

P174 The features of fetoplacental angiogenesis in pregnant women with anamnestic embryonic losses

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The miscarriage is considered not only as the most important element of original selection, but also as the first manifestation of serious pathological changes, which in 30% of incidents are the cause of subsequent recurrent miscarriage. It is extremely important that 75-80% of losses were occurred within early gestational age (8-10 weeks). One of the important reasons for spontaneous miscarriage is the chorionic-placental factor, which in 40-50% of cases is the strongest predictor of the manifestation of perinatal pathology (placental dysfunction, preeclampsia, preterm birth) if pregnancy will progress. Therefore, the goal of our prospective study was to study the factors of fetoplacental angiogenesis in pregnant women with previous embryonic losses (PEL). We were decided to investigate the role of vascular endothelial growth factor (VEGF) and placental growth factor (PlGF) in the development of gestational complications in pregnant women who had previous pregnancy losses in the early gestational age. **METHODS** In accordance with the task of our study, 40 pregnant women were examined, in term of pregnancy 10-12 weeks. The clinical group was represented by 20 pregnant women who had a history of embryonic losses. 20 pregnant women with a physiological pregnancy comprised a control group. **RESULTS** According to the results of our prospective study, the difference in the serum level of VEGF between women with the physiological pregnancy (36.14 ± 3.88 pg/ml) and the clinical group (23.49 ± 2.88 pg/ml) had a statistically significant difference ($p < 0.05$). These results may indicate that placental development in pregnant women with PEL were occurred in conditions of impaired formation of processes angiogenesis and disorders local hemodynamic. An analysis of the serum data of PlGF also revealed a significant decrease ($p < 0.05$) of PlGF to 11.85 ± 2.85 pg/ml (pregnant women with PEL) against 20.17 ± 2.92 pg/ml in women with a physiological process of gestation.

CONCLUSION The result of our study of endothelial angiogenesis factors in women with PEL may be evidence of impaired optimal blood flow in the uterus-placenta-fetus system and may be an early marker of placenta-dependent pregnancy complications.