Pathomorphological features of ovary endometriosis

Samoylova Mariya Valeriya (UA) [1], Gnatko Olena (UA) [2], Tanko Olga (UA) [3], Solskiy Serhiy (UA) [4]

Endometriosis is a disease that affects women of reproductive age, disrupts reproductive function, decreases quality of life.

The aim was to determine pathomorphologic features of ovary endometriosis, estimate its proliferative potential.

Methods. 122 women with ovary endometriosis were observed. Diagnosis was verified by the histological analysis of surgical material after endoscopic elimination of lesions. Women were divided into groups according to the stages by r-AFS classification. Pathomorphologic and immune histochemical test, determination of Ki-67 and IV type collagens were performed.

Results. In women with I-II stage of ovary endometriosis in the samples was evaluated mild intensiveness of IV type collagen lightning in vessel basal membranes of ectopic endometrioid lesions. Due to the presence of this type of collagens basal membranes are characterized with mechanic stability. While determining proliferation activity marker Ki-67 expression, mitotic index of epitheliocytes was 6,7±0,02%, of stromal cells 5,5±0,03%.

Detected two pathomorphologic variants in women with III-IV stage of the disease. In first occasion in cytogene stroma small amount of microcirculatory vessels with thickened or sclerotic walls were found. Significant contain of IV type collagen was observed, mitotic index of epitheliocytes was 5,2±0,04%, of stromal cells 4,8 ±0,05%.

In second variant expressed vessel component was defined. IV type collagens in vessel wall basal membranes were determined by the mild lightening. Mitotic index of epitheliocytes was 7,8±0,04%, of stromal cells 8,2±0,05%, that testified increasing of proliferative activity and probably more risk of endometrioid lesion malignisation.

Conclusions. Two pathogenetic variants of ovary endometrioma detected. Described features allow to explain individual distinction in ovary endometriosis progression.