



CLINICAL SYMPTOMS OF HYPOXIC-ISCHEMIC ENCEPHALOPATHY IN NEWBORN WITH DIFFERENT GESTATION

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Annotation

The huge increase in childhood morbidity is a very urgent problem of modern health care. Among them, an important place is occupied by perinatal lesions of the nervous system, which are diagnosed in 85% of full-term and almost 100% of premature babies [5]. Perinatal hypoxic lesions of the central nervous system cause a high percentage of neurological disorders: from mild functional disorders to severe disabling conditions [8, 10, 13]. According to WHO, 10% of newborns have neurological disorders of varying severity, the cause of which is hypoxic-ischemic brain damage [6, 9].

Key words: hypoxic-ischemic encephalopathy, gestational age, clinical symptoms, severity, course of the disease, postmaturity.

Relevance

Perinatal hypoxic brain lesions in newborns are one of the most urgent problems of pediatric neurology. This is due to the high prevalence of pathology, a significant level of mortality, high risk, the formation of disability.

Hypoxic-ischemic encephalopathy is an acute brain injury of the fetus and newborn after perinatal asphyxia, caused by hypoxemia and ischemia of sufficient strength and





duration to lead to functional and biochemical changes and severe disorders of energy metabolism [1, 2, 11, 14].

In most cases, hypoxic-ischemic encephalopathy appears at birth or within a few hours after birth. There are 3 degrees of severity of encephalopathy.

Taking into account this information, 24 newborns born with signs of cerebral ischemia were examined. According to the gestational age of 38-39 weeks - 12 newborns, 40-41 weeks - 7 newborns, 42-43 weeks - 5 newborns. From the anamnesis, the leading risk factors are tight entanglement of the umbilical cord around the neck, premature complete or incomplete placental abruption, diseases of the cardiovascular and respiratory system in the mother, insufficient respiratory effort of the newborn [3, 4, 7, 12].

More than half of the observations have a combination of 2-3 high risk factors for the development of posthypoxic complications.

The development of the clinic and the course of the disease depended very much on the severity of hypoxic-ischemic encephalopathy. Mild degree of hypoxic-ischemic encephalopathy with signs of moderate muscle tone; revitalization of tendon reflexes during the first few days; transient behavioral disturbance in the form of weak sucking, restlessness or drowsiness - was observed in 9 newborns with a gestation period of 38-39 weeks. In these newborns, after 3-4 days, the neurological status returned to normal. Hypoxic-ischemic encephalopathy of moderate severity with symptoms of muscular hypotension and a significant decrease in tendon reflexes, lethargy, drowsiness, with periods of short-term apnea, with convulsions in the first day of life - was observed in 8 newborns, of which 1 - with a gestational age of 38-39 weeks, 5 - with a gestation period of 40-41 weeks, 2 - with a gestation period of 42-43 weeks. Complete neurological recovery in these newborns occurred within 1-2 weeks. Severe hypoxic-ischemic encephalopathy with manifestations of stupor or coma; with a lack of response to physical stimuli; with irregular breathing; diffuse muscle hypotonia and a deep decrease in tendon reflexes, the absence of sucking, swallowing, grasping reflexes; oculomotor disorders such as nystagmus, exophthalmos, and lack of consensual eye movements; early and frequent generalized seizures, resistant to standard therapy, increasing in the next 2-3 days; instability of the heart rate and blood pressure; renal failure - was observed in 7 newborns, of which 2 - with a gestation period of 38-39 weeks, 2 - with a gestation period of 40-41 weeks, 3 - with a gestation period of 42-43 weeks. In newborns with severe hypoxic-ischemic encephalopathy, the reaction to the environment gradually recovered by the 4th-5th day of life. Hypotension and feeding difficulties persisted, requiring tube feeding for a week and up to a month.





As can be seen from the information presented, when comparing the features of the clinical picture depending on the gestational age, a severe degree of hypoxic-ischemic encephalopathy was mainly observed in the group of newborns with signs of postmaturity, that is, with a gestational age of 42-43 weeks. There is no clear boundary between the severity of hypoxic-ischemic encephalopathy. After an initial period of well-being, a sudden deterioration may follow, usually indicative of a reperfusion disorder. Features of the staging of clinical symptoms of hypoxic-ischemic encephalopathy require the provision of clinical and laboratory monitoring for a long period of time.

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