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OPTIMIZATION OF TREATMENT METHODS FOR OBSTRUCTIVE BRONCHITIS AGAINST THE BACKGROUND OF HYPOXIC-ISCHEMIC ENCEPHALOPATHY IN CHILDREN

Shadieva Khalima Nuridinovna

Associate Professor of the Department of Propaedeutics of Childhood Diseases

Samarkand State Medical University Samarkand. Uzbekistan

Abstract: Acute respiratory diseases occupy a leading place in the structure of morbidity in children. According to WHO, ARIs account for about 40-50% of all infectious diseases. One of the many reasons for the growth of diseases accompanied by BOS is the deterioration of the environmental situation. The aim of the study is to develop new systems of complex therapy and rehabilitation of young children with obstructive bronchitis against the background of hypoxic-ischemic encephalopathy. The children were distributed as follows: Group I - 41 children who received traditional treatment, of which 17 had a moderate form and 24 had a severe form. Group II - 45 children who received aevit, cytochrome C, trental, immunomodulin and laser therapy in addition to traditional treatment, of which 13 had a moderate form and 32 had a severe form. The inclusion of aevit and immunomodulin with laser therapy in the complex treatment of children with obstructive bronchitis against the background of hypoxic-ischemic encephalopathy improves its final results so effectively that it becomes strictly mandatory. This conclusion is also confirmed by the analytical calculations of clinical-immuno-biochemical observations given below.

Key words: children, obstructive bronchitis, hypoxic-ischemic encephalopathy, treatment.

Relevance. A number of researchers have identified a link between damage to the central nervous system and the development of bronchopulmonary pathology. Particular difficulties arise in the diagnosis of obstructive bronchitis in young children with hypoxic-ischemic encephalopathy. To date, prognostic criteria for the development and outcome of obstructive bronchitis 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 central nervous system damage in young children, improving treatment and rehabilitation of patients, it can be stated that this pathology remains a complex and largely unsolved problem [1,3,6].

The pathogenetic role of a combination of environmental hazards in the development of obstructive bronchitis against the background of hypoxic-ischemic encephalopathy in these children and other negative premorbid factors requires clarification. In particular, a pathogenetically significant complex of ecopathobiological effects for these diseases, place of residence, negative technological working conditions with their unfavorable consequences on immunity, metabolism for parents and their children. [2,4]. The list of the main factors of pathogenic premorbid soil for active detection and timely treatment of children from the "risk" group has not been determined. It is known that Uzbekistan is located in a region with its combined environmental hazards for a child: a sharply continental climate, widespread use of pesticides in agriculture. These factors can be associated with not decreasing, but in some areas increasing, prevalence of damage to the central nervous system in young children in general, including encephalopathy in children. Moreover, their severe cases and forms 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 complex of ecobiological influences has still not been studied. The significance of environmental hazards in the formation of premorbid pathogenic soil in children and their susceptibility to damage to the central nervous system, mediated through metabolic disorders in the body of parents and directly manifested in children, remains practically open.

Insufficient attention is paid to such aspect of premorbidity and pathogenic soil as family genealogical background influencing general morbidity, its nature, forms and frequency of pathological processes, including the central nervous system. [7,10,12]. At the same time, on the basis of complex dynamic clinical and immuno-biochemical study of these aspects it is possible and necessary to organize a system providing for active detection among young children from the "risk" group of development of obstructive bronchitis, against the background of hypoxic-ischemic encephalopathy, prediction of features of its course, introduction of appropriate modifications in principles of treatment of patients, including development of new approaches to organization of therapy, rehabilitation and prevention. In particular, therapeutic and preventive prospects of use of composite pharmacological correction and low-intensity laser action on the body and damaged links of homeostasis have been practically not studied. . [11]. Therefore, we consider it necessary to simply draw attention to numerous facts indicating the presence of significant difficulties in pharmacotherapy for obstructive bronchitis and bronchiolitis, against the background of hypoxic-ischemic encephalopathy in young children, caused by a variety of reasons.

The main therapeutic method for treating obstructive bronchitis, against the background of hypoxic-ischemic encephalopathy in young children and to this day, remains antihypoxic antioxidant membrane-stabilizing membrane-protective and immunomodulatory therapy.

Objective of the study: Optimization of complex therapy and rehabilitation of young children with obstructive bronchitis against the background of hypoxic-ischemic encephalopathy.

Materials and methods of the study. The main groups of observed patients are represented here by 88 children with a significant degree of severity of aggravated premorbid soil in the form of various somatic and inflammatory diseases of parents, the obligatory presence in the pedigree of one or another frequency of damage to the nervous system, metabolic-hormonal and other disorders, ecopathological hazards leading to disruption of the child's development and undermining the formation and development of his immunological and homeostatic mechanisms. The observed children were distributed as follows:

Group I - 44 children who received traditional treatment, Group II - 44 children who received Aevit, Cytochrome C, Trental in addition to traditional treatment. Aevit was prescribed in the following course doses: for moderate to severe forms, 5 to 8 injections daily, and for severe forms, 7 to 10 injections in two divided doses. Cytochrome C in a dose of 5-10 mg intravenously in the following course doses: for moderate to severe forms, 5 to 8 injections daily, and for severe forms, 7 to 10 injections. Trental in a dose of 0.2-0.3 ml intravenously in the following course doses: for moderate to severe forms, 5 to 8 injections daily, and for severe forms, 7 to 10 injections as one of the key vasoactive agents.

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

Analysis of the obtained data presented in the tables, from which it is obvious that against the background of traditional therapy of the I group of patients, almost all the analyzed symptoms of obstructive bronchitis, against the background of hypoxic-ischemic encephalopathy in children persisted for a longer time than in the II groups, which received the modified therapy methods developed by us.

Table 1

Dynamics of the main clinical symptoms in children with obstructive bronchitis, against the background of hypoxic-ischemic encephalopathy of group I-II against the background of a modified method of therapy

Clinical symptoms	of the observed group of children			
	I group	P	II group	P
Improvement of general condition	6, ± 0,4 8	<0,05	5,2 ± 0,4	<0,1
Normalization of skin color	8,3 ± 0,5	<0,01	7,0 ± 0,6	<0,5
Normalization of breathing rhythm	8,7 ± 0,6	<0,05	7,2 ± 0,7	<0,1
Normalization of cardiovascular activity	8,0 ± 0,7	<0,05	7,3 ± 0,6	<0,5
Restoration of muscle tone	9,9 ± 0,6	<0,1	9,2 ± 0,5	<0,1
Disappearance of fontanelle tension	5,3 ± 0,4	<0,05	4,9 ± 0,4	<0,1
Disappearance of limb tremor	9,4 ± 0,6	<0,05	9,1 ± 0,7	<0,05
Number of days spent in hospital	13,7 ± 1,0	<0,1	12,4 ± 1,1	<0,5

Note: P1 - reliability of differences between groups I and II.

Dynamic analysis of the clinical symptom complex in obstructive bronchitis, against the background of hypoxic-ischemic encephalopathy in children of the first group, in whom its therapeutic correction was used, convincingly testifies in favor of the greatest optimality of modification in the second group with daily use of aevit, cytochrome-c, trental.

In dynamic terms, within the groups receiving modified methods of therapy, the course of the disease was observed in group I compared to group II, "delay" in the disappearance of symptoms of each of the symptom complexes. When comparing the average terms of normalization of the main clinical manifestations of obstructive bronchitis, against the background of hypoxic-ischemic encephalopathy in young children, in group II, an acceleration of normalization by an average of 2-3 days was revealed, compared with the groups of children who did not receive the modified method of therapy. The differences were statistically significant. By the end of the individual course of antioxidant immuno-metabolic correction in these groups of patients, clinical

manifestations of the disease were completely eliminated in 95.2% of them, while in the rest, with traditional treatment measures - only in 69.8% of patients.

In addition, it can be noted that against the background of modified therapy, there was a significantly less severe course of diseases with a very clear phenomenon of "break" in the dynamics of the progression of the leading symptom described above. In patients of this group, the phenomena of general intoxication disappeared faster; and the less severe nature of the course 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 them only in 2.1% (only three children), and with traditional treatment of patients in 15.7%.

Conclusion. The inclusion of aevit cytochrome-c, trental in the complex treatment of children with obstructive bronchitis, against the background of hypoxic-ischemic encephalopathy improves its final results so effectively that it becomes strictly mandatory. This conclusion is also confirmed by the analytical calculations of clinical-immuno-biochemical observations presented below.

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