not affected by presence of JAK2 V617F mutation.

RESPIRATORY PATTERNS OF PREMATURE INFANTS WITH PERINATAL DISORDERS OF THE CENTRAL NERVOUS SYSTEM

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Relevance. Postnatal adaptation of the respiratory system of premature infants has significant features: breathing is irregular in depth, amplitude and frequency. Periodic respiratory arrest is more the rule than the exception.

Aim of the research. To study the features of the respiratory pattern of premature infants with perinatal disorders of CNS.

Methods and materials. The 59 premature infants with a gestational age of 29-33 weeks, were examined. The I group consisted of 26 premature infants with hypoxic-hemorrhagic disordes of CNS (intraventricular hemorrhages of I-II degree), the II group - 33 newborns with hypoxic-ischemic CNS lesions. At the age of 2-3 weeks, the ECG monitoring with recording of rheopneumogram was conducted for all babies («Cardiotechnics 04-8M», «Incart», St. Petersburg, Russia). The main advantage of this method of research is the ability to recording the heart rate and respiratory movements in the natural newborn's condition.

Results. The analysis of the indicators of the respiratory pattern revealed the presence of respiratory pauses of up to 10 seconds in all premature babies with a significant advantage in children of group I. Apnea from 10 to 20 seconds without clinical manifestations occurred in 95.4% of children of group I and 74.2% - group II. In quantitative terms, pauses of this duration were 7.3 times higher in infants with intraventricular hemorrhages of I-II degree. Apnea for more than 20 seconds was recorded only in neonates of group I and was accompanied with bradycardia, acrocyanosis, muscular hypotension, self-breathing resumed after tactile stimulation. An inverse correlation was found between gestational age and the number of apneas ($r = -0.42$, $p = 0.01$).

Conclusions. In all premature infants were determined by the periodic rhythm of respiration, which reflects the immaturity of the central mechanisms of regulation. The longest respiratory pauses, which were accompanied by clinical manifestations (bradycardia, acrocyanosis) occurred in premature infants with hypoxic-hemorrhagic lesions of the central nervous system, which allows collecting such children into a group with a high risk of life-threatening conditions.