

Effectiveness of Ethinyl Estradiol /Cypoterone Acetate and Ethinyl Estradiol/ Desogestrel With or Without Low-Dose Metformin on Perceived Quality Of Life in Hirsute Women with Polycystic Ovary Syndrome: A Randomized, Double-Blind Study

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Polycystic Ovary Syndrome (PCOS) is an endocrine disorder with various endocrine and metabolic abnormalities. It is often associated with menstrual irregularity, infertility, obesity and dermatological manifestations such as hirsutism and acne. Because of these reasons, women with PCOS suffer from psychological problems such as anxiety, eating disorders, dissatisfaction with body shape, depression, sexual dysfunction and impaired health-related quality of life. This study was carried out to evaluate the change of perceived of quality of life in PCOS patients treated with Ethinyl estradiol (35 µg) / cyproterone acetate (2 mg) (EE/CPA) and Ethinyl estradiol (20 µg)/ Desogestrel (0.15mg) (EE/DES) alone and combination with low-dose metformin (500 mg daily). A total of 107 patients with PCOS diagnosed according to Rotterdam Consensus Criteria 2003 with a hirsutism score of 8 or more according to modified Ferryman- Gallwey Score (mFGS) were randomized to receive one of four drug combinations (arm A – EE/CPA plus two placebos, arm B- EE/DES plus two placebos, arm C- EE/CPA plus metformin and a placebo, arm D- EE/DES plus metformin and a placebo). The outcomes assessed were body mass index (BMI), hirsutism (using mFGS) and quality of life (using polycystic Ovary Syndrome Health- Related Quality of Life Questionnaire (PCOSQ) and Visual Analog Scale (VAS) score) at the beginning and after 12 months of treatment. PCOSQ score related to the hirsutism, emotions, menstruation, obesity and infertility and VAS score related to hirsutism and obesity showed a statically significant improvement at the end of 12 months ($p < 0.001$) in all treatment arms. Statistically significant improvements were seen in BMI arm A and mFGS in arms A and B at the end 12 months. However, there was no significant difference between treatment arms in all measured outcomes at baseline and the end of 12 months.

Key words: Polycystic Ovary Syndrome, Quality of life, Hirsutism, Obesity, Menstruation