## ETHANOL SCLEROTHERAPY AFTER ULTRASOUND-GUIDED ASPIRATION CAN PROLONG THE TIME TO RECURRENCE OF ENDOMETRIAL CYST

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**OBJECTIVE:** It is well known that an ovarian endometrial cyst affects the outcome of ART. To avoid this risk, there are two ways. One is a laparoscopic cystectomy which bears a big risk to decrease the ovarian reserve. The other is an ultrasound-guided cystic aspiration which has higher recurrence rate than first on. To improve cystic aspiration method, we investigated whether ethanol sclerotherapy after ultrasound-guided aspiration can prolong the time to recurrence of endometrial cyst compared with simple aspiration.

**DESIGN:** Retrospective clinical study.

MATERIAL AND METHODS: We retrospectively analyzed 75 cases from January 2009 to December 2011 performed simple ultrasound-guided aspiration or ethanol sclerotherapy after providing an informed consent. The lumen wall of ovarian tumor was washed with saline after transvaginal ultrasound-guided aspiration (Group A: n=33). After washing the cyst, 95% ethanol were injected and held at least 10 minutes (Group B: n=42). The recurrence rate and the time to recurrence were compared between two groups. Recurrence of endometrial cyst was defined as the detection of ovarian cyst over 2 cm in diameter confirmed by ultrasound. Statistical analysis of the data was performed using Fisher's chi-square test for recurrence rate and using t-test for the time to recurrence.

**RESULTS:** The mean age of the patients (group A: 35.4±4.0 vs. group B: 34.0±3.6) were comparable. The mean diameter of the endometrial cyst was significantly bigger in group B (group A: 30.8±7.8 cm vs. group B: 35.1±7.5: p<0.05). We could not find no difference in the recurrence rate (group A: 54.5 % vs. group B: 42.9%), but the time to recurrence was significantly longer in group B (group A: 3.3±2.7 months vs. group B:7.6±6.6: p<0.05). Conclusions: Ethanol sclerotherapy after ultrasound-guided aspiration could prolong the time to recurrence of endometrial cyst. It can be said to be favorable to the outcome of ART.