

EFFECT OF DEHYDROEPIANDROSTERONE ADMINISTRATION ASSOCIATED WITH CORIFOLLITROPIN AND SEQUENTIAL AGONIST/ANTAGONIST PROTOCOL IN PATIENTS WITH POOR OVARIAN RESPONSE V/S CONVENTIONAL USE

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Objective: Dehydroepiandrosterone (DHEA) is now widely used as an adjuvant to IVF treatment protocols in poor responders. Recently, the ESHRE Working Group developed a new definition, the Bologna criteria.

Design: The aim of the current study was to investigate the potential effect of Dhea treatment associated with Corifollitropin chorionic gonadotropin and sequential use of agonist/antagonist as new protocol on in vitro fertilization(IVF) outcome of poor ovarian responders that fulfill the Bologna criteria.

Materials and Methods: This study investigated 185 poor ovarian responders that fulfill the Bologna criteria. Patients underwent IVF-ET treatment with the new sequential use of more Corifollitropin GnRh agonist/antagonist protocol. The study group contained 185 patients, who received 50 mg of DHEA daily (25mg two times daily) 5 weeks before the IVF cycle. The control group was composed of 137 patients poor ovarian responders who received infertility treatment with conventional protocol, but did not receive DHEA. The IVF outcome parameters in each group were compared.

Results: The study and control groups did not show statistically significant differences in terms of patient demographics characteristics, mean numbers of oocytes retrieved, as for mature oocytes, fertilization rate, cleavage rate, or embryo availability. While the DHEA group demonstrated significantly higher implantation rate (18,7 % vs 10,1 %; P0,01) and ongoing PRs (26,7 % vs 15,8 %; P0,05) as compared with the control.

Conclusions: DHEA pre-treatment does not significantly increase oocyte yield. However, the ongoing PRs in this subgroup of women are significantly higher after DHEA administration, suggesting that DHEA may increase IVF results by improving oocyte and embryo quality with significantly decreased total FSH dose required with Corifollitropin chorionic gonadotropin and agonist/antagonist protocol versus conventional use.