12° CONGRESS of the EUROPEAN SOCIETY of Gynecology
BARCELONA 18/21 OCTOBER 2017

EXPRESSION OF PROLIFERATION MARKER KI-67 IN EUTOPIC AND ECTOPIC ENDOMETRIUM AT ADENOMYOSIS AND ENDOMETRIOID CYSTS OF OVARIES

Paulouskaya M (BY) [1], Hutsikava L (BY) [2]

Objective: to determine the nature of molecular and biological features of eutopic and ectopic endometrium at adenomyosis and endometrioid cysts of ovaries by character of expression of proliferation marker Ki-67.
Materials and methods: 69 patients with genital endometriosis have been examined: with adenomyosis (1 group, n=24) and endometrioid cysts of ovaries (the 2nd group, n=26). According to the stage of prevalence of endometriosis the patients have been divided into subgroups 1A (1-2st, n=12) and 1B (3-4st, n=12), 2A (1-2st, n=13) and 2B (3-4st, n=13); 6 observations - control group. The immunohistochemical research has been executed on operational and biopsy material. As primary specific antibodies have been used monoclonal antibodies to proliferation marker Ki-67. System of detection "Ultra Vision LP Value HRP Polymer" (Lab Vision, the USA) has been applied.
Results: In 5 control samples of normal endometrium the expression of ?i-67 was low and has made: 0,36% - in epithelial cells and 0,62% - in stromal cells. In group of patients with adenomyosis (the I group) ?i-67 expression - 1,35 (0,04) % in epithelial and 1,47 (0,06) % in stromal cells of ectopic endometrium has been revealed. In eutopic endometrium the expression of ?i-67 was twice lower: 0,68 (0,02) % - in epithelium and 0,87 (0,05) % in strom; at external endometriosis Ki-67 expression level in eutopic endometrium has made in epithelium 0,6 (0,02) %, in strome-0,94 (0,04) %, in the endometriosis centers in epithelium - 1,6 (0,04) %, in strome-1,74 (0,02) %. By the level of expression of this marker according to the stages of the disease haven't been revealed any distinctions, however, activity authentically prevailed in strom. That is the expression of proliferation marker ?i-67 in endometrium at external and internal endometriosis was authentically higher than indicators of control group. Reliable increase of this indicator in ectopic centers has been noted both at external endometriosis, and at adenomyosis ($p<0,05$).
Conclusion: Regardless of the stage of distribution of endometrioid process proliferative activity at endometriosis remains high with prevalence of activity in strom that suggests that the endometrioid center possesses a certain potential of proliferative activity.

[1] Grodno State Medical University, [2] Grodno State Medical University