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## **FEATURES OF THE CHILDHOOD OF PATIENTS WITH BRONCHIAL ASTHMA**

**Objective of the research.** To analyze the features of the childhood patient's with asthma in order to improve the results of its treatment and prognosis.

**Materials and methods.** In the conditions of the pulmonologic department of the Regional Children's Clinical Hospital in Chernivtsi, 98 children with asthma were examined. The group included 63 boys (64,3%) and 35 girls (35,7%). According to the classification of bronchial asthma in children, given in GINA-2020, controlled asthma was observed in  $14,28 \pm 3,4\%$ , partly controlled asthma - in  $57,15 \pm 4,3\%$  and uncontrolled asthma was recorded in  $28,57 \pm 4,5\%$  of children. All patients were analyzed for anamnestic data, in particular, the middle body weight at birth and the period of breast-feeding. The results obtained were analyzed by means of variational statistics methods using statistical program StatSoft Statistica v5.0. From the position of clinical epidemiology sensitivity (Se) and specificity (Sp) tests, and also absolute (AR), relative (RR) risk and odds ratio (OR) were evaluated with calculation of confidence intervals (95% CI).

**Results and discussion.** The middle-weight of children at birth was  $3495 \pm 45,9$  g, which corresponds to body mass index of infant newborns. However, patients whose body weight at birth was higher than 3500 g ( $58,2 \pm 4,8\%$ ) dominated, at the same time, children with weight at birth was less than 2500 g noted only in ( $2,8 \pm 1,6\%$ ) cases ( $P < 0,01$ ). The overweight at birth was associated with the risk of developing asthma as follows: AR – 0,65, RR – 3,17 (95% CI 0,98-10,1). The obtained results coincide with the literature data, which indicate that overweight at birth associated with a high risk of developing bronchial asthma.

Among the examined children, 87 patients ( $88,8 \pm 3,4\%$ ) received breastfeeding up to 6 months, while only 11 patients ( $11,2 \pm 3,1\%$ ,  $P < 0,01$ ) were on artificial feeding. Indicators of the diagnostic value of the presence of breastfeeding for the development of asthma in school-age children comparatively to the artificial one were marked by high sensitivity and specificity: 84,9% (95% CI 76,3-91,3) and 88,8% (95% CI 80,8-94,2). These data can be explained by the protective role of breast milk in relation to infectious factors, which contributes to a shift in domination of T-helper type II. Thus, in patients who were born the first in the family with

overweight and who had breastfeeding more than 6 months, the risk of developing bronchial asthma was three times higher in future life.

**Conclusions.** 1. Overweight at birth is associated with a high risk of developing bronchial asthma in children (RR – 3,17 (95% CI 0,98-10,1)).

2. The presence of breast-feeding up to 6 months and longer was associated with the risk of developing bronchial asthma in children with a sensitivity of 84,9% and a specificity of 88,8%.

3. Children who had breastfeeding more than 6 months is determined by the high risk of implementing bronchial asthma, which should cause particular disturbance to district pediatricians for the timely detection and initiation of treatment of the disease.

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## **THE MODERN OPPORTUNITIES FOR INCREASING THE CONTROL OF BRONCHIAL ASTHMA IN SCHOOL-AGE CHILDREN**

**Purpose of the study.** To increase the controllability of asthma in school-age children by using Nucleinate as a component in the complex therapy.

**Material and methods.** 45 school-age children with asthma in the remission period were comprehensively examined in the pulmonology department of the Chernivtsi Regional Children's Clinical Hospital. Nucleinat was taken at a dose of 0.25 g in day for 21 days in the complex of basic therapy prepared in accordance with the International Consensus for the treatment of asthma in children. This clinical group included 31 boys (68.8%) and 14 girls (31.1%), and the average age of patients was  $11.8 \pm 0.5$  years. Mild asthma was observed in 4 patients ( $8,9 \pm 4,2\%$ ), moderate asthma in 26 children ( $66,7 \pm 7,4\%$ ) and severe - in 15 patients ( $33,3 \pm 7,0\%$ ). All children underwent a baseline assessment of asthma control with the help of a survey before and after the course of anti-inflammatory therapy. The function of external respiration was assessed according to the indices of FEV1 (forced expiratory volume for the first second) and PEF (peak expiratory flow rate). At the same time, the above indicators were estimated as follows: if the FEV1 and the PEF were more than 90% of the norm - 0, 80-89% - 1, 70-79% - 2, 60-69% - 3 and less than 60% - 4 points. The effectiveness of the control therapy was analyzed according to the sum dynamics