EP15.05 Influence of supracervical hysterectomy, ulipristal acetate and uterine artery embolization on ovarian reserve – an observational study.

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Objective
To assess and compare the influence of three fibroid treatment options: supracervical hysterectomy (SH), ulipristal acetate (UPA) and uterine artery embolization (UAE) on ovarian reserve.

Methods
Premenopausal Caucasian women with symptomatic uterine fibroids were recruited into 3 groups: patients qualified for SH; patients qualified for UPA treatment scheduled for SH or myomectomies; patients qualified for UAE. The following markers of ovarian reserve were investigated: antral follicle count (AFC), anti-Mullerian hormone (AMH), inhibin B (INHB), follicle stimulating hormone (FSH) and estradiol (E2). These markers were assessed before and 3 months after SH, before and 3 months after UAEs, and before and after 3 months of UPA treatment, before the scheduled surgeries. Baseline characteristics (age, parity, dominant fibroid volume, hemoglobin level, BMI, as well as AFC, AMH, INHB, FSH and E2) were compared between the study groups by Kruskall-Wallis ANOVA. Pre- and postinterventional values of AFC, AMH, INHB, FSH and E2 in the studied groups were compared with the Wilcoxon matched pairs test.

Results
Twenty-six, 27 and 30 patients were included in the final analysis in the SH, UPA and UAE groups, respectively. Three months after SH INHB and E2 significantly decreased, while AFC, AMH and FSH remained unchanged. After 3 months of UPA treatment the values of all the assessed markers of ovarian reserve were not significantly different in comparison to baseline. Conversely, three months after UAE the values of AFC, AMH, INHB, and E2 were significantly decreased, while FSH was significantly increased.

Conclusion
UAE seems to have the greatest impact on ovarian function. SH did not affect the most accurate markers of ovarian reserve, and therefore appears to be safe in terms of ovarian function. UPA did not change any of the studied markers of ovarian reserve and seems a reasonable option when ovarian function is concerned.