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TITLE

ENDOMETRIAL MICROBIOTOP OF WOMEN WITH UNSUCCESSFUL ATTEMPTS OF IN VITRO FERTILIZATION AND CHRONIC ENDOMETRITIS

AUTHOR/S

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ABSTRACT

Context: Endometrial receptivity is one of the main determinants of successful implantation. Pelvic inflammatory diseases (PID), including chronic endometritis (CE) can change the normal pattern of endometrium.

Objective: To examine characteristics of endometrial microbiota in patients with unsuccessful attempts of IVF and CE of different level of activity.

Methods: We used atraumatic curette «Pipelle de Cornier» (France) with transparent polyvinylchloride 3-mm tube to endometrial biopsy. We separated up the patients in three groups, depending of the results of their immunohistochemical studies (markers of CE at the field of view: cytotoxine T lymphocyte - CD8+; B lymphocyte - CD20+; plasmocytes - CD138+ 1-2; T-cells - CD4+). I group (n=34) includes patients with morphological signs of weak activity endometritis, II (n=64) – average activity of CE, III (n=9), - intense endometritis. Endometrial specimens were tested by RT-PCR (Femoflor 16, Moscow, Russia).

Patient(s): We analyzed the charts of 107 who were affected by CE and with one or more attempts of IVF.

Intervention(s): Endometrial samples were collected from women with unsuccessful attempts of IVF and CE diagnosis at immunohistochemical studies.

Main Outcome Measure(s): The level of activity of chronic endometritis and the identified microorganisms.

Result(s): Enterobacteriaceae (67,1%; $p=0,01$), Streptococcus spp. (59,3%; $p=0,01$) ? Atopobium vaginae (28,1%; $p=0,02$) were detected significantly higher in the II Group compared with the I Group.

Conclusion(s): The results of the study showed the presence of association between the morphological characteristics of CE and the identified microorganisms in the endometrium. First of all, it concerns facultative anaerobic microorganisms: Staphylococcus spp., Enterobacteriaceae, Streptococcus spp.

INSTITUTE

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