

Cerebral Palsy as a Medical and Social Problem

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Relevance of the study. Cerebral palsy (cerebral palsy) is one of the most common diseases in the world, which leads to disability in childhood due to impaired motor development. This disease occurs due to brain damage during intrauterine development, childbirth and newborn, manifested by motor disorders - paresis, paralysis, hyperkinesia of the muscles of the arms, neck, trunk and tongue, which adversely affects the child's self-care. 60-80% of children with cerebral palsy have a change in their psyche and speech. Thus, with cerebral palsy, the most important functions for human life are affected: movement, speech, and the psyche. It is proved that cerebral palsy is an urgent medical and social problem, due to its prevalence, which reaches 3-5 per 1000 newborns and disability of young patients [1.3.5.7.9]. Numerous other researchers also believe that cerebral palsy is a severe disease of the central nervous system (CNS), resulting from underdevelopment or damage to the brain in early ontogenesis. At the same time, the most severely affected are the large hemispheres of the brain, which regulate voluntary movements, speech and other cortical functions. Motor disorders are leading in the clinical picture of cerebral palsy.

About 500 factors are known to explain the causes of the appearance of the cerebral palsy clinic. Since the development of medical science and research methods does not stand still, more of these factors will be found over time, and forecasts for the rehabilitation of children with cerebral palsy will become even more pessimistic. Such a paradoxical conclusion does not suit doctors and parents of sick children with cerebral palsy. The muscular system of the maxillofacial region in such children does not remain isolated from myofunctional disorders that cause disharmony in the formation of the dentofacial apparatus and are an integral part of cerebral palsy syndromes. By its nature, this disease is polyetiological, but the variety of its manifestations depends on a single pathogenesis. The essence of pathogenesis is that any pathological factor affecting the fetus at birth or in the first months of life disrupts the development of the immature brain. Pathology of mature brain formations, its manifestations at different stages of postnatal development determine the main clinical symptoms of the disease.

The pathology of the formation of the immature brain, its manifestations at different stages of postnatal development determine the main clinical symptoms of the disease. Today, among the etiopathogenetic factors of cerebral palsy, several main ones are traditionally distinguished: asphyxia during childbirth, low body weight (NMT), premature birth (MAT), intrauterine infection (IUI), genetic causes, morphological changes in brain structures. The most important factors are intrauterine and/or birth asphyxia, premature birth and the ratio of fetal weight to gestational age. The importance of birth asphyxia, which accounts for 20 to 30% of cases of cerebral palsy, is especially actively discussed as the most important intranatal risk factor for the development of cerebral palsy; researchers' opinions on this issue are very contradictory [2.6.8.10].

Currently, a number of authors attach great importance to programmed cell death or apoptosis in the development of cerebral palsy, which is a physiological, flexible process that is an integral part of the development of cellular homeostasis, the main morphological feature of which is cell compression, contraction. Apoptosis is not a random process, it is a genetically programmed cell death, which is signaled by the cell itself. Apoptosis is associated with hypoxia, which induces the expression of a number of factors. Information about the role of apoptosis in the development of cerebral palsy has convincing evidence shown in special studies that have established a link between the development of cerebral palsy and apoptosis in experimental and clinical settings. Premature birth (MP) is an important risk factor for the development of cerebral palsy. It has been shown that the presence of MaT in the pathogenesis of cerebral palsy ranges from 18 to 33%. There is evidence that the number of

premature babies in the population of patients with cerebral palsy is 8 times higher than in the healthy population. VUI (intrauterine infection and urinary tract infection of the mother) is of great importance as a risk factor for the development of cerebral palsy, since in 50% of cases this factor leads to the risk of developing cerebral palsy. In about 70-80% of cases, the cause of cerebral palsy is infectious agents passing through the placenta of the fetus and causing inflammatory changes in the fetal brain.

Congenital rubella, cytomegalovirus and toxoplasmosis are of particular importance. Thus, when a mother is infected with rubella, the frequency of intrauterine lesions ranges from 16 to 59%, and toxoplasmosis is the cause of 17% of all other intrauterine lesions. In recent years, especially abroad, many pediatric neurologists and obstetricians have identified the main role of the genetic factor in the development of cerebral palsy in at least 25-30% of cases. Today we can talk not about individual cases of cerebral palsy, which are more or less related to genetic factors, but about the whole complex of mechanisms of encephalopathy pathogenesis, and then about the genetic origin of cerebral palsy as a whole. Cerebral palsy manifests itself in the form of motor, speech and mental disorders. The main symptoms of cerebral palsy are motor disorders. At the same time, in addition to disorders of movement and body retention (pathological postural reflex mechanism), cerebral palsy has mental retardation, epileptic syndrome, deafness, sensitivity disorders, in which the manifestation of concomitant symptoms is not always associated with the severity of the severity of motor disorders. In addition to the listed variants of etiological factors of cerebral palsy, additional risk factors for its development have recently been identified [11.13.14].

Thus, multiple pregnancies occur in 4% of cases of BMF and are considered as a predisposing factor for the development of this disease. Destruction of nervous tissue, dysontogenesis, cytoarchitectonic diseases leading to the development of cerebral palsy may be the result of various intoxications (industrial and household chemicals, medicines, alcohol, drugs). Fetal developmental disorders leading to the development of cerebral palsy, brain diseases, can be caused by improper and insufficient nutrition of the mother, stressful conditions during pregnancy. To date, about 400 predisposing factors have been identified that contribute to the development of cerebral palsy [10.12.13.14].

Conclusion. Spastic diplegia occurs in about half of patients with cerebral palsy. It is characterized by impaired movements of the arms and legs, and the legs are affected more. The hyperkinetic form of cerebral palsy is observed in 20-25% of all patients with this pathology. This form of cerebral palsy often occurs due to incompatibility of the mother's and child's blood with Rh antigen, ABO antigens, and can also develop due to bleeding into the terminal arteries of the subcortical nuclei.

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