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## **THE INFLUENCE OF RISK FACTORS ON THE DEVELOPMENT OF ATYPICAL PNEUMONIA IN YOUNG CHILDREN**

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**Abstract:** In young children, the increase in the infectious morbidity of the bronchopulmonary system directly depends on the influence of risk factors that determine the likelihood of developing pneumonia in young children. Timely identification and elimination of risk factors leads to a decrease in the incidence of respiratory diseases and their complications. 52 sick children with pneumonia were examined. The results show that in sick children the most significant differences were observed in such factors as: burdened obstetric history, extragenital diseases of pregnant women, TORCH infections, gestational age at birth less than 28 weeks, artificial feeding.

**Keywords:** risk factors, atypical pneumonia, young children.

**Relevance:** Pneumonia attracts attention with its prevalence in young children, unfavorable course and outcome, and difficulties in therapy. This is an infectious and inflammatory disease of the lung tissue that develops when microorganisms enter the respiratory tract. [1,3,8]. Various microorganisms play a role in the development of the disease (bacteria, mainly cocci, fungi, viruses, protozoa, and among the “atypical” pathogens *Mycoplasma pneumoniae* and *Chlamydia pneumoniae*) [1,5]. The high frequency and severe course of pneumonia in young children requires the study of risk factors for development. Recent studies have established that the most significant factors contributing to the development of pneumonia in children are: age-related features of the respiratory system, aggravated obstetric and perinatal anamnesis, immunity features, social factors, environmental factors, allergic anamnesis, the presence of concomitant ENT pathology, foci of chronic infections [7,9]. Clinically, pneumonia is manifested by fever, cough, malaise, respiratory failure. Atypical pneumonia is characterized by a persistent febrile temperature without a pronounced manifestation of toxicosis, poor catarrhal manifestations, conjunctival hyperemia, auscultatory asymmetry of wheezing [2]. Radiologically, the shadow of the infiltrate is fuzzy. In recent years, for the purpose of differential diagnosis of pneumonia and determining the severity of the condition, the determination of the serum level of C-reactive protein and procalcitonin has become increasingly important. [4,6]. Despite the existing studies aimed at identifying risk factors for the development of pneumonia, there are still no clear criteria for selecting patients into various risk groups, which served as the relevance of our study.

**Purpose:** to study the features of the influence of risk factors on the development of atypical pneumonia in young children.

**Material and methods.** In accordance with the purpose of the research, the results of a survey of 26 children with pneumonia aged 2 to 36 months were analyzed, and a control group of practically healthy children in the amount of 26 children. The study was conducted in the department of emergency pediatrics №2 of the Samarkand branch of the Republican Scientific Center for Emergency Medicine. This study is based on the results of a comprehensive examination of 26 sick children aged 2 to 36 months, including 15 boys and 11 girls who had pneumonia. Of these, 17 children with pneumonia without complications and 9 children with pulmonary complications. In all patients, anamnestic, clinical, laboratory studies were studied, as well as the identification of modifying risk factors to determine their prognostic value for the development of pneumonia.

**Results:** Based on the purpose of the research, we studied the clinical and anamnestic signs of the disease and the main risk factors affecting the development of pneumonia in young children. 26 sick children from 2 to 36 months were treated, of which there were 15 boys, 11 girls who had pneumonia. As can be seen, boys predominated (57.6%). Children in the autumn-winter period are 2 times more often ill with pneumonia than in summer.

History revealed risk factors during pregnancy, such as the threat of miscarriage - 3 (11.5%), extragenital diseases of pregnant women - 4 (15.3%), TORCH infection -4 (15.3) violation of the uteroplacental blood circulation 1 (3.8%), multiple pregnancy 2 (7.7%). 5 (19.2%) women had iron deficiency anemia of 1-2 degrees, gestational age at birth less than 28 weeks 3 (11.5%), chronic fetal hypoxia and newborn asphyxia 4 (15.3%).

When analyzing the clinical course of pneumonia at the prehospital stage in the study group of children, an increase in body temperature was observed in 81% of cases. Cough was observed in 90% of cases, at the time of admission of them in 50% of cases the cough was predominantly dry, shortness of breath 34.6%. Physical data, such as dullness of percussion pulmonary sound, were recorded in 46% of children, the presence of moist fine bubbling rales during auscultation of the lungs - in 68%. At the time of hospitalization of children in the hospital, an increase in body temperature was observed in 65% of cases.

All children had a cough, which changed from a dry character to a wet productive one. Wheezing in the lungs during auscultation was auscultated in 60% of cases, and wheezing was moist fine bubbling - 70%. In 17 (65.3%) patients, pneumonia proceeded without complications; respiratory failure, cardiorespiratory syndrome, toxicosis, infectious toxic shock were not observed.

Observation of sick children showed that the main risk factors for the development of atypical pneumonia in young children were the following: aggravated premorbid background, children with an aggravated obstetric history. Children with poor premorbid backgrounds suffered from pneumonia more often, the disease

proceeded with complications, clinical symptoms such as fever, intoxication, and a wet paroxysmal cough lasted longer. In the children of the control group, in the anamnesis, the pregnancy of the mothers proceeded without complications, the obstetric anamnesis was not burdened, the children were breast-fed.

**Conclusion.** Thus, there are various risk factors that contribute to the development of SARS. The incidence of pneumonia in children is more often recorded among boys, the peak incidence of the respiratory system occurs mainly in the autumn-winter season. Timely identification of risk factors will reduce the incidence of pneumonia and the frequency of complications of the disease.

### References

1. Alimova Kh.P. Analysis of the causes of complications of pneumonia in young children: materials of the republican scientific-practical conference. Collection of abstracts of the XX Congress of Russian Pediatricians with international participation "Actual problems of pediatrics" Moscow, February 16–18, 2018;

2. Gorbich, O. A. (2016). SARS is a significant problem in childhood. Medical Journal, 3, 57-61.

3. M.F.Ibragimova, N.M.Shavazi, M.V. Lim, M.S. Atayeva. Diagnostic and therapeutic methods for community-acquired pneumonia with atypical etiology in children. Bulletin of the Doctor No. 4 (101) -2021. C29-32

4. Maidannik V.G., Mitin Yu.V. Diagnosis, treatment and prevention of inflammatory diseases of the respiratory system in children. - K.: ITs Medprominfo, 2006. - 288 p.

5. Tatochenko VK Respiratory diseases in children. Practical guide. Ed. V. K. Tatochenko. M.: Pediatrician. 2012. 480 p.

6. Kulichenko T.V. Respiratory syncytial virus infection in children: new research // Pediatric pharmacology. - No. 6. - 2009. - p. 70-76.

7. Saatova G. M., Mikhailova V. V., Kabaeva D. D. Risk factors for the development of complications in pneumonia in children // Bulletin of Science and Practice. 2020. V. 6. No. 12. pp. 241-247. <https://doi.org/10.33619/2414-2948/61/24>

8. Tatochenko V.K. Practical pulmonology of childhood / ed. Tatochenko V.K. - Moscow: 2000. - 268 p.

9. Shavazi N.M., Rustamov M.R., Ibragimova M.F., Zakirova B.I., Lim M.V. Stepwise antibiotic therapy of community-acquired pneumonia in children. Questions of science and education. No. 10 (64), 2020. From 64-66.