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## HISTOCOMPATIBILITY ANTIGENS IN PRIMARY CHRONIC PLACENTAL FAILURE

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**Objective:** To study compatibility of married couples according to the HLA antigen system in normal and complicated by primary chronic placental failure pregnancy.

**Methods:** A clinical and immunologic study was carried out in 40 couples with primary chronic placental failure and 30 couples with normal pregnancy. The heterogeneity degree in married couples was studied according to histocompatibility antigen of A and B locuses. HLA antigens were tested by standard lymphocytotoxic Terasaki test in Dausset modification. Chronic placental failure diagnosis was based on the results of ultrasound fetometry and placentometry, cardiocography, dopplerography of uteroplacental blood flow.

**Results:** A tendency to enlarge the wife and husband's compatibility as regards leukocytic antigens of A and B locuses in primary chronic placental failure was determined. In those couples that are compatible by 3 HLA antigens of A and B loci, chronic placental failure symptoms appeared earlier than in cases of compatibility by 2 HLA antigen. In 26 cases of compatible couples pregnancy tends to end in spontaneous abortion or preterm labor. In 13 cases pregnancy was complicated by preeclampsia, severe gestation anemia. The heterogeneity degree in married couples correlated with some immune and hemostatic parameters of pregnant women. In those couples that are compatible by 2 or 3 HLA antigens pregnant cellular and humoral immunity was more depressed, the level of acute phase reactants was more increased and the concentrations of acute phase contrreactants was more decreased. Only 6 patients with normal pregnancy were compatible by 1 HLA antigens of A or B loci with their husbands.

**Conclusions:** The percentage of compatible couples was higher in the primary chronic placental failure group, as compared to normal pregnancy. Probably, the complications of pregnancy were connected with specific HLA-determinations which mainly control the power of immune reactions.

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## ELEVATED LEVEL OF PROINFLAMMATORY CYTOKINES IS AN EARLY SYMPTOM OF ENDOMETRITIS AFTER PARTUS CAESARIUS

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**Objective:** Postoperative endometritis in puerperium are a grave risk factor to mother's invalidization and mortality. Preventive application of antibiotics leads to asymptomatic onset of the disease and delay of the full value complexive therapy.

**Methods:** The study was performed on blood of 18 puerperas with a high risk of postoperative endometritis. Lymphocyte subpopulations were determined by indirect surface immunofluorescence cy-tokines (IL-1-alpha, IL-1-beta, IL-8, TNF-alpha) were tested by double-antibody enzyme immunoassay, hemostatic condition was examined by coagulation tests on 1-st, 3-rd, 5-th and 7-th days of puerperium.

**Results:** It was observed that the levels of inflammatory cytokines of women on the 1-st day after partus caesarius were elevated. In patients with an uncomplicated postoperative period (1st group) the concentration of inflammatory cytokines decreased and normalized from 3-rd till 7-th days. Symptoms of endometritis appeared in cases when the levels of inflammatory cytokines increased from 3-rd till 7-th days after abdominal delivery (2d group). Contents of IL-1-alpha and TNF-alpha increased more considerably than the levels of IL-1-beta and IL-8. Concentrations of inflammatory cytokines correlated with immune and hemostasis parameters. In females of the 2-nd group hypercoagulation was intensified, levels of antithrombin III and protein C were decreased, fibrin degradation products were noted, the number of CD3+, CD22+ lymphocytes was decreased, the ratio CD4+/CD8+ was reduced neutrophil phagocytic activity was intensified.

**Conclusion:** Elevated levels of inflammatory cytokines in the blood of puerperas from 3-rd till 5-th days past partus caesarius can be regarded as a prognostic sign of postoperative endometritis.