
IMMUNOCHISTOCHEMICAL ALTERATIONS IN PLACENTA AT GESTOSIS.

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Objectives: The goal of the present work was to analyze the role of immune complexes and NO-synthase activity of placenta in pathogenesis of gestosis.

Methods: 43 woman whose pregnancies were complicated with gestosis (main group) and 22 woman with physiological pregnancy (control group) were observed. The main group include 28 pregnant woman with nephropathy of I stage and 15 - with nephropathy of II-III stages. Composition and localization of fixed immune complexes were detected in placenta by immunofluorescent methods using monoclonal antisera to A, M, G immunoglobulins and C3 complement fraction. NADPH-diaphorase (NO - synthase) activity of syncytiotrophoblast were detected by histochemical method. Also excretion of nitrites, nitrates and products of protein proteolysis of pregnant women in urine were analyzed.

Results. Immune complexes with A, G and predominantly M immunoglobuline classes were found in placenta from the main group. NADPH-diaphorase activity of impaired zones of syncytiotrophoblast and vessel endothelium was decreased. The expression of immunohistochemical alterations were correlated with degree of gestosis and urine excretion of nitrites and oligopeptides.

Conclusions: The results obtained have been demonstrated the key role of pathological immune complexes and NO-generated systems in formation of placental deficiency in pregnancy complicated by gestosis.

THE POSSIBILITY OF PLACENTAL INSUFFICIENCY PROGNOSTICATION IN THE FIRST TRIMESTER

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Objective: prognostication of the development of placental insufficiency in the first trimester of pregnancy.

Methods: there were 317 pregnant women examined in the first, second and third trimesters.

The method used: ultrasound investigation with the measurement of miometry hypertonus, biometry of embryo, amnion and chorion, location of the fertilized egg; dopplerometry of uterine arteries; definition of the b-HGG level investigation of the cervical canal contents for pathogen flora.

Results: as a result of the examination 2 groups were singled out. With the first group, having a high chance of placental insufficiency, the following indexes were registered: the size of hypertonus in the area of chorion exceeded 1 sm, the fertilized egg was located in the middle and lower parts of uterus, the index of resistance was $0,991 \pm 0,085$; the level of b-HGG was 2 MoM; the content of colony forming units (CFU) in the cervical canal was 10^{12} and more.

The second group had a lower risk of placental insufficiency development. No hypertonus at the place of chorion attachment, fertilized egg was located in the upper parts of uterus; the index of resistance was $0,818 \pm 0,71$; the level of b-HGG was 0,5-1 MoM; growth of 10^{5-6} CFU was registered in the contents of the cervical canal.

In the second and third trimesters the development of placental insufficiency was diagnosed in 60% cases with the first group, and 14% - with the second.

Conclusion: complex examination in the first trimester makes it possible to prognosticate the development of placental insufficiency and promote the diminution of perinatal incidence and death rate.