

## Comparing the administration of Letrozole and Megestrol acetate in the treatment of women with simple endometrial hyperplasia without atypia: A randomized clinical trial

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**Introduction:** The present study was conducted as a pilot to compare the therapeutic effects and the potential side-effects of oral Megestrol acetate and Letrozole in the treatment of simple hyperplasia in perimenopausal women .

**Methods:** The participants of this randomized clinical trial consisted of two groups of 25 women aged 44 to 50 presenting with abnormal uterine bleeding diagnosed with simple endometrial hyperplasia without cytologic atypia confirmed by transvaginal ultrasonography and biopsy. The first group received 40 mg doses of Megestrol acetate for two weeks per month for a total period of two months. The second group received 2.5 mg daily doses of Letrozole for a total period of two months. The differences in terms of quantitative measurements were analyzed using the independent two-sample t-test and the paired T-test. To compare the two groups in terms of the distribution of the categorical variables, Pearson's Chi-square and Fisher's Exact tests were used at the significance level of .05 by Stata-9.2 .

**Results:** Although the intervention led to significant improvements in both groups ( $P < .001$ , > there was no difference between the groups in terms of accomplishing resolution)  $P = .74$ ) (seven (28%) patients in the Letrozole group and five (20%) in the Megestrol group), while two patients in the Letrozole group and nine in the Megestrol group suffered from side-effects, suggesting significantly lower side-effects in the Letrozole group ( $P = .02$ ).

**Conclusion:** Letrozole and Megestrol acetate seems to have similar effects on the treatment of simple endometrial hyperplasia; the only difference was that Letrozole presents fewer side-effects than Megestrol acetate in patients with this condition.

**Key Words:** Letrozole, Endometrial hyperplasia, Megestrol acetate