

*Strelkova M. I., Bashkirova N. V.*

## **OPTIMIZATION OF TREATMENT CHILDREN WITH WHEEZING**

*Supervisor: Doctor of Medical Science, prof. G. S.Senatorova*

*Department of pediatrics №1 and neonatology,  
Kharkiv National Medical University, Kharkiv*

**Dateness.** Wheezing - the secondmost popular children respiratory disease. Bronchial asthma rate among babies is 220 cases per 1,000 children, and among infants – 40-45 cases per 1000 children. According to other authors, wheezing number among hospitalized children is 34%., it also causes disability of one parent during the illness and recovery of child, on average it takes from 2-3 till 8 weeks. Children with family history for allergies, wheezing usually develops more often (in 30-40%); it is also typical for children who often (more than 6 times per year) suffer from respiratory infections, including recurrent and/or relapsing bronchitis. Children with allergic history are burdened for developing of acute inflammatory diseases of the upper respiratory tract, which contributes to more severe disease course and high risk of complications. According to the study of J.Montoro and co-arthur, patients who have severe allergic history demand in the use of intensive antihistamine care. Thanks to the use of appropriate antihistamine therapy for patients with allergic diseases, the severity of nasal (decrease swelling of the nasal mucosa, rhinorrhea, sneezing), bronchial (decrease swelling of bronchial mucosa, increasing of their permeability) and general symptoms can become reduced.

The **object** is to study the anamnesis, physical performance in children before and after the treatment, who suffer from acute obstructive bronchitis to determine the effectiveness of the drug combination "Pulmolor®."

**Materials and methods.** We observed in the pulmonology department of Kharkov regional children's hospital 30 children from 6 to 12 years, who met the criteria for inclusion in the study: 20 children (group I) who received "Pulmolor®", 10 children (Group II) – control group.

**Results.** All (100%) of examined children were diagnosed with acute obstructive bronchitis. 17 boys (56,6%), 13 girls (43,4%). 60,0% of children from 6 to 9 years (18 children), 40,0% of children from 10 to 12 years (12 children). Duration of illness till hospitalization was: 1-3 days of disease – 13 children (43,4%), 4-7 days – 12 children (40,0%), more than 7 days – 5 children (16,6%). All children had severe allergic history in the form of food allergy (43,4%), atopic dermatitis (30,0%), allergic rhinitis (13,3%), mixed allergies (13,3%). All children (100%) had the signs of undifferentiated dysplasia of connective tissue. Children with severe bronchial obstruction syndrome were intended with "Pulmolor®" in age dosage for 10 days. Evaluation of clinical and laboratory studies was conducted on the 3<sup>rd</sup> day, 5<sup>th</sup> day, in 10 days after the end of treatment. In assessing of symptoms the intoxication syndrome intensity, frequency and presence of cough, cough productivity, the number of wheezing on auscultation of the lungs were considered. 100% of the I group patients on the 3<sup>rd</sup> day of treatment fever or intoxication syndrome wasn't noted, it reflected the satisfactory condition of children and lack of complications. Performance of cough in children who received "Pulmolor®" increased on the 3<sup>rd</sup> day of treatment, it was accompanied with watering sputum, improving of the mucociliary clearance and it reflected the normal course of the disease. In the dynamics of surveillance performance of cough was significantly decreased ( $p < 0.05$ ), which was seen as the culmination of the ignition process and reducing of secretion. The study of the dynamics of the number of wheezing during auscultation of the lungs during treatment revealed a significant decrease in this indicator at the 3<sup>rd</sup> day of treatment ( $p < 0.05$ ). On 10<sup>th</sup> day of observation nobody from patients had presence of wheezing in the lungs ( $p < 0.05$ ).

The II group of children was characterized with cough by prolonged flow: reducing of cough after 7-8<sup>th</sup> day of observation, but cough productivity remained low. Number of wheezing during auscultation of the lungs during treatment decreased after 5-7<sup>th</sup> day of treatment and on 10<sup>th</sup> day 4 children had wet wheezing.

**Conclusion.** Results of the study show the feasibility and effectiveness of drug therapy of the acute bronchitis in children with allergic history with combined preparation Pulmolor for a faster reduction of the main clinical manifestations of the disease (cough, sputum), which, in turn, would reduce the severity and manifestations of possible allergic reactions that lead to violations of bronchial obstruction in acute bronchitis.