

Efficacy of Letrozole (LE) Combined with Cabergoline (CE) in Comparison to LE alone in ovulation induction among patients with Polycystic Ovarian Syndrome (PCOS) and Hyperprolactinemia (HP): Our Experience

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BACKGROUNDS & OBJECTIVES: PCOS is the most common cause of anovulatory infertility, and up to 64% of patients having mild HP. CE, a dopamine receptor agonist, inhibits prolactin secretion and leading to better ovulatory response in those patients. LE, an aromatase inhibitor, without adverse effects on endometrium & induces fewer mature follicles with less risk of OHSS. Our aim was to investigate effects of combined LE & CE in comparison to LE alone on ovulation & clinical pregnancy rates in PCOS patients with HP.

PATIENTS & METHODS: One eighty women with PCOS and of 22-38 years old, were enrolled in a hospital based clinical trial. Patients randomly allocated into 2 groups, (A&B). All with a serum prolactin > 32 ng/ml. Patients in A (92) were given LE, 5mg from day cycle 3-7/3 cycles and CE, 0.5mg weekly for 12 weeks. Those in B(88) received only LE, same dose & duration. All patients were matched for their age and BMI. Exclusion criteria: other causes of HP. Outcome measure: ovulation rate & detection of both chemical & clinical pregnancies by β hCG and ultrasound of fetal cardiac activity, 2-4 weeks after missed period. Follow-up for 6 months. Data analysis by using SPSS version for windows, P-value significant if < 0.05.

RESULTS: 3 patients from (A) & 5 from (B) had drug side effects and were excluded. None of patients were lost during the follow-up period. In(A), difference between mean serum prolactin level before & after treatment was statistically significant ($P < 0.001$): 48 ± 3 ng/ml and 9.7 ± 4.5 ng/ml respectively. No significant decrease of prolactin level in (B). Ovulation rate was higher in (A) (64.8%) in comparison to (B) (41.2%), ($P < 0.05$). Clinical pregnancy rate in (A) (40.8%) and (27.3%) in (B) ($P < 0.05$). Neither twin pregnancy, nor OHSS were recorded in both groups.

CONCLUSIONS: The combination of LE & CE is superior to LE alone in management of anovulatory patients with PCOS and should be used as the first-line treatment for them.

Keywords: Polycystic Ovarian Syndrome, Letrozole, Cabergoline

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