

OP20.06 Changes in sonographic findings of adenomyosis after treatment with aromatase inhibitor

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Introduction

Aromatase inhibitors are efficacious in decreasing adenomyoma volume and in improving pain symptoms. The **objective of this study** is to investigate the changes in the sonographically detectable alterations of the myometrium caused by adenomyosis after treatment with aromatase inhibitor.

Methods

This prospective study included symptomatic women with adenomyosis. The diagnosis of adenomyosis was suspected on the basis of transvaginal ultrasonography (TVS) and confirmed by magnetic resonance imaging. Patients received **oral letrozole (2.5 mg/day**, Femara; Novartis Farma) for 6 months. Patients underwent **TVS** before starting the treatment, **after 3 and 6 months of treatment**. During TVS, ultrasonographic parameters were examined by using a standardized protocol (Table 1).

Results

The study included 34 patients, the mean age was 38 years. 4 patients (11.8%) discontinued the therapy because of adverse effects (bone and joint pain, n = 2; muscle aches, n = 1, weakness, n = 1). 11 patients (36.7%) had

Parameters	3- month	6-month
Uterine volume	< 0.05	< 0.001
Thickening of the transition zone	0.634	0.543
Regularity of the endometrial-myometrial junction	0.893	0.662
Presence of myometrial cystic anechoic areas	0.127	0.072
Size of myometrial cystic anechoic areas	0.110	< 0.01
Thickness of uterine wall	0.270	< 0.05
Asymmetrical myometrial thickening	0.369	0.278
Presence of subendometrial hyperechoic linear striation	0.529	0.768
Largest diameter of localized adenomyoma	0.063	< 0.01
Total volume of localized adenomyomas	< 0.05	< 0.001

Table 1. Changes in sonographic parameters after 3- and 6-month treatment with letrozole compared with baseline

associated endometriosis. Table 1 shows the changes in ultrasonographic parameters after 3- and 6-month treatment with letrozole. **The 6-month treatment caused a 56.2% decrease in uterine volume** and a 53.7% decrease in total adenomyoma volume. The treatment improved pain symptoms.

Conclusion

In patients with adenomyosis, letrozole causes a significant decrease in uterine and adenomyoma volume, which is associated with changes in some ultrasonographic characteristics of adenomyosis.