

**COMPLEX TREATMENT OF NEONATAL PNEUMONIA DUE TO HYPOXIC-
ISCHEMIC ENCEPHALOPATHY IN NEWBORNS**

Yuldasheva Feruza Mardieva

Teacher of the subject of obstetrics and gynecology
Ishtykhan College of Public Health named after
Abu Ali ibn Sino

Annotation: Acute respiratory pathology occupies a leading place in the structure of morbidity in children. The leading place among them belongs to pneumonia, which is characterized by a high prevalence in the early age group, severity of the course, and the possibility of transition to severe forms. Purpose of the study: to optimize complex therapy and rehabilitation of newborns with neonatal pneumonia against the background of hypoxic-ischemic encephalopathy. Materials and methods of research: Group I - 50 children who received traditional treatment, of which 33 had a moderate-severe form and 17 had a severe form. Group II - 50 newborns who received cytochrome C, immunomodulin in addition to traditional treatment and of these, 37 are moderately severe and 13 are severe.

Key words: Newborn children, neonatal pneumonia, hypoxic-ischemic encephalopathy, treatment.

Relevance. A number of researchers have identified a connection between damage to the central nervous system and the development of bronchopulmonary pathology. Particular difficulties arise in the diagnosis of neonatal pneumonia in young children with hypoxic-ischemic encephalopathy. To date, prognostic criteria for the development and outcomes of pneumonia in children with hypoxic-ischemic encephalopathy have not been developed. Despite the obvious successes of modern medical science and practice aimed at reducing the incidence of damage to the central nervous system in young children, improving the treatment and rehabilitation of patients, it can be stated that this pathology remains a complex and largely unsolved problem [1,3,6,15]. The pathogenetic role of the totality of environmental hazards in the development of neonatal pneumonia against the background of hypoxic-ischemic encephalopathy in these children and other negative premorbid factors requires clarification. In particular, the pathogenetically significant complex of ecopathobiological influences for these diseases, place of residence, negative technological working conditions with their adverse effects on immunity, metabolism for parents and their children. [2,4]. A list of the main factors of pathogenic premorbid soil for the active identification and timely treatment of children at risk has not been determined.

These factors can be associated with the not decreasing, but in some areas growing, prevalence of damage to the central nervous system in young children in general, including encephalopathy. Moreover, their severe cases and forms that are resistant to conventional pharmacotherapy, with subsequent complications of the disease, are becoming more frequent. [5,8,9]. In addition, in young children with hypoxic-ischemic encephalopathy and the "risk" group, the pathogenetic role of hereditary factors and a regionally significant set of ecobiological influences has still not been studied.

Insufficient attention is paid to such an aspect of the premorbid and pathogenic soil as the family genealogical background, which influences the general morbidity, its nature, forms and frequency of pathological processes, including those of the central nervous system. [7,12]. At the same time, on the basis of a comprehensive dynamic clinical and immunobiochemical study of these aspects, it is possible and should organize a system that provides for the active

identification of the development of neonatal pneumonia among young children at risk, against the background of hypoxic-ischemic encephalopathy, predicting the characteristics of its course, introducing appropriate modifications into the principles of treating patients, including the development of new approaches to the organization of therapy, rehabilitation and prevention. In particular, the therapeutic and preventive prospects of using composite pharmacological correction and low-intensity laser effects on the body and damaged parts of homeostasis have been practically not studied. [10,11,13,14]. Therefore, we consider it necessary to just pay attention to the numerous facts indicating the presence of significant difficulties in pharmacotherapy for neonatal pneumonia, against the background of hypoxic-ischemic encephalopathy in young children, due to a variety of reasons. The main therapeutic method for treating neonatal pneumonia against the background of hypoxic-ischemic encephalopathy in young children to this day remains antihypoxic, antioxidant, and immunomodulatory therapy.

Purpose of the study: to optimize complex therapy and rehabilitation of newborns with neonatal pneumonia against the background of hypoxic-ischemic encephalopathy

Materials and methods of research. The observed children were distributed as follows:

Group I – 50 children who received traditional treatment, of which 33 had a moderate-severe form and 17 had a severe form.

Group II - 50 newborns who received, in addition to traditional treatment, cytochrome C, immunomodulin, and of them with a moderate-severe form - 37 and a severe form - 13.

Cytochrome - C at a dose of 5mg intravenously in the following course doses: for moderate-severe forms, from 5 to 8 injections daily and for severe forms, from 7 to 10 injections.

Immunomodulin is used in the following course doses: for moderate-severe form - from 5 to 8 injections daily; and for severe cases - from 7 to 10 injections in age-appropriate doses.

Results. In terms of the clinical results studied, a comparative analysis of the effectiveness of the modified method of treating the observed children of groups I and II would not be complete without an analysis of the characteristics of the clinical course of various forms of the disease.

As can be seen from the presented material, there is complete agreement with the facts established above about the close relationship between the degree of premorbid burden of different nature and the severity of the clinical manifestations of the disease. Analysis of the data obtained, presented in tables, from which the obvious conclusion follows that, against the background of traditional therapy of group I patients, almost all of the analyzed symptoms of neonatal pneumonia, against the background of hypoxic-ischemic encephalopathy in children, persisted for a longer period of time than in group II groups that received the modified therapy methods we developed.

A dynamic analysis of the clinical symptom complex of pneumonia against the background of hypoxic-ischemic encephalopathy in children in group I, in whom its therapeutic correction was used, convincingly testifies to the greatest optimality of the modification in group II with daily use of cytochrome c and immunomodulin.

In dynamic terms, within the groups receiving modified methods of therapy, the course of the disease was observed in group I compared with group II, a “delay” in the disappearance of symptoms of each of the symptom complexes from group to group approximately: in the moderate-severe form - 1-2 days and in the severe form -2-3 days.

When comparing the average time for normalization of the main clinical manifestations of neonatal pneumonia, against the background of hypoxic-ischemic encephalopathy in young children in group II, an acceleration of normalization was revealed by an average of 2-3 days, with a moderately severe form and by 3-5 days with a severe form compared with groups of children who did not receive the modified method of therapy. The differences turned out to be statistically significant. By the end of the individual course of antioxidant immuno-metabolic

correction in these groups of patients, the clinical manifestations of the disease were completely eliminated in 94.2% of them, while in the rest, with traditional therapeutic measures - only in 68.8% of patients. In addition, it can be noted that against the background of modified therapy, there was a significantly less severe course of the disease with a very clear phenomenon of a "break" in the dynamics in the progression of the leading symptom described above. In patients of this group, the symptoms of general intoxication disappeared more quickly; and the less severe nature of the disease made it possible to reduce the duration of pharmacotherapy. At the same time, a protracted course of the disease was observed in only 2.2% of them (only three children), and with traditional treatment of patients in 16.7%.

Conclusion. The inclusion of cytochrome C, immunomodulin in the complex treatment of sick children with neonatal pneumonia, against the background of hypoxic-ischemic encephalopathy, improves its final results so effectively that it becomes strictly mandatory.

References.

1. Ibragimova, M. F. (2022). DIAGNOSTIC CRITERIA FOR PNEUMONIA OF ATYPICAL ETIOLOGY IN CHILDREN. *British medical journal*, 2(5).
2. Ибрагимова, М. Ф. (2022). Применение препарата пектолван ц при лечении неонатальной пневмонии у детей. *Биология*, 3, 136.
3. Ю.Правдухина, Г.П. Новые подходы в диагностике гипоксически -ишемической энцефалопатии / А.П. Скоромец, М.В. Шумилина, Г.П. Правдухина и соавт. // Педиатрия. - 2012. - Т. 3, № 3. - С.35-42.
4. Скоромец А.П., Мостовой А.В., Шумилина М.В. Постгипоксическая энцефалопатия новорожденных: возможности лечения и мониторинга функций мозга// X Всероссийский съезд неврологов. Тезисы докладов - Нижний Новгород, 2012
5. Румянцев, А. Г., Шавазы, Н. М., & Ибрагимова, М. Ф. (2022). ДИАГНОСТИЧЕСКИЕ КРИТЕРИИ НЕОНАТАЛЬНОЙ МИКОПЛАЗМЕННОЙ ПНЕВМОНИИ У ДЕТЕЙ. *ЖУРНАЛ ГЕПАТО-ГАСТРОЭНТЕРОЛОГИЧЕСКИХ ИССЛЕДОВАНИЙ*, (SI-3).
6. Шавазы, Н., & Ибрагимова, М. (2023). Эффективность применения джозамицина при атипичных пневмониях у детей раннего возраста. *Международный журнал научной педиатрии*, 2(2), 44-46.
7. Правдухина, Г.П. Морфофункциональные основы формирования энцефалопатии при перинатальном гипоксико-ишемическом поражении центральной нервной системы / Г.П. Правдухина, В.В. Семченко // Мед. наука и обр. Урала. - 2012. -Т. 13, № 4. -С. 68-72.
8. Шавазы, Н., Ибрагимова, М., & Эсанова, М. (2023). СОСТОЯНИЕ КЛЕТОЧНОГО ИММУНИТЕТА У БОЛЬНЫХ С ОБСТРУКТИВНЫМ БРОНХИТОМ. *Международный журнал научной педиатрии*, 2(9), 330-332.
9. Fedorovna, I. M., & Mamedovich, S. N. (2022). IMPROVING TREATMENT IN CHILDREN WITH COMMUNITY-ACQUIRED PNEUMONIA WITH ATYPICAL ETIOLOGY. *International Journal of Early Childhood Special Education*, 14(6).
10. Сергеева В.А., Александрович Ю.С., Петренкова Н.С. Препараты
11. гипоксически-ишемической энцефалопатии у новорожденных
12. детей. *Вестник анестезиологии и реаниматологии*. 2017;14(4):16-22.
13. Shavazi H., & Ibragimova M. (2023). USE OF POLYOXIDONIUM IN THE TREATMENT OF OBSTRUCTIVE BRONCHITIS IN CHILDREN. *International Journal of Scientific Pediatrics*, (1), 26–28.

14. Кайтмазова Н. К. Клинико-иммунологическая характеристика детей с
15. обструктивным бронхитом и методы совершенствования тактики лечения, 2013. С.-15-23
16. Fedorovna, I. M. (2022). The influence of risk factors on the development of atypical pneumonia in young children. *Asian journal of pharmaceutical and biological research*, 11(2).
17. Mamedovich, S. N., & Fedorovna, I. M. (2022). Efficacy of vilprafen and resistol in community-acquired pneumonia with atypical etiology in children. *Thematics Journal of Applied Sciences*, 6(1).
18. Shavazi, N. M., Tursunkulova, D. A., Turaeva, N. O., & Ibragimova, M. F. (2023). INFLUENCE OF NEGATIVE PREMORBID AND ECOLOPATHOLOGICAL FACTORS ON THE COURSE OF OBSTRUCTIVE BRONCHITIS IN CHILDREN AGAINST THE BACKGROUND OF HYPOXIC-ISCHEMIC ENCEPHALOPATHY. *British Medical Journal*, 3(2).