Background. Currently, the great attention of the pathogenesis of various diseases focuses on angiogenesis. Vascular endothelial growth factor (VEGF) is an important regulator of neovascularization and stimulates the proliferation and migration of endothelial cells.

Aim. To assess the level of vascular endothelial growth factor (VEGF) in endometrial hyperplasia.

Subjects. We examined a total of 60 cases. Three groups of patients were analyzed according to histological data: with EG (30 cases), with normal proliferative endometrium (30 cases).

Methods. VEGF concentrations were determined by enzyme linked immunosorbent assay in serum and aspirates from the uterine cavity. Aspirates from the uterine cavity were received before the diagnostic curettage. P < 0.05 was considered significant.

Results. VEGF concentrations in aspirates from the uterine cavity are significantly higher in women with EG versus the control group. The level of VEGF in aspirate from the uterus cavity is significantly higher in comparison with blood serum in endometrial hyperplasia. Then dydrogesteron was prescribed in the luteal phase of the cycle during 6 months after a diagnostic curettage for patients from the study group. Pipelle endometrial biopsy was performed in the study group through 6 months. After 6 months, were not found statistically significant differences between groups.

Conclusions. The concentration of VEGF, significantly higher at the local level in patients with endometrial hyperplasia.