



## RECURRENT ENDOMETRIOID OVARIAN FORMATIONS. FEATURES OF STEROID HORMONE RECEPTORS EXPRESSION IN TISSUES

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**CONTEXT.** Search for molecular pharmacological marker belonging to the group at risk of relapse of ovarian endometriosis is necessary to develop an individual plan for postoperative management of patients.

**THE OBJECTIVE.** To carry out a comparative analysis of the gene expression of estradiol receptor (mER, ERa, ERb) and progesterone (PGRmC1, mPR, PR-A, PR-B) in the tissue of primary endometrioid formation of ovarian and recurrence of the disease.

**METHODS.** RT-PCR method was used to determine the expression of steroid receptor genes.

**PATIENTS.** The examination included 94 patients of reproductive age with endometrial ovarian formations: 82 patients with primary ovarian endometriosis and 12 patients with disease relapse.

**INTERVENTIONS.** All patients had ovarian resection within healthy tissue performed using laparoscopic access with KarlStorz equipment (Germany) followed by histological examination of material.

**MAIN OUTCOME MEASURES.** Comparison of independent variables in the two samples was performed with nonparametric method using the Mann-Whitney test. P-value is less than 5%.

**RESULTS.** An increase in expression of the gene mER 3 times, in the ERb 5times, and decrease of the ERa receptor 7 times was revealed at relapse of the disease in the endometrial tissue compared to the case of the primary disease ( $p < 0,05$ ).

**CONCLUSION.** The receptor profile of endometrial tissue in the primary case and in relapse are different by the level of estradiol mRNA receptor. This result confirms the estradiol receptors participation as promoters of proliferation of hormone-dependent tissues of female reproductive tract. The absence of differences in progesterone receptor expression indicates unchanged sensitivity to progesteron therapy at relapse of ovarian endometriosis.

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