

P277. Pharmacological therapy of uterine fibroids: prediction and durability of treatment effect

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Context

Uterine fibroids are very common in the routine gynecological practice. Due to the benign nature of most fibroids, the pharmacological therapy with ulipristal acetate (UPA) appears to be an attractive alternative to the surgical treatment.

Objective

To evaluate the UPA treatment response in patients with different type, structure and size of uterine fibroids. To evaluate the duration of treatment effect after 12 and 24 months of follow-up.

Methods

The patients received 1 to 3 courses of UPA treatment due to symptomatic uterine fibroids. The volume of fibroids was measured during ultrasound exam and/or MRI scan before treatment and during follow up. Relative optical density (ROD) of fibroids was measured on T2-weighted MRI scans using the relative 256-grade grayscale. Optical density score was also used as a surrogate marker for vascular density of the fibroid. Blood loss was evaluated using specific questionnaires both during treatment and follow-up. Safety endpoints were also evaluated.

Participant(s)

31 patients with symptomatic fibroids were recruited. Patients' age was 21-45 years. Inclusion criteria were: reproductive age, symptomatic fibroids, absence of contraindications to UPA treatment. Exclusion criteria were: previous treatment with UPA or GnRH agonists, previous surgical or less-invasive treatment for uterine fibroids, nodular form of adenomyosis.

Intervention(s)

All patients have undergone 1 to 3 courses of UPA treatment with subsequent 24 months follow-up.

Main Outcome Measure(s)

Fibroid volume before and after treatment and during follow-up. Relative optical density of fibroids. Menstrual blood loss volume before and after treatment.

Result(s)

Fibroid size or localization before treatment did not show any significant correlation with percent of subsequent volume decrease (Pearson's $r = 0.42$ and 0.36 for size and localization, respectively [$p > 0.05$]). Low optical density of fibroids (high fibroid vascularity) was associated with larger decrease in fibroid volume after treatment and positively correlated with treatment effect (Pearson's $r = -0.71$ correlation between ROD and volume decrease [$p < 0.05$]). Fibroid volume didn't demonstrate any significant change in 12 and 24 months after the treatment.

Conclusions

Fibroid treatment with UPA provides durable clinical effect lasting up to 24 months after the end of treatment. Fibroids with low ROD appear to demonstrate better treatment response and volume decrease.

[1] BelMAPO, Minsk, [2] BelMAPO, Minsk, [3] BelMAPO, Minsk