

P149. Letrozole versus clomiphene as the first-line treatment for anovulatory infertility in women with pcos

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- **Context:** There is increasing evidence of letrozole effectiveness as the ovulation inductor, especially in group of women suffering from PCOS
- **Objective:** To compare the efficacy of letrozole to clomiphene citrate (CC) for infertility treatment in patients with anovulatory infertility caused by PCOS
- **Methods:** results from controlled, observational, prospective study were analyzed by SPSS
- **Participants:** 200 infertile women with PCOS were assigned to receive Letrozole (120 women) or CC (80 women) in 200 treatment cycles. Participants had at least one patent fallopian tube, normal uterine cavity, and male partner had normal sperm characteristics according to the WHO criteria
- **Interventions:** Medications were initiated on day 3, for 5 consecutive days- Letrozole 5 mg/per day or CC 100 mg per day; ovulation triggering was done by HCG 5000 IU. Follow up methods: vaginal ultrasound (visualization of follicular growth and endometrial estimation) and hormone measuring (FSH, LH, estradiol progesterone on day 2, 8, 10 and day of ovulation triggering). Protocol incorporated a sperm wash with, ``swim up`` preparation and intrauterine insemination (IUI). Quality of luteal phase was estimated by progesterone measuring on day 1, 5 and 10 after IUI.
- **Main outcome measures:** primary: live birth rate, and pregnancy rate in both groups; secondary: endocrine and ultrasound parameters in Letrozole stimulation protocol, and rate of twin pregnancy, pregnancy loss and congenital malformations in both groups
- **Results:** biochemical pregnancy rate in Letrozole vs CC group was: 35,5% vs 28,8% clinical pregnancy rate 32% vs 20% ($p < 0,01$) live birth rate 28% vs 18% ($p < 0,01$). The ovulation rate was significantly higher in Letrozole vs CC group. There was no significant between group difference in pregnancy loss (5/120 vs 2/80), twin pregnancy (3,4% vs 7,5%) or major congenital anomalies.
- **Conclusions:** Compared to CC, Letrozole was associated with higher live birth rate and ovulation rate in infertile anovulatory women with PCOS

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