

Preeclampsia and selected immunogenetic factors

Our objective was to evaluate plasma levels of the eight most common antiphospholipid antibodies (antiphosphatidylserine, antiphosphatidylethanolamine, antiphosphatidylinositol, antiphosphatidylglycerol, antiphosphatidic acid, antiannexin V, anticardiolipin and anti 2-glycoprotein I antibodies) by ELISA method and selected inherited thrombophilia (F V- Leiden mutation, FII mutation G20210A, C677T and A1298C variants of the gene for methylene tetrahydrofolate reductase-MTHFR) by DNA analysis of peripheral blood lymphocytes using the real-time PCR in fifty-five women with preeclampsia in the period immediately before urgent termination of pregnancy. Fifty-five healthy women without preeclampsia was considered as a control group. Entered data were examined using a non-parametric Wilcoxon's test, univariate analysis were performed using the Fisher's exact test and statistical dependence between variables was assessed using Spearman's rank correlation coefficient. We demonstrated that women with preeclampsia had significantly higher levels of anticardiolipin antibodies in the isotope IgG ($p < 0.01$) and IgM ($p < 0.01$), elevated levels of antiphosphatidylserine antibodies in the isotope IgG ($p < 0.01$) and antiethanolamine antibodies in the isotope IgM ($p < 0.01$) when compared to healthy controls. Parameter severe preeclampsia correlated positively with levels of anti 2-glycoprotein-I antibodies in the isotope of IgA ($r = 0.7223$, $p < 0.01$). The obtained results did not confirm a positive correlation between incidence of thrombophilic mutations and preeclampsia. Elevated levels of antiphospholipid antibodies particularly anti-2-glycoprotein I in the isotope IgA and anticardiolipin and antiphosphatidylserine antibodies in the isotope IgG could be useful for prediction of preeclampsia in pregnancies in advanced stages. Our results also support the idea of autoimmune background of preeclampsia.