



**CHANGES IN THE MOTHER-PLACENTA-FETUS SYSTEM IN WOMEN  
IN LABOR WITH IRON DEFICIENCY ANEMIA WITH A MODERATE  
PREDOMINANCE OF THE TONE OF THE SYMPATHETIC NERVOUS  
SYSTEM**

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**Resume**

The article is devoted to an urgent problem – changes occurring in the mother-placenta-fetus system against the background of changes in vegetative reactivity in women in labor with iron deficiency anemia of moderate severity. The object of the study was 30 women in labor with iron deficiency anemia of moderate severity. At the same time, 70% (21%) of women in labor revealed a moderate predominance of the tone of the sympathetic nervous system. Against the background of this kind of reactivity of the autonomic nervous system, it was determined that the large diameter of the placenta decreased by 3.3%, the small diameter by 3.9% and the thickness by 3.7%, as well as a decrease in the weight of the newborn by 5.82%.

**Keywords.** Iron deficiency anemia, vegetative reactivity, mother, placenta, fetus.

At present, changes in the functional system of the mother-placenta - fetus are becoming one of the main problems in obstetric practice in the perinatal and postnatal period.[ 11; 13; 7; 1] on the basis of this problem lay obstetric and extragenital pathologies, and on the basis of such pathological changes iron deficiency anemia has acquired one of the main places. With iron deficiency anemia in our country, about 2 billion residents have been ill. The introduction of modern methods of diagnosis, prevention and treatment of iron deficiency anemia in pregnant women is now considered one of the most important problems [8].





According to the Jaxon Health Organization, mainly among pregnant women, the prevalence of anemia is 80%, with a share of almost 90% of anemia, corresponding to iron deficiency anemia [2; 6; 12; 5]. Iron deficiency disrupts the transport of electrons in the human body, causing various complications, including hypoxic changes in the fetal body. [4;15; 20; 17; 22; 21]. Any changes that occur in the body are manifested in stages of excitation, adaptation, exhaustion in some cases, providing reactivity in the plane of the central nervous system, the vegetative nervous system, as well as the neuroendocrine system [14; 9; 10. 3; 18; 19]. Changes to occur in these stages do not burn without affecting the functional system of the mother-placenta - fetus.

In turn, an increase in the body's need for iron in pregnancy, as well as an increase in circulating blood volume in the fetal female body at the age of 2-3 months of pregnancy, fetal development, as well as the formation of lactation in the last weeks of pregnancy, further increases the excretion of iron in total 1500 mg of iron. As a result of such processes, a variety of pathological changes occur in the mother-placenta - fetal plane, in the body of a pregnant woman, as well as iron deficiency anemia in the body of the fetus.

The study and identification of changes that occur in these stages occupies a large place in the prevention of changes that occur in the perinatal and postnatal period. Alternative attachment to vegetative changes that occur in fetal women with iron deficiency anemia depends on the level of iron deficiency anemia in the placenta, the changes that occur in the fetus in Halda have not been fully studied until now. Attention to the above-mentioned processes depends on the degree of iron deficiency anemia, vegetative reactivation, and the identification of changes occurring in the fetus in the placenta remains one of the actual problems in obstetrics.

**Objective:** to detect changes in the placenta and fetus in women who give birth to iron deficiency anemia with moderate sympathetic nervous system reactivity with moderate to severe levels.

**Material and method of work.** The Material was studied in 30 women giving birth in the maternity department of the 1 Clinic of Samarkand State Medical University. In fetal women in each group, the total blood flow, vegetative reactivity, size of the placenta, mass as well as the weight of the fetus were studied.

### **Results obtained and their analysis**

In women who give birth with physiological fertility, the total blood flow rate is  $3,8 \pm 0,03 \cdot 10^{12}/l$ , and the hemoglobin content is  $112,8 \pm 0,5 \text{ g/l}$ , and the color indicator is





0,89, the number of breaths in them is  $16,2 \pm 0,3$  times per minute, and the number of heartbeats is  $76,8 \pm 1,0$  per minute. Hildebrant. the coefficient was  $4,7 \pm 0,1$ . When vegetative reactivity was studied using KIG: 100% of fetal women were found to have moderate vegetative reactivity, with the control activity of the sympathetic nervous system Amo –  $78,09 \pm 1,3$ , while the weight of the birth baby was  $3349,7 \pm 29,0$  gr.organized. When studying the dimensions of the satellite, the large diameter of the satellite was  $175,3 \pm 1,8$  mm, and the small diameter was  $164.6 \pm 1,8$  mm, the thickness was  $2,6 \pm 0,3$ , and the weight of the satellite was  $523,2 \pm 4.5$  gr, and the ratio of the weight of the satellite was  $6,4 \pm 0.01$ .

In women who give birth with moderate to severe levels of iron deficiency anemia, the total blood flow rate is  $3,59 \pm 0,02$   $10^{12}/l$  ( $r < 0,01$ ), while the hemoglobin content is  $94,1 \pm 0,6$  g/l ( $r < 0.001$ ), and the color indicator is  $0,78$  ( $R < 0.001$ ), the number of breaths in them is  $16,1 \pm 0,2$  times per minute ( $R < 0.01$ ), the number of Beats was  $81,8 \pm 1,0$  times per minute ( $R < 0,001$ ), while the Hildebrant coefficient was  $5,1 \pm 0.1$  ( $R < 0,001$ ). When vegetative reactivity is studied in them using KIG: in fetal women who give birth to 70%, the reactivity of the sympathetic nervous system is observed, while the control activity of the sympathetic nervous system is amo –  $78,1 \pm 1,3$  ( $R < 0,001$ ), the weight of the companion is  $500,8 \pm 4,1$  gr. ( $R < 0,001$ ) and the weight of a newborn baby is  $3154,8 \pm 25,0$  gr. ( $R < 0,001$ ). When the dimensions of the placenta are examined: a large diameter is  $169,5 \pm 2.0$  mm, ( $r < 0,05$ ), and a small diameter is  $158,5 \pm 2,0$  mm, ( $r < 0,05$ ), the thickness is  $2,5 \pm 0,3$  ( $R < 0,05$ ), and the weight of the placenta is  $500,8 \pm 4.1$  gr. the ratio of fetal weight to placental weight was  $6,3 \pm 0.01$ .

In turn, it should be said that in women who give birth with moderate severe iron deficiency anemia , the amount of women who give birth with moderate vegetative reactivity was 70%, with a dependence on the level of iron deficiency anemia, there was a decrease in fetal weight by 5.82%, the large size of the placenta by 3.3%, and the.

## Conclusion

Thus, iron deficiency anemia, as well as the average reactivity of the sympathetic nervous system on the basis of a relative chemo adaptation reaction to it, is characterized by spastic state in the histochemical barrier, the formation of an iron deficiency state, in turn, the formation of the placenta on the basis of a violation of gas exchange, and one of the main



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