



ABSTRACT BOOK



KHARKIV, UKRAINE
MAY 24th-26th, 2017



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OBSTETRICS AND GYNECOLOGY



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THE STATE OF CELLULAR IMMUNITY OF PREGNANT WOMEN WITH PREECLAMPSIA

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Introduction. Modern ideas about the gestosis` etiology include the hypothesis of the role of local immune mechanisms in the induction of pathological development of the vessels of the fetoplacental complex. According to this hypothesis, a breach of the invasive ability of trophoblast can occur as a result of an inadequate immune response of the maternal organism in the form of an imbalance between the cytotoxic and suppressor components of the cellular immune complex.

The purpose of our work was to identify patterns in changes in the cellular immunity in pregnant women with preeclampsia.

Materials and methods. 40 pregnant women in the period of 37-38 weeks were selected and formed 2 investigated groups. The first (main) group consisted of 20 patients with signs of late gestosis of varying severity. The second (control) group included 20 women with a physiological pregnancy.

The program of immunological studies included the determination of the population and subpopulation composition of immunocompetent blood cells by indirect immunofluorescence using monoclonal antibodies. The content of cells carrying differential human leukocyte antigens into CD3 + (T-lymphocyte) lymphocyte differentiation (CD) clusters, CD4 + (T-lymphocytes helper / inducers), CD8 +, (T-suppressors), CD16 + (natural killers) in relative indices was identified.

Results of research. In the physiological course of pregnancy, the relative level of lymphocytes was $21.04 \pm 1.15\%$, while in pregnant women with preeclampsia this index was within the range of $14.97 \pm 1.58\%$ ($p < 0.05$).

The CD3 + (T-lymphocyte) content in the pregnant control group was $54.41 \pm 2.54\%$, while in the I group it was $38.49 \pm 2.84\%$, ($p < 0.05$).

The number of CD4 + (helper T-lymphocytes / inducers) in the blood of women with a physiological course of pregnancy was determined at the level of $9.5 \pm 0.58\%$, in the group with preeclampsia this index reached $18.71 \pm 2.68\%$ ($p < 0.05$).

The level of relative parameters of CD8 + (T-suppressors) in pregnant control group was $24.95 \pm 0.87\%$, while in the main group this index was $17.01 \pm 0.96\%$ ($p < 0.05$).

The number of CD16 + (natural killers) in the blood of women with the physiological course of pregnancy was determined at the level of $9.18 \pm 0.94\%$, in the group with preeclampsia this index was higher and amounted to $18.42 \pm 2.11\%$ ($p < 0.05$).

Conclusions. Based on the data obtained during our study, it was revealed that preeclampsia is accompanied by an increase in the level of T-helpers (CD4 +), natural killers (CD16 +) and a decrease in T-suppressors (CD8 +). This indicates an increase in the cytotoxic effect of immune complexes on invasive trophoblast processes in the spiral arteries of myometrium, which may be a pathogenetic link in the development of late gestosis in pregnant women.

INDEX

Adamu I., Chalenko N.....	3
Abdullaieva S., Qasanova A., Tkachenko V.....	204
Afolabi Omotolani.....	28
Ahmed Ahmed Mosad Gaballa	166
Ajayi E.....	85
Akinwumi A.	28
Akuyoma May Ohiri	29
Aleksandrova E.	4
Aleksandrova K., Kozka I.	166
Al-Trawneh O.....	30
Amoo-Mensah A., Mary Yaa Acheampoymaa Asanie.....	233
Andikan Effiong Udoh	180
Aralova V.	136
Aralova V., Onashko Yu.	5
Arogundade F.....	137
Artamonov R., Dubovyk V.	181
Arutiunian A.....	86
Asante G., Ashiq Parappil	181
Asiome W., Karmazina I., Isaeva I.	6
Bagmut A.	138
Bagmut A.	31
Balchunas I.	87
Belitsky I.	87
Berdikova Y., Mr. Gubin N.....	7
Berezhnoy H., Suhopara M.	32
Berihu Mosay	33
Bilchenko S., Bausov Y.	88
Bilousova M., Ievtushenko D., Ievtushenko O., Kholosheva D.....	89
Bortnik K., Kitchenko S., Yaremko I., Babaeva A.....	90
Chekhunova A.....	139
Chepeliuk O., Ivakhnenko D., Bordun A.....	91