



Effect of laser puncture combined with a diet-exercise intervention on obese polycystic ovarian females

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Abstract : Background: Polycystic ovary syndrome (PCOS) is a common endocrine disorder, affecting 8–12% of women. Lifestyle modification is the first-line approach in managing PCOS. Acupuncture has been shown to have also beneficial effects on PCOS. Purpose: To evaluate the effect of laser acupuncture combined with a diet-exercise intervention on obese polycystic ovarian females. Methods: Sixty obese females diagnosed with PCOS. They were divided into study (N=30) and control (N=30) groups. The control group received the diet-exercise intervention and the study group received the same intervention and sessions of laser acupuncture, 2 times /week for three months. The tools used to assess the outcome were anthropometric measurement, fasting blood insulin, endocrine hormones and follicular size. Results: The results of the study show that participants in the study group revealed a significantly greater decrease in (BMI, waist / hip ratio, fasting insulin level, LH, LH/FSH) and significant more increase in FSH and follicular size as compared to the control group , while AMH was significantly decreased after treatment only in the study group. Conclusion: Laser acupuncture combined with the diet-exercise intervention decreases BMI, waist hip circumferences, improves both metabolic and endocrine features as well as increasing the follicular size in obese polycystic ovarian women.

Keywords: Diet, Exercise, Laser acupuncture, Obesity, Polycystic ovarian syndrome.