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THE MODERN POSSIBILITIES OF INCREASING THE EFFICIENCY OF BASIC THERAPY OF CHILDREN'S BRONCHIAL ASTHMA

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Lack of efficacy anti-inflammatory therapy of bronchial asthma (BA) in almost every second patient probably is occurring with phenotypic features of the disease. According to scientists early-onset asthma is associated with atopic mechanism of disease. Considering these statements in the appointment of basic treatment of asthma may likely increase its effectiveness.

Aim of the work: To assess the performance of atopic reactivity in children with early-onset to improve effectiveness of the basic therapy.

50 school-age children with BA were subjected to complex examination. The distribution of children according to the comparison group performed with the age of onset of the disease: patients with onset of BA before the age of 3 years was recorded early-onset asthma, and after 6 years – the late-onset. According to the main clinical characteristics formed groups were comparable. All patients assessed intradermal allergy tests with non-bacterial allergens and the content of IL-4 in the blood serum.

Results. Comparison of the presence of atopy in children with a history of different phenotypes of BA showed that almost all pupils (92,3±5,3%) with

early-onset asthma had an increased sensitivity of the skin (the size of papula >10,0 mm) to the household allergens (house dust), and in II group such persons were only 56,0±9,9% ($R\phi < 0,01$). Significantly higher sensitivity to house dust allergens in children with early-onset asthma corresponds to published data, indicating a predominant mechanism of atopic disease in these individuals. The survey revealed that child with early-onset asthma was observed some what higher level of IL-4 in serum: 15,8±28,4 pg/ml in the I group and 12,8±8,5 pg/ml ($P > 0,05$) the second. Elevated levels of IL-4 (more than 3.6 pg/ml) was detected in 80% of patients with early-onset asthma and 66% of the children of the second group ($R\phi > 0,05$).

Thus, the majority of children with early-onset atopic asthma is dominated, eosinophil mechanisms of inflammation in the bronchi, as significantly higher sensitivity to house dust allergens and indirectly indicates a trend to a higher content of IL-4, stimulates the production of immunoglobulin E. Found in association studies must be considered in the preparation of the individual controlling the treatment of BA in children.

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THE CONCENTRATION OF THE INTERLEUKINS-4 AND -8 SERUM OF CHILDREN WITH EARLY-ONSET AND LATE-ONSET BRONCHIAL ASTHMA

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Lack of efficiency controlling bronchial asthma (BA) in children is caused, apparently, by the presence of different phenotypes of the disease. It is known that interleukin-4 and -8 (IL-4, IL-8) indirectly play an important role in shaping the immune response, that is why the analysis of their relative content in blood with regard to disease phenotypes which allows us to individualize therapy thus improving its efficiency. Aim of the work: To evaluate performance of IL-4 and -8 in the serum of children with early-onset asthma and late-onset asthma to improve disease control. 50 school-age children with BA were subjected to complex examination. The distribution of children according to the comparison group performed with the age of onset of the disease: patients with onset of BA before the age of 3 years was recorded early-onset asthma, and after 6 years – the late-onset. According to the main clinical characteristics formed groups were comparable. All children assess the content of IL-4 and -8 in the blood serum.

The survey revealed that child with early-onset asthma was observed somewhat higher level of

IL-4 in serum: 15,8±28,4 pg/ml in the I group and 12,8±8,5 pg/ml ($P > 0,05$) – the second. Elevated levels of IL-4 (more than 3.6 pg/ml) was detected in 80% of patients with early-onset asthma and 66% of the children of the second group ($R\phi > 0,05$). The average content of IL-8 in serum of children surveyed was: 6,5±2,6 pg/ml and 8,9±5,3 pg/ml ($P > 0,05$), respectively. Elevated levels of IL-8 in the blood (more than 7.6 pg/ml) was detected in 44% of patients with late asthma and 18 children of the I group ($R\phi > 0,05$).

Thus, the majority of children with early-onset atopic asthma is dominated, eosinophil mechanisms of inflammation in the bronchi, as, indirectly indicates a trend to a higher content of IL-4, stimulates the production of immunoglobulin E. In patients with late-onset asthma had an increased content of IL-8 in the blood, indicating that the prevalence of neutrophilic inflammation in the bronchi. Found in association studies must be considered in the preparation of the individual controlling the treatment of BA in children.