

ADENOMYOSIS: PATHOGENETIC ROLE OF STEROID HORMONES RECEPTION

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Introduction: The most common localization of genital endometriosis is the uterus lesion - adenomyosis, the specific frequency of which is 70 - 80%.

Methods: We have studied 252 women with histologically verified diagnosis of adenomyosis (the main group). The control group included 252 patients without proliferative processes of the uterus. Immunohistochemical study of the endometrium/ myometrium had been carried out based on material from 51 patients, 7 of which were in the control group. We have studied the expression level of estrogen receptors: ER α , ER β , progesterone receptors (PR) and CYP19 (aromatase) by reverse transcription polymerase chain reaction.

Results: Studied biopsy specimens were obtained during surgical treatment of patients with various gynecological pathology. Attention is drawn to the fact of increased expression of ER α and ER β genes in patients with glandular hyperplasia of the endometrium, in contrast to the patients with endometrial atrophy. It is shown that in patients with glandular hyperplasia the level of ER α and ER β gene expression is increased in 60%. While in patients with endometrial atrophy gene expression level is low in 72%. ER α and ER β gene expression is significantly increased in patients over 50 with persistent menstrual cycle and in patients under 50 in postmenopause. Gene expression of PR has been analyzed in 30 patients in the main group. The number of women in groups of over and under 50 was equal, 15 people in each group. Attention is drawn to the fact of increased gene expression of PR in women in deep menopause. The low level of expression was observed in women under 50 with menstrual cycle. It is interesting that expression of ER β was accompanied by suppression of ER α . Expression of ER is accompanied by expression of PR. In the studied uterine biopsy specimen a low expression of aromatase gene CYP 19 has been revealed, which is a favorable prognostic sign.

Conclusions: A low expression of aromatase gene CYP 19 it has been revealed. ER α and ER β gene expression in the myometrium does not differ from the control group. ER α and ER β gene expression is increased in patients with endometrial hyperplasia, and reduced in patients with endometrial atrophy. Increase of ER β expression is accompanied by reduction of ER α expression and increase of PR expression.

Key words: adenomyosis, steroid hormones, reception.

BIOARTIFICIAL LIVER – DECELLULARIZATION AND THE SUBSEQUENT RECELLULARIZATION OF THE RAT LIVER

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Introduction: Bioartificial livers (B.A.L) could become a possible future alternative to the liver transplant. B.A.L would be used as a temporary transplant (to sustain a critically ill patient until a suitable