Effect of Different Type of Treatment on Clinical, Hormonal, Metabolic Parameters and Quality of Life in Women with Polycystic Ovary Syndrome

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Introduction

Polycystic ovary syndrome (PCOS) affects 5-10% of the population of women. The exact etiology of PCOS remains unclear, but it is believed to result from complex interactions between genetic, behavioral, and environmental factors. The spectrum of its symptoms such as hirsutism, skin problems, obesity and finally infertility has a huge negative impact on the individuals' psychological and interpersonal functioning.

Aim

Evaluation of clinical, hormonal, metabolic parameters and quality of life in PCOS women after different type of treatment.

Material and Methods

90 PCOS women (age 18-30 years) were recruited to the study. The diagnosis of PCOS was based on the Rotterdam 2003 criteria.

Serum concentrations of estradiol, Follicle-stimulating hormone (FSH), Luteinizing hormone (LH), prolactin, total testosterone, Dehydroepiandrosterone-sulfate (DHEA-S), glucose, insulin, Thyroid-stimulating hormone (TSH) and free thyroxine (fT4) were estimated.

Conducted clinical evaluation of hirsutism with modified Ferriman & Gallwey scale and the evaluation of acne lesions was performed.

Quality of life was estimated by the Short-Form 36 Health Survey (SF36).

Women were randomly assigned, on the basis of a random number scale, to each of three treatment groups:
- 3 mg Drospirenone (D) /30 mcg Ethinylestradiol (EE)- 30 patients,
- 2 mg Chlormadinone acetate (CMA) /30 mcg EE - 30 patients,
- 2 mg Estradiol (E)/10 mg Dydrogesterone (P)- 30 patients. E/P therapy consisted of 21 days of 2mg of E and joined 10 mg of P for the last 10 days of treatment.

The hormonal treatment was prescribed for 6 months (21 days followed by 7 days suspension).

Results

Serum levels of total testosterone and DHEAS in women after treatment were statistically lower in comparison to these results after the study. There was no statistically difference in androgens levels between these three groups of women. Quality of life estimated by SF36 after treatment was statistically higher in comparison to women before entering to the study.

Conclusions

A six-cycle hormonal treatment with is efficacious in PCOS women to improve serum androgens levels, hyperandrogenic symptoms and quality of life.