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TITLE

EARLY PREDICTION OF SYNDROME FETAL GROWTH RESTRICTION BY INSULIN-LIKE GROWTH FACTOR.

AUTHOR/S

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ABSTRACT

Fetus growth restriction – is one of the great obstetrical syndrome. FGR - leading cause of perinatal morbidity and mortality. Objective. To study the diagnostic value of IGF (IGF-I) at the FGR we carried out a prospective analysis of pregnancy and birth outcomes in 150 women with fetal growth restriction. Materials and methods. The main group - 120 pregnant women with FGR. We divided all cases of FGR to early onset – before 34 weeks, and late onset – after 34 weeks. Control group - 30 pregnant women without any complications. Results. Our studies have shown that for uncomplicated pregnancy IGF-I levels increase with gestational age. By the deadline of 16-22 weeks of its average values were 207 ± 34 ng / ml. By the end of the second trimester of IGF-I values were 274 ± 27 ng / ml. During the third trimester of pregnancy, IGF-I levels ranged from 465 ± 37 ng / ml, and it fell slightly to full-term date and amounted to 368.67 ± 35 ng / ml. In pregnant women with FGR marked decrease IGF-I levels during the whole period of gestation. In case of late onset FGR in the second trimester (16 weeks) an average value of IGF-I was 152 ± 14 ng / ml, which is 1.36 times lower than with uncomplicated pregnancy. In case of early onset FGR - $123 \pm 7,5$ ng / ml, which is 1.68 times lower than the physiological level.

By the beginning of the third trimester of pregnancy, the level of IGF-I is: when late onset FGR - $285 \pm 16,1$ ng / ml, which is somewhat higher than in uncomplicated pregnancy; and early onset FGR - $243,33 \pm 12$ ng / ml, which is lower than in uncomplicated pregnancy.

Conclusions. result of our study we determined the predictive value of IGF-I in determining the development of FGR: If at 16-22 weeks values of IGF is equal or less than 150 ± 13 ng / ml, the pregnant woman has a high risk of severe and early FGR (sensitivity 79%, specificity 99%).

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