Detection of immune antibody in serum, cervical mucus and CD4⁺ CD25⁺ FoxP3 regulatory T lymphocytes content in endometrial tissues of female patients with infertility

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View from specialist: It is creative, and of certain scientific and educational value.

[ABSTRACT] Objective: To study the content of immune antibody in serum, cervical mucus and CD4⁺ CD25⁺ FoxP3 regulatory T lymphocytes in endometrial tissues of female patients with infertility. Methods: 80 cases of female patients with infertility in our hospital were enrolled in observation group, 80 cases of healthy women underwent regular physical examination in our hospital during the same period were enrolled in control group. Then immune antibody in serum, cervical mucus and CD4⁺ CD25⁺ FoxP3 regulatory T lymphocytes content in endometrial tissues were detected. Results: (1) Immune antibody: AsAb, EmAb, ACAb, hCGAb, AoAb content in serum and cervical mucus of observation group were higher than those of control group; (2) CD4⁺ CD25⁺ FoxP3 regulatory T cells: CD4⁺ CD25⁺ FoxP3 regulatory T cells number and proportion in peripheral blood and FoxP3 mRNA and protein content in endometrial tissue of observation group were higher than those of control group. Conclusion: AsAb, EmAb, ACAb, hCGAb, AoAb abnormal expression in serum and cervical mucusin, CD4⁺ CD25⁺ FoxP3 regulatory T cells function decrease in correlated with female sterility.

[KEY WORDS] Female infertility; Immune antibody; Anti sperm antibody; Regulatory T cells