

Original Paper

Effect of N-acetylcysteine with letrozole to induction of ovulation in infertile women with polycystic ovarian syndrome

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Abstract

Background and Objective: Polycystic ovary syndrome (PCOS) is the most endocrine disorder in women. This study was done to determine the effect of N-acetylcysteine with letrozole to induction of ovulation in infertile women with polycystic ovarian syndrome.

Methods: This clinical trail study was carried out on forty PCOS women with normal TSH, prolactin, hysterosalpingographies and normal spermograms. The patients in control group were received letrozole 5 mg/d for 5 days starting at day 3 of the cycle. The patients in interventional group were received letrozole 5 mg/d with NAC 1.2 g/d (group II) for 5 days starting at day 3 of the cycle. On 14th day of cycle, transvaginal ultrasonography was performed to evaluate endometrial thickness and follicles properties. If mature follicle detected, hCG was injected and timed coitus at 12, 36 and 60 hours later advised. -hCG level was checked on day 16 after hCG injection.

Results: The mean of endometrial thickness and follicles ovulation in hCG injection day was similar in the two groups. The pregnancy rate was 15% and 20% in control and interventional groups, respectively. This difference was not significant. The mean of follicles number was 1.13% and 1.47% in control and interventional groups, respectively. This difference was not significant.

Conclusion: NAC as an adjuvant to letrozole was not effective for ovulation induction in patients with PCOS.

Keywords: Polycystic ovary syndrome, N-acetyl-cysteine, Ovulation, Letrozole

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