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TITLE

LABORATORY AND INSTRUMENTAL MARKERS OF SEVERE NEONATAL LESIONS OF THE CNS IN EARLY PRETERM LABOR

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ABSTRACT

The aim of this study was to develop a comprehensive system for evaluating the condition of the central nervous system of the fetus and the newborn in preterm labor based on ultrasound and Doppler in fetal brain vessels to reduce perinatal CNS lesions in preterm labor. The object of study were 120 pregnant women and preterm infants born at 22-32 weeks of gestation as a result of premature birth. The vast majority of women with preterm labor in an officially registered marriage did not take place - 73 (76.04%). Tobacco smoking was observed in 70 (72.92%) of the observed women. In 77 (80.2%) women with preterm labor history revealed somatic diseases, while 67 (67.79%) diagnosed with combined pathology. Noteworthy is the high incidence of cardiovascular diseases - 38 (39,58%), endocrine diseases - 22 (22,9%) and urinary system - 26 (27.08 %). Only women with preterm birth have been identified obesity (BMI> 30) - 11 (11,46%). Noteworthy is significantly high incidence of gynecological diseases in the group of women with preterm labor 67 (69,79%), established before pregnancy, including co-genital pathologies - 49 (51,04%). As a result of all labours live children were born, regardless of gestational age. The severity of CNS damage depended on the duration of pregnancy, method of delivery.

A relation markers level indicators, indicators of prenatal hemodynamic fetal CNS, early perinatal outcomes. It is noted that reducing, zero and reverse blood flow in the vertebral artery, the jugular vein was an increase in performance of the protein S-100 to 250, NSE and 2.5, antibodies to nerve growth factor and 12, the reduction of myelin basic protein and 4, due to perinatal CNS lesions of varying severity. With increasing severity of perinatal CNS lesions, respectively, increases the concentration of CNS markers and aggravated indices of central hemodynamics prenatal fetus.

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