Evaluation of essential time to reach to mature follicle following ovulation stimulation with clomiphene citrate

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Abstract

Ovulation disorders and unexplained infertility are most common infertility causes among women. The first line treatment in these cases is clomiphene citrate. This study has been designed to evaluate the essential time for growth follicle to reach 18 *mm* of diameter among patients who were stimulated to ovulate with clomiphene citrate. Study was experimental type and 78 women with polycystic ovary syndrome and 92 women with unexplained infertility referring to Royan Institute had taken to this study. These persons were under treatment with clomiphene citrate 100*mg* from day of 5-9 of menstrual cycle and follicular growth monitoring was performed by vaginal ultrasonograghy. The necessary time for follicular growth was determined separately in patients with polycystic ovary disease and unexplained infertility and its correlation with age, duration of infertility, BMI and hirsutism was studied in both groups.

There was no significant association between the essential time for follicular growth groups and in both groups it was day of 14 of cycle and length of this time had no significant correlation with age, duration of infertility, hirsutism and BMI. There were more common cases of no response to follicle as absence of follicular growth or progesterone serum level less than 5*ng/ml* in patients with polycystic ovary syndrome. Since the average time of follicle growth in patients with PCO and unexplained infertility who were stimulated to ovulate with clomiphene citrate was the day 14 of the cycle in this study, it has been suggested in cases that follicular growth monitoring with ultrasonography or evaluation of LH peak in urine is not possible, the continuation of treatment can be scheduled on the basis that patients with have a mature follicle on day 14 of their cycle.

Keywords: Polycystic ovary syndrome, Unexpained infertility, Follicular growth and Ultrasound.
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