

Does Dehydroepiandrosterone (DHEA) Improve IVF Outcomes in Poor Responders?

Malini Mat Napes¹, Murizah Mohd Zain²

¹Department of Obstetrics & Gynaecology, Hospital Sultanah Nur Zahirah, Kuala Terengganu, ²Department of Obstetrics & Gynaecology, Hospital Sultanah Bahiyah, Alor Setar

ABSTRACT

Objective: To assess effectiveness of DHEA supplementation on IVF outcomes among poor responder women undergoing IVF. **Methods:** Sixteen patients who were diagnosed with POR scheduled to undergo their second intracytoplasmic sperm injection (ICSI)/embryo transfer cycle were enrolled in the study. All enrolled patients had undergone their first ICSI/embryo transfer cycle at least 4 months prior to the current study. All subjects were given DHEA supplementation (25 mg t.i.d.) for at least 3 months prior to their second ICSI/embryo transfer cycle. Statistical analysis of various ovarian response and ICSI outcomes parameter were compared pre and post DHEA. **Results:** In total, 16 women with poor ovarian response were enrolled in the study. The comparative analysis of the results showed a significant increase in the number of good quality of embryo obtained ($p < 0.05$). Moreover, after the treatment with DHEA, there was an increase, though non-significant, in the number of oocytes retrieved, MII oocytes obtained, fertilised and transferrable embryos as well as the pregnancy rate. There was no significant effect of DHEA treatment on the number of days of stimulation and cumulative dose of gonadotrophins used. **Conclusions:** The results showed that DHEA supplementation enhances IVF-ICSI outcome in women with poor ovarian reserve especially in those age 35 and below.

KEY WORDS:

Dehydroepiandrosterone (DHEA), Poor ovarian response (POR), intracytoplasmic sperm Injection, embryos, oocytes

The Effects of Subdermal Etonorgestrel on Body Weight, Blood Pressure, Menstrual and Non-menstrual Adverse Effects between Two BMI Groups

Faizatunnor Bt Muhamad

International Islamic University Malaysia

ABSTRACT

The aim of this study is to describe and compare the effects of subdermal etonorgestrel on body weight, body mass index (BMI), blood pressure (BP) – systolic and diastolic, menstrual, non-menstrual side-effects and to determine overall acceptability of this implant in between two BMI groups: BMI group of ≤ 23.0 and > 23.0 . This is a comparative cross sectional study which was conducted at Lembaga Penduduk dan Pembangunan Keluarga Negara (LPPKN), Kuantan, Pahang from 1st June 2012 until 1st June 2015. All women who had their subdermal etonorgestrel inserted and removed within study period were included. Data on body weight and body mass index, blood pressure, menstrual changes, non-menstrual side effects, and overall acceptability whilst on subdermal etonorgestrel in between two BMI groups (≤ 23.0 and > 23.0) were analyzed. There were 70 women recruited during the study period where 33 of them with BMI of ≤ 23.0 and 37 were BMI of > 23.0 . There was no pregnancy reported. The mean difference of weight gain and BMI increment in both groups were statistically significant ($P < 0.001$). The changes were more in women with BMI > 23.0 . There was no change in systolic blood pressure (SBP) in both groups but diastolic blood pressure (DBP) showed the mean increment is statistically significant in BMI > 23.0 group. These changes, however, were not significant clinically. Out of 70 women, more than 90% of women experienced menstrual disturbances whilst on subdermal etonorgestrel, being amenorrhea and infrequent bleeding commonly reported. Non-menstrual side effects were reported in 25% of women. Fifteen women had removed the implant prematurely due to menstrual disturbances, non-menstrual side effects and weight gain issues. However, the differences were not statistically significant between two studied groups. The study reported more than 80% of women were satisfied with the use of this method of contraception. In conclusion, subdermal etonorgestrel implant is highly effective as a method of contraception in normal, overweight and obese women and its non-contraceptive effects such as on weight gain, menstruation and blood pressure seemed to be comparable.