchodilatory effect of salbutamol was $37,3 \pm 4,9\%$ (95% CI: 13,2-29,3), as compared to a mild attack: $17,6 \pm 2,9\%$ (95% CI: 6,7-16,7), ($P < 0,05$). To determine the probability of severe asthma attack the sensitivity of index of $PC_{20}H$ test less than 1.0 mg/ml was 71,4%, and the sensitivity of bronchial reactivity to this direct bronhospasmogenic stimulus – 60,0%. These results suggest, that on the background of the basic treatment in adolescents presence of bronchospasm to physical stress more than 15,0% is a highly specific test (90,9%), which increases the post-test probability of severe asthma attack by 35,6%, with the significant odds ratio of the event 11,6.

Conclusion. The sensitivity of the bronchi to histamine at concentrations less than 1.0 mg/ml can be used to screen and index of the bronchial lability more than 15% - to confirm the possibility of severe asthma attack in the nearest catamnesis.