## EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal Volume: 9| Issue: 6| June 2023|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2023: 8.224 || ISI Value: 1.188

# SOME FEATURES OF THE CLINICAL COURSE OF RECURRENT OBSTRUCTIVE BRONCHITIS IN CHILDREN WITH PRIMARY HYPOTENSION

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#### **ANNOTATION**

40 children aged 3 to 7 years were examined. The main group consisted of 12 children with recurrent obstructive bronchitis, with a verified diagnosis of primary arterial hypotension (group 1), the comparison group consisted of 18 patients with recurrent obstructive bronchitis and normal blood pressure (group 2), the control group consisted of 10 conditionally healthy children. The examination included the collection of anamnesis, clinical and laboratory studies. It has been established that in the development of recurrent obstructive bronchitis in children with primary arterial hypotension, unfavorable factors of a family history, the pathological course of pregnancy and childbirth in the mother, and the features of the premorbid background in postnatal ontogenesis are important.

**KEYWORDS:** recurrent obstructive bronchitis, primary arterial hypotension, children, clinical features, clinical laboratory studies.

#### INTRODUCTION

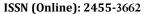
Acute respiratory viral infection in children of early age mainly affects the bronchi and is characterized by chronic and recurrent obstructive syndrome. The incidence of acute bronchitis is 200-400 per 1000 children. Recurrent obstructive bronchitis accounts for 20-30% of lung-bronchial diseases [2,4]. Recurrent bronchitis is a special nosological unit that requires careful consideration by general practitioners, as it is a risk factor for the development of a number of chronic diseases of the respiratory system. The disease occupies one of the leading places among respiratory diseases, and according to different authors, the frequency ranges from 5 to 40% [3,5]. A high prevalence of recurrent bronchitis in preschool children is observed in environmentally disadvantaged areas. Bronchitis on the background of an acute respiratory infection can cause recurrent bronchitis if it recurs 2-3 times in 1 year with obstructive syndrome. Recurrent bronchitis is often observed in young children, hyperreactive changes are observed based on the morphological characteristics of the bronchial trees under the influence of external environmental factors [11-16]. According to scientists, recurrent obstructive bronchitis in children can lead to the development of bronchial asthma, therefore it is important to carry out preventive treatment preventive procedures [6-10]. The effect of systemic hemodynamic disturbances in children with recurrent obstructive bronchitis has not been studied. The most common primary arterial hypotension in the pathology of cardiovascular diseases in children is accompanied by many systemic changes, neurovegetative and endocrine imbalance, changes in central and regional hemodynamics, which strongly affects the course of inflammatory diseases of the respiratory tract [17-22].

The purpose of the study: to determine the characteristics of the clinical course of recurrent obstructive bronchitis in children with primary arterial hypotension.

Sources and verification methods. In our observation, children 1 were 40 children aged 3 to 7 years who were treated in a city clinic, 12 children with recurrent obstructive bronchitis, primary arterial hypotension formed the main group, group 2 consisted of 18 children with recurrent obstructive bronchitis and arterial blood their blood pressure was normal, 10 children formed the control group (healthy children). Both groups of patients were examined during the acute period of the disease. The examination methods included: anamnesis collection (genealogical, social, biological), clinical and laboratory examination. To evaluate the degree of development of bronchoobstructive bronchitis, the degree of severity of expiratory wheezing and the degree of development of cyanosis, the point scale of W. Tal et al. (1983) was used.

**Test results and discussion.** Analyzing the antenatal anamnesis collected from the mothers of the patients, it was found that the children in group 1, compared to children in group 2 and the control group, had pregnancy complications in their mothers, that is, anemia was observed (in group 1 - 33.3%, in group 2 - 27.7% and control children - 20%), slow labor was observed in 41.6%, 22.3% and 20% of children.

Mothers of patients in group 1 experienced strong changes in the second half of pregnancy compared to mothers of children in group 2 and the control group, that is, severe toxicosis, chronic fetoplacental insufficiency were observed, and a decrease in arterial blood pressure (ABP) with primary arterial hypotension in pregnant mothers led to increased





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hypoxia in the fetus. brought At birth, 16.6% of children in the 1st group and 11.2% of the children in the 2nd group had low weight gain. When the genealogical anamnesis was collected, 50% of the children in the 1st group, 61.1% more in the 2nd group, and less allergic diseases were observed in the control group (30%). Among relatives of children of both clinical groups, the following diseases were more often detected: chronic bronchitis, pneumonia, bronchial asthma, chronic sinusitis, tonsillitis, pharyngitis, otitis, etc. When we analyzed the diseases of patients in group 1, in the first year of life, 25% of anemia, 16.6% of rickets, 33.3% of hypotrophy were detected, in patients of group 2, these indicators were 33.3%, 22.2%, and 10%.

At the time of examination, 16.7% of children had recurrent obstructive bronchitis with primary arterial hypotension, 11.2% of patients had recurrent obstructive bronchitis with normotension, physical development indicators (body weight, height) were equal to below average, i.e. 10-25th centile. Gastrointestinal tract diseases (intestinal dysbacteriosis, giardiasis, biliary tract dyskinesia, worm infestation) were observed in 32.5% of children with primary arterial hypotension, the occurrence of gastrointestinal tract diseases in children of the 2nd group was 25%.

Allergy symptoms were observed in 58.3% of children in group 1, and in 38.8% of children in group 2, which can be attributed to immune characteristics, and in primary arterial hypotension, it is associated with systemic disorders of hemodynamics. The anamnesis of children with recurrent obstructive bronchitis revealed the following: unfavorable conditions in the family, deficiencies, parents' smoking, alcohol consumption. These mentioned factors were more observed in children with recurrent obstructive bronchitis in both groups compared to the control group. In children with primary arterial hypertension, the influence of surrounding negative mental influences was observed more - 33.4%, in children in group 2 -16.7%, and 10% in children in the control group. In children under 4 years of age, primary arterial hypertension was detected in 75% of children with signs of bronchial obstruction, and in 66.7% of children in group 2.

Acrocyanosis in every 2 patients with primary arterial hypotension: blueness of the fingertips, was found in every 5 patients in group 2, blueness around the nose-lip was rarely observed. The majority of children in both groups were admitted to the ward with symptoms of acute respiratory infection: symptoms of rhinitis - recurrent obstructive bronchitis with primary arterial hypotension (BAG) in 83.3% and recurrent obstructive bronchitis with normal blood pressure (BP) in 94.4%, with pharyngitis (91.6%), with catarrhal otitis (10%), with conjunctivitis (8.3%), with laryngitis (16.7%) were observed in children. In the acute period of the disease, symptoms of atopic dermatitis were detected in 33.4% of children with primary arterial hypotension, in 27.8% of children with recurrent obstructive bronchitis and normal blood pressure. Most of the children in both groups had a dry, whistling cough from the first day, followed by a wet, sticky cough. Duration of cough in patients with primary arterial hypotension was (3.4±5.0 days) and (in the second group –  $2.2\pm2.5$  days, r < 0.05).

Expiratory wheezing with the involvement of additional muscles was observed in most of the children under observation. Among them, 25% of children with primary arterial hypotension, 11.2% of children in group 2 had mixed type of wheezing. Children with primary arterial hypotension had more moderate severity of bronchial obstructive syndrome. and patients in group 2 had more mild and severe degrees.

Percussion revealed a box-like sound in the lungs. During auscultation, hard breathing, prolongation of exhalation was observed. Diminished vesicular breathing was heard in 33.4% of children in group 1 and in 16.7% of children in group 2. Dry, whistling and 1-2 moist rales of different caliber were detected in the area of the lungs.

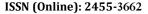
A general blood analysis of patients with acute recurrent bronchitis revealed leukocytosis compared to patients with primary arterial hypotension. Patients with primary arterial hypotension often complained of: sleep disturbances, profuse sweating, stable dermographism, variable pulse, cephalgia, palpitations, squeezing pain in the heart area, spastic pain in the abdominal area.

#### **CONCLUSIONS**

Thus, based on the results of the examination, the development of recurrent obstructive bronchitis in children with primary arterial hypotension - unfavorable circumstances in the family, deficiencies, the mother's pregnancy and the pathological course of the delivery process (toxicosis, arterial hypotension, chronic fetoplacental insufficiency, chronic intrauterine hypoxia), the presence of a premorbid background in the child (artificial nutrition, hypotrophy, anemia, rickets) is of great importance. The course of recurrent obstructive bronchitis against the background of primary hypotension was determined by the fact that children begin at an early age, acute respiratory infection often develops with broncho-obstructive syndrome, general intoxication and catarrhal symptoms are observed in the acute period of the disease, obstructive syndrome is often moderately severe, and changes in dynamics are gradually manifested. Prolonged course of recurrent obstructive bronchitis developed on the background of primary arterial hypotension should be considered as a risk factor, and vegetatrope drugs should be added to the therapy of these patients.

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