

Markers for prediction early and late preeclampsia and fetal development delay

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Preeclampsia (PE) is a pregnancy complication characterized by the development of generalized vascular spasm and endothelial dysfunction. Currently used concepts of early and late PE. At the same time 34 weeks is most often seen as a reference because it correlates with the violation of placentation in the early stages. Early PE is associated with a higher rate of neonatal morbidity and mortality; To determine the value of angiogenic factors VEGF, PDF and their receptor, VEGF-R1 in prediction of early and late preeclampsia with/without szrp was made a prospective study of 124 pregnant women with preeclampsia (PE) in moderate-to-severe, with/without delay syndrome fetal growth (sdfd).

The results of the study. The study of VEGF showed that at the beginning of II trimester when arrested on the background of PE early and late and when arrested, in the absence of PE the values of this FR had no significant differences from $42,1 \pm 4,1$ to $52,2 \pm 6,1$ PG/ml. 23-29 weeks To VEGF in the presence of szrp on the background of PE early, late and szrp not applicable to PE increased in 2-3 times and amounted to $115,7 \pm 12,0$ PG/ml, with a $99,2 \pm 8,9$ PG/ml $121,1 \pm 10,6$ respectively. In the third trimester continues to increase VEGF for late PE. Dynamics of VEGF-R1 fundamentally different. For late PE without szrp average level of VEGF-R1 in the period of 16-22 weeks is $2,6 \pm 0,3$ ng/ml in pregnant women with early PE without sdfd—3.6 times higher (9,4 ng/ml) for late PE with subsequent szrp is 1.5 times higher ($3,8 \pm 0,3$ ng/ml). With increasing gestational age and progression of PE observed increase in the concentration of VEGF-R1 as in the absence of szrp and if available. However, the level of the receptor in early PE 1.5–2 times higher than this figure.

Summary. Level of VEGF and throughout the gestation period studied does not differ in the early pre-eclampsia with / without FGR. The concentration of sFlt-1 increases several times since II trimester, especially for early preeclampsia in combination with FGR. sFlt-1 has a high sensitivity for the early prediction of PE: sFlt-1 equal to or higher than $0,83 \pm 9,483$ ng / ml in 16–22 weeks with a sensitivity of 80% and $12,194 \pm 1,41$ ng / ml in 23–29 weeks sensitivity 82% indicate a high risk of early PE with FGR. (specificity 96%).

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