INFLUENCE OF IMMUNOTHERAPY ON ANTISPERM ANTIBODIES IN WOMEN

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Objective. *Antisperm antibodies (ASA) in women's sera have been implicated as a causative factor of infertility, pregnancy wastage and early recurrent spontaneous abortion. It was reported that approximately 50% of women with this pathology were positive for ASA. The problem of overcoming this situation is very actual for planned pregnancy and associated reproduction technology.*
Method. *406 consecutive patients with infertility and recurrent miscarriages were examined using for ASA status by ELISA assay with the help of test-system "Seravac" (Germany).*
Results. *134 patients were found to be ASA-positive (33%). The associations between the presence of ASA and patient's age, primary or secondary infertility was examined using multivariant analysis. No differences were found in investigated groups. All the patients were recommended to use a method of barrier contraception, 44 patients with ASA were immunized with allogenic leukocytes for three successive cycles. ASA was not present in 35 women (79%) after immunotherapy. In 9 women a decrease of ASA levels were revealed.*
Conclusion. *The mechanisms of the beneficial effect of immunoterapy for ASA remains to be elucidated. The important part belongs to antigenic cross-reactivity between lymphocytes and spermatozoa. It is possible that immunotherapy intends to stimulate the idiotype –antidiotypic antybody system to eliminate ASA and to induce the immune tolerance to sperm antigens.*

CORRELATION OF SERUM CYTOKINE DETERMINATION WITH PREGNANCY OUTCOME IN WOMEN WITH HABITUAL ABORTIONS

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Objective: *To test the hypothesis that disturbance of the cytokine balance during human pregnancy may initiate spontaneous abortion.*
Methods: *Levels of interleukin-6 (IL-6), interferon-gamma (IFN-g), tumor necrosis factor-alpha (TNF-a) and interleukin-4 (IL-4) were measured by enzyme-linked immunosorbent assay (ELISA) in sera from 46 women with a history of two or more prior pregnancy losses (main group). Control group consisted of 20 healthy women with first normal pregnancy.*
Results: *In main group abortions were observed in 11/46 (23,9%) women, 6/46 (13%) pregnancies terminated as preterm labor on 28-34 weeks, in two cases with premature partial placental separation. TNF-a levels were demonstrable in sera of 10/11 women with missed abortions and were 20 times higher than in control group. Normalization of TNF-a and IFN-g levels was associated with regress of symptoms of threatened abortion in main group. Increase of IL-6 levels in first trimester of pregnancy were determinate in cases of abruption of chorion villi and clinical signs of infection.*
Conclusion: *Statistically significant increased production of TNF-a, IL-6, IFN-g and reduced production of IL-4 characterized threatened abortion group and distinguished them from normal pregnancies. These preliminary data suggest that disturbance of the cytokine balance could play a significant role in the mechanisms of immunologically mediated recurrent pregnancy loss.*