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## PERINATAL OUTCOMES OF MULTIPLE PREGNANCIES WITH FETO-FETAL TRANSFUSION SYNDROME

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*Abstract: Feto-fetal transfusion syndrome is one of the most severe complications of monochorial multiple pregnancies, which occurs in 10-15% of cases. The uneven distribution of blood flow between the twins due to the presence of unbalanced anastomoses of the placenta leads to significant changes in the cardiovascular system of the fetuses. In the absence of treatment, feto-fetal transfusion syndrome is associated with high perinatal morbidity and mortality in excess of 95%.*

*Monochorial multiple pregnancies complicated by feto-fetal transfusion syndrome are accompanied by a high risk of perinatal complications compared to uncomplicated monochorial twins. With monochorial multiple births complicated by feto-fetal transfusion syndrome, all newborns in the early neonatal period require detailed examination and dynamic observation.*

*Keywords: monochorial diamniotic multiple pregnancy, feto-fetal transfusion syndrome, perinatal outcomes.*

Topicality. Improving outcomes of multiple pregnancies is now becoming increasingly important. The focus is always on the problem associated with assessing the quality of health of children born. The data of the literature [1-3] indicate that the course of multiple pregnancies, regardless of the method of its occurrence, accompanies a greater number of complications than a singleton.

Adverse maternal and fetal outcomes for monochorial multiple births are as follows [1-4]:

- increase in the frequency of intrauterine fetal death by 4 times;
- 6-fold increase in neonatal mortality;
- 10-fold increase in perinatal mortality;
- an increase in the incidence of cerebral palsy by 3-7 times;
- an increase in the number of prenatal and intranatal complications in the mother by 2-4 times.

Feto-fetal transfusion syndrome is one of the most severe complications of monochorial multiple pregnancies, which occurs in 10-15% of cases. The uneven distribution of blood flow between the twins due to the presence of unbalanced anastomoses of the placenta leads to significant changes in the cardiovascular system of the fetuses. In the absence of treatment, feto-fetal transfusion syndrome is associated with high perinatal morbidity and mortality in excess of 95%. In children who have undergone feto-fetal transfusion syndrome, there is a high incidence of cardiovascular (87%), neurological (70%) and respiratory disorders (92%). Timely diagnosis and the choice of optimal treatment tactics for feto-fetal transfusion syndrome are decisive in improving perinatal

outcomes. Currently, there are several methods of treatment that help reduce the morbidity and mortality of newborns who have undergone fetofetal transfusion syndrome.

Thus, the study of the features of perinatal outcomes in monochorial twins, complicated by fetofetal transfusion syndrome at its various stages and methods of treatment, remains relevant.

The purpose of the study was to study the features of the course of monochorial multiple pregnancy, the effectiveness of various management tactics and perinatal outcomes in fetofetal transfusion syndrome.

Materials and methods of research. All patients were divided into two groups: the control group included 8 pregnant women with uncomplicated monochorial diamniotic twins; main - 11 pregnant monochorial diamniotic twins, complicated by fetofetal transfusion syndrome. Evaluation of neonatal outcomes included gestational age and birth weight, Apgar neonatal condition at 1st and 5th minutes, occurrence of respiratory disorders, damage to the central nervous system and other systems, and early neonatal mortality.

Results of the study. When comparing the gestational age of newborns, a significant difference in the study groups was revealed. The median gestational age of monochorial twins complicated by fetofetal transfusion syndrome was 31.8 weeks, while the uncomplicated one was 36.

When studying the number of children with a low score on the Apgar scale (less than 6/7 points), it was found that a lower score is characteristic of fetofetal transfusion syndrome. In the main group, it was 21% and 4% in the control group.

Comparison of the frequency of complications of the early neonatal period showed their predominance in the main group. The frequency of neurological morbidity in fetofetal transfusion syndrome increases by 21.2%, respiratory disorders - by 15.8%, retinopathy - by 5.7%.

Cases of early neonatal mortality were noted only in the group of newborns with fetofetal transfusion syndrome. The frequency of this indicator was 10.8%.

Conclusion. Monochorial multiple pregnancies complicated by fetofetal transfusion syndrome are accompanied by a high risk of perinatal complications compared to uncomplicated monochorial twins. With monochorial multiple births complicated by fetofetal transfusion syndrome, all newborns in the early neonatal period require detailed examination and dynamic observation.

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