

## **PERINATAL OUTCOMES IN SEVERE PREECLAMPSIA**

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### **Objective**

To conduct a comparative analysis of the condition of newborns depending on the mode of delivery in women who have experienced severe preeclampsia.

### **Materials and Methods**

A comprehensive clinical and biochemical examination was conducted on 60 pregnant women at 28-40 weeks of gestation complicated by severe preeclampsia, with 30 of them undergoing abdominal delivery and the remaining 30 delivering vaginally. The control group consisted of 20 pregnant women with a normal course of pregnancy at the same gestational age. The groups were representative in terms of parity, age, and severity of preeclampsia. The pregnant women underwent thorough clinical and laboratory examinations. Functional research methods were employed, including fetal condition assessment through auscultation, ultrasound biometry of the fetus and placenta, and Doppler assessment of uteroplacental-fetal circulation. The condition of the newborns was evaluated jointly with a neonatologist using the Apgar score.

### **Conclusions**

In the current state of perinatal technology, when choosing the management strategy for pregnant women with severe preeclampsia, the assessment of fetal viability, gestational age, the degree of uteroplacental-fetal circulation impairment, and the level of perinatal care are equally important.

**Keywords:** Perinatal outcomes, preeclampsia

Preeclampsia complicates up to 10% of pregnancies worldwide and is a leading cause of infant morbidity and mortality. Perinatal mortality accounts for approximately 10% of cases. Preeclampsia is a syndrome that negatively affects almost all organs and systems of the mother's body. However, it should be noted that fetal distress may be associated with the development of fetal growth restriction (FGR) due to impaired uteroplacental blood flow.

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fetus and placenta, and Doppler assessment of uteroplacental-fetal circulation. The condition of the newborns was evaluated jointly with a neonatologist using the Apgar score.

### **Results and Discussion**

In all pregnant women with severe preeclampsia, we observed types 4 and 5 disturbances in uteroplacental-fetal circulation, manifested by a decrease in both uterine and umbilical artery blood flow. Significant disturbances in uteroplacental-fetal circulation contributed to the development of FGR and, consequently, adverse perinatal outcomes. Ultrasound revealed severe intrauterine fetal growth restriction (IUGR) of grade II-III, and placental aging was diagnosed by placental grading. Pronounced disturbances in the reactivity of the fetal cardiovascular system, especially in patients with decompensated blood flow, were noted. Biometric indicators indicated a severe fetal condition and the risk of antenatal and perinatal losses. Pregnant women with severe preeclampsia gave birth to children with hypotrophy, low Apgar scores, and central respiratory distress syndrome. The neonatal period was difficult, with the development of neurological symptoms, weight loss, prolonged transient jaundice, and poor adaptation. This was more pronounced in cases of emergency cesarean section. Vaginal delivery resulted in the birth of better-prepared infants, with a 2-fold lower incidence of hypotrophy and neurological symptoms, and a 3-fold lower rate of perinatal losses compared to operative delivery. Additionally, a more favorable course of the early neonatal period was observed.

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