

DEPRESSION, ANXIETY AND ANGER IN PATIENTS WITH POLYCYSTIC OVARY SYNDROME

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Introduction: PCOS is a syndrome of the heterogeneous nature, affecting multiple systems, particularly the endocrine system. We propose to investigate the possible relationships among hormonal changes, levels of anxiety, depression, and anger in patients with PCOS.

Method: Forty four female patients with PCOS and 44 BMI (Body Mass Index)-matched healthy women participated in this study. We measured the sociodemographic features, some serum hormonal levels (insulin, gonadotropins, prolactin, dehydroepiandrosterone sulfate (DHEAS), TSH, T3, T4, 17 OH-Progesterone, total and free testosterone) and some other biochemical parameters of the participants. Also, all participants completed Trait Anger-Anger Expression Scale (STAS), Beck Depression and Beck Anxiety Inventories.

Results: The mean ages of the patients with PCOS and control subjects were 27.3 ± 5.6 and 27.4 ± 6.1 years, respectively. The measures of BMI, insulin, LH, DHEAS, and total testosterone serum levels in the patient group were significantly higher than the control group ($p < 0.05$). There was statistically significant positive correlation between BAI scores and DHEAS levels. We found significant differences between two groups in terms of trait anger, anger control, anger outward and inward, anxiety level and depression scores ($P < 0.05$).

Conclusion: Anxiety symptoms indicate stronger relationship compared to the depression with the DHEAS serum levels via autonomic nervous system, considering GABA antagonistic effect of DHEAS. Obesity, hirsutism, and infertility may reduce self-confidence, and create depressive symptoms in patients with PCOS. In addition, changes in the hormonal levels may lead to anxiety directly. Possibly, depressive symptoms are a secondary reflection of these changes.