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THE SIGNIFICANCE OF THE PHAGOCYTIC COMPONENT OF THE IMMUNE SYSTEM IN CHRONIC SALPINGO-OOPHORITIS IN REPRODUCTIVELY-CHALLENGED WOMEN

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Background: the reason of a protracted course of the inflammatory process in pelvic organs is failure of the organism’s protective systems that is shown as a change of cytic, humoral and phagocytic components of the immune system. The study of the cytic features of chronic salpingo-oophoritis and immunity factors depending on the duration of disease shall allow developing more effective schemes of preparation to extracorporeal fertilization (in vitro) for women with chronic saplingo-oophoritis (CSO).

Objectives: improvement of diagnostics procedures of CSO in reproductively- challenged women on the ground of phagocytosis condition.

Materials and methods: 60 reproductively-challenged patients of fertile age with CSO were examined. Groups of patients: group 1 - patients (n=20) with CSO in past medical history up to 10 years, group 2- patients (n=20) with CSO in the past medical history over 10 years; group 3 - patients (n=20) with CSO who had conservative therapy that included immonumodulatory biological medicines; group 4- control group (n=20). The phagocytosis condition was studies according to the definition of circulating immune complexes (CIC), phagocytic index (PI) and phagocytic number (PN) in the cervical and vaginal secretion.

Results: neutrophils PN in cervical and vaginal secretions of group 1 (2,2 ± 0,32 and 2,9±0,34 standard units) and group 2 (2,3±0,31 and 2,5±0,standard units respectively) and their absorbing capacity (PI) of group 1 - 48,1 ±2,3 and 50,1±2,1% and group 2 42,6±2,5 and 46,5±2,1% respectively, were lower than the control value (6,9±0,5 and 7,7±0,4% standard units respectively), p<0,05. With CSO CIC firm titer increase in the main groups occurred (19,2+0,68 and 14,85+0,93 standard units relatively) compared with the control group (11+0,standard units), p<0,05. These indexes show inadequacy of cells phagocyting during the persistency of the antigen in the body, which is evidenced by high bacterial ingress of vagina. During usage of immunomodulatory biological medicines by patients from group 3 it was discovered that the indexes of phagocytic component of the immune system in cervical and vaginal secretions increased, PI was 73,7±1,2 and 74,1±3,7% respectively, PN was 5,8±0,26 and 4,6±0,57 standard units, number of CIC was 12,48+0,95 standard units, p<0,05.

**Conclusion**: The discovered problems of the phagocytic component of the immune system in CSO in reproductively-challenged women became normal after therapy that included immunomodulatory biological medicines, that in its turn increased effectiveness of the diagnostics and improved preparation of reproductively-challenged women with CSO for in vitro fertilization.