

**Ovarian stimulation by concomitant
administration of cetrorelix acetate and HMG
following Diane-35 pre-treatment for patients
with polycystic ovary syndrome: a prospective
randomized study**

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摘要

Abstract

BACKGROUND: Patients with polycystic ovary syndrome (PCOS) may need a longer period of pituitary downregulation to suppress the elevated serum LH and androgen levels effectively during IVF treatment using the GnRH agonist long protocol. We proposed a stimulation protocol incorporating Diane-35 and GnRH antagonist (Diane/cetrorelix protocol) and compared it with the GnRH agonist long protocol for PCOS patients.

METHODS: Part I of the study was an observational pilot study to evaluate the hormonal change as a result of the Diane/cetrorelix protocol (n=26). Part II of the study was a prospective randomized study comparing the Diane/cetrorelix protocol (n=25) and the GnRH agonist long protocol (n=24). In the Diane/cetrorelix protocol, patients were pre-treated with three cycles of Diane-35, followed by 0.25 mg of cetrorelix on cycle day 3. From day 4, cetrorelix and gonadotrophin were administered concomitantly until the day of HCG injection.

RESULTS: Serum LH, estradiol and testosterone levels were suppressed comparably in both protocols at the start of gonadotrophin administration. Serum LH was suppressed at constant levels without a premature LH surge in the Diane/cetrorelix protocol. The clinical results for both protocols were comparable, with significantly fewer days of injection, lower amounts of gonadotrophin used and lower estradiol levels on the day of HCG injection following the Diane/cetrorelix protocol. Furthermore, there was no significant difference in clinical pregnancy outcome between the two stimulation protocols.

CONCLUSIONS: The Diane/cetrorelix protocol has a similar pregnancy outcome to the GnRH agonist long protocol for women with PCOS undergoing IVF treatment.