

DECIDUAL DIFFERENTIATION OF ENDOMETRIAL CELL LINES IN NORMAL AND PATHOLOGY

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The paper is devoted to the study of decidualization of endometrial cell lines induced by a combination of estradiol with progesterone and its new analogues. Cell lines were isolated from the endometrium of gynecologically healthy patients and patients with gynecological pathology. The technique of isolation and cultivation of endometrial cell lines and their morphological characteristics is described. We determined the immunophenotype, karyotype of cell lines and evaluated the expression of progesterone and estrogen receptors. In addition, we showed that cell lines isolated from the endometrium of gynecologically healthy donors demonstrated decidual transformation by the effect of a combination of estradiol and progesterone (or its analogues). However, the lines obtained from endometrial tissue of patients diagnosed with endometriosis and some of the lines isolated from endometrial tissue with hyperplastic processes did not show sensitivity to the same hormones. Our results confirm the available data on the violation of decidualization processes in patients with endometriosis and endometrial hyperplastic processes. The data obtained are a prerequisite for development of personalized gestagen gynecological diseases therapy.

Keywords: human endometrium, gestagens, endometrial cell line, cell decidualization, endometriosis