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INFLUENCE OF NEGATIVE PREMORBID AND ECOLOPATHOLOGICAL FACTORS ON THE COURSE OF OBSTRUCTIVE BRONCHITIS IN CHILDREN AGAINST THE BACKGROUND OF HYPOXIC-ISCHEMIC ENCEPHALOPATHY

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Abstract. The most important point in this article is the analysis of the conditions of intrauterine development of the fetus (the nature of pregnancy and its burden, the state of health of the mother, hereditary and acquired pathology, characteristics of childbirth, environmental hazards, etc.) and the condition of the child in the first hours and days his life, necessary to determine the degree of influence of premorbid factors as a pathogenic soil on the health of the child and his susceptibility to damage to the central nervous system and respiratory organs already in the pre-neonatal period. With this in mind, in a series of own observations, a clinical and genealogical analysis of 127 families with patients with encephalopathy and followed in dynamics was carried out.

Keywords: premorbid and environmental factors, obstructive bronchitis, children, hypoxic-ischemic encephalopathy

Relevance. In the development of acute pathology of the respiratory organs, not only the infectious factor is important, but also the initial level of children's health. In turn, the initial level depends on intrauterine development, intranatal period and background pathology, in particular, hypoxic-ischemic encephalopathy. [1,3,6]. A number of researchers have identified a relationship between CNS damage and the development of bronchopulmonary pathology. Particular difficulties arise in the diagnosis of obstructive bronchitis in young children with hypoxic-ischemic encephalopathy. [10].

To date, prognostic criteria for the development and outcomes 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 frequency 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 unresolved problem. [2,5,8]. The pathogenetic role of the

totality 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 complex of ecopathobiological influences pathogenetically significant for these diseases, place of residence, negative technological working conditions with their adverse effects on immunity, metabolism for parents and their children. [4,7,9]. The list of the main factors of pathogenic premorbid soil for the active detection and timely treatment of children from the "risk" group has not been defined.

Purpose of the study: To study the impact of negative premorbid and environmental pathological factors on the course of obstructive bronchitis in children with hypoxic-ischemic encephalopathy.

Materials and research methods. It is now clear that susceptibility to neurological diseases is often genetically determined. With this in mind, in a series of own observations, a clinical and genealogical analysis of 127 families with patients with encephalopathy and followed in dynamics was carried out. A total of 3261 people were studied using the proband method in this model population, of which at the time of the study 2356 (72.2%) were relatively healthy and 905 (27.8%) were sick with one or another pathology. For a comparative assessment, a similar model population of the genealogical tree of 21 practically healthy newborns was used, studied as a control and according to the immuno-biochemical parameters mentioned below. In this group, data on 584 people were studied, of which 496 (84.9%) were healthy and 88 (15.1%) were sick.

Research results. From the anamnesis it was found out that the observed children were born mainly to young parents: up to 25 years old - 86 (33.7%); up to 30 - 121 (47.5%); up to 35 - 36 (14.1%); and over 35 - 12 (4.7%). At the same time, in the first birth -91 (35.7%); 2-3-x - 143 (56.1%); 4-5-x - 21 (8.2%), i.e. predominantly not in primiparas. The latter, unfortunately, just reflects the unfavorable premorbid soil of patients due to various deviations in the state of health of his mother and other pathogenic factors of obstetric anamnesis. We note here only that in many of those who gave birth again, pregnancy was previously interrupted by abortions or spontaneous miscarriages. In addition, in the anamnesis of sick children, there were many other burdens, "purely" somatogenic (on the part of the mother and fetus), as well as ecopathological.

Within the framework of the goal and objectives of our own research, it was necessary to resolve the issue of assessing the degree of burdened anamnesis of the studied patients for other factors of pathogenic soil in their premorbid (somatogenic and ecopathological). Their list, the evaluation of which was focused on, is presented in Table 1.

Table 1.

Factors of pathological premorbid soil, which determine the perinatal burden of the observed patients with obstructive bronchitis, against the background of hypoxic-ischemic encephalopathy, referring them to the "risk" group for its development (on the part of the pregnant woman).

The nature of pathogenic factors soils in premorbid	**Their frequency of occurrence (%)in depending on the severity diseases**			
	Medium		heavy	
	abs.	%	abs.	%
-mother's age over 35 years	12	4,7	36	14,1
- neurological diseases in the pedigree	62	24,3	121	47,5
-neurological diseases in pregnant women	43	16,9	84	32,9
- somatic diseases	71	27,8	164	64,3
-anemia	64	25,0	136	53,3
- infectious-allergic pathology	41	16,1	97	38,0
- metabolic and hormonal disorders	24	9,4	63	24,7
- acute illness during pregnancy	27	10,6	56	22,0
- exacerbation of chronic diseases	12	4,7	37	14,5
-toxicosis of the first half of pregnancy	54	21,2	85	33,3
-toxicosis of the second half of pregnancy	38	14,9	66	25,9
- threatening miscarriage	17	6,7	32	12,5
- nephropathy of pregnant women	15	5,9	41	16,1
-eclampsia	3	1,2	8	3,1
- polyhydramnios	12	4,7	27	10,6
- miscarriage	3	1,2	18	7,6
- overdue pregnancy	11	4,3	24	9,4
-weak labor activity	38	14,9	76	29,8
-excessive labor activity	41	16,1	94	36,9
- pathology of pregnancy	23	9,0	47	18,4
- pathology of childbirth	46	18,0	91	35,7
- professional hazards	26	9,1	38	14,9
- environmental hazards	63	24,7	150	58,8

This table draws attention to the fact that, on the one hand, both for moderate and severe forms of obstructive bronchitis, against the background of hypoxic-ischemic encephalopathy of the observed newborns, it turned out to be characteristic of the premorbid complex approximately the same in terms of share in the pathogenic soil burdened, i.e. general qualitative orientation of its background; on the other hand, a significantly high qualitative weight of these signs in the severe course of the disease.

The most significant factors in this case were: from the side of the influence of the mother on the fetus of the pathology of the central nervous system in the pedigree and in the mother herself; extragenital inflammatory diseases; somatic and infectious-allergic pathology; pathology of pregnancy; metabolic and hormonal disorders; various environmental hazards of production and life; on the part of the fetus - a combination of intrauterine hypoxia and asphyxia of the fetus and newborn; early artificial feeding and its defects; defects in newborn care;

As a result of the analysis, it turned out that the influence of environmentally unfavorable factors in the form of peculiarities of the climatic impact of the region with a sharply continental climate, in which the observed children live and fell ill, is another very important side of their pathogenic premorbid soil in terms of negative consequences.

In the course of the research, it was found that out of 255 observed sick children, 165 (64.7%) had a severe form upon admission to the hospital, and only 90 (35.3%) had a moderate form (mild cases of the disease in our observations). did not exist at all). At the same time, a larger proportion of severe variants of the course of the disease falls on the hot dry period of the year - 61.8% (in 102 children), than in the cool 38.2% (in 63 children). And in total, taking into account moderate variants of the disease, 53.3% (in 48 children) were registered in the summer-autumn period and 41.2% (in 52 children) in the winter-spring period, with a high reliability of the intergroup difference ($p<0.05$).

In general, we can state a very significant role of hot and dry climate as an ecopathological factor in the mechanisms of formation and manifestation of obstructive bronchitis against the background of hypoxic-ischemic encephalopathy in newborns and young children living in our region. At the same time, emphasis is placed on the fact that this factor, along with hereditary burden, should be regarded as significant in the spectrum of signs and criteria that classify still healthy children into the "risk" group. The data obtained also allow us to state that the advantage of the occurrence of adverse environmental environmental factors, under the conditions of which the fetus developed in a pregnant woman, is probably pathogenically less significant for the development of birth trauma in a newborn than the totality of somatogenic factors of the mother's body. (hereditarily determined or acquired).

A thorough and purposeful analysis of the information contained in the tables made it possible to conditionally identify 3 relatively independent variants of pathogenic soil in the premorbid of observed patients with obstructive bronchitis against the background of hypoxic-ischemic encephalopathy:

I-burdening of the 1st degree, when directly related 2-4 significant pathogenic factors are detected;

II-burdenedness of the 2nd degree, respectively 5-7;

III-burdenedness of the 3rd degree, respectively, more than 7 such factors.

Note that in our own studies, among all 255 observed patients, we identified these variants with the following frequency: 1st - 20.7% (in 53 children); 2nd - 47.5% (in 121 children); 3rd - 31.8% (in 81 children). And this means that if we take each individual variant of the degree of premorbid burden, then the 2nd variant is relatively more common, i.e. 5-7 factors of adverse impact on the child. But if we consider the issue from other positions, namely in the aspect of the same set of factors, then the occurrence of the most pronounced degree of burden (2 and 3 options) will be 79.3% (in 202 children), while less (1 and 2) - 20.7% (in 53 children), i.e. with a noticeable difference both in percentage and in the number of newborns in these combinations of options. When analyzing the differences between these combinations for severe and moderate forms of obstructive bronchitis, against the background of hypoxic-ischemic encephalopathy,

the differences were even more noticeable (64.7% and 35.3%, respectively).

It was interesting to trace the contribution of each of the variants to each form of disease severity.

Thus, the above results make it quite obvious that the degree of burdening of the premorbid soil probably makes a decisive contribution not only to the early development of the disease, but also to its pathogenesis, determining the subsequent severity of the disease.

Conclusion. Such a widespread pathology of the central nervous system makes it possible to consider encephalopathy in observed patients as a certain hereditary burden in the complex of pathogenic soil factors in their premorbidity, and the very presence of neurological diseases in the closest relatives and the frequency of pathology in the genealogical tree as an important criterion for "risk "Susceptibility of children to the occurrence of encephalopathy in the pre-pere-non-natal period of life.

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