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## TITLE

### **THE EFFICACY AND SAFETY OF APPLICATION ULIPRISTAL ACETATE IN THE TREATMENT OF PATIENTS WITH UTERINE FIBROIDS**

## AUTHOR/S

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## ABSTRACT

The aim of the study was evaluate the efficiency and safety of treatment with ulipristal acetate in patients of reproductive age with simple and proliferating uterine fibroids.

Material and methods. Conducted a prospective randomized study of efficiency of ulipristal acetate in 30 patients with simple (I group) and proliferating (group II) uterine fibroids. Histological and immunohistochemical study of uterine leiomyomas were performed.

Results. After 3 months of treatment amenorrhea was observed in 70% of patients in group I and in 90% of patients in group II. After 3 months from the beginning of therapy reduction of the diameter nodes by 27% in group I and by 47% in group II was revealed. In 80% of patients in both groups found a median decrease of endometrium to 4-5 mm, 10% - the thickness of the endometrium reached 8 mm and 10% were found to increase the thickness of the endometrium to 12 - 14 mm.

Ulipristal reduces the leiomyomas size not only because the tumor cell apoptosis induction, reduction of their proliferative and mitotic activity but also by angiogenesis and growth factors (VEGF, EGF, FGF-2, TGF- $\beta$ 1) inhibition in combination with the increased matrix metalloproteinases (MMP-2, -10, -12) production and their tissue inhibitors (TIMP-1, -2, -3) reduction.

Conclusion. Ulipristal causes the simultaneous negative impact on the parenchymal components, angiogenesis and extracellular matrix and leads to rapid, significant and sustained decrease in leiomyomas volume. The obtained data allow to recommend the use of ulipristal acetate as preoperative preparation in the group of patients with simple and proliferating uterine fibroids.

## INSTITUTE

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