Observation on therapeutic effect of acupuncture combined with Chinese herbs on polycystic ovary syndrome of kidney deficiency and phlegm stasis type

Objective: To observe the clinical therapeutic effect of acupuncture combined with Chinese herbs on polycystic ovary syndrome of kidney deficiency and phlegm stasis type and probe into the mechanism. METHODS: Sixty-three cases of polycystic ovary syndrome of kidney deficiency and phlegm stasis type were randomly divided into a combined acupuncture and Chinese herb group (n=32) treated with acupuncture at Qihai (CV 6), Guanyuan (CV 4), et al. and oral administration of Chinese herbs, and a simple Chinese herb group (n=31) treated with oral administration of the same Chinese herbs as in the combined acupuncture and Chinese herb group. The therapeutic effects and changes of follicle stimulating hormone (FSH), luteotropic hormone (LH), testosterone (T) and LH/FSH were compared between the two groups. RESULTS: The total effective rate was 93.8% in the combined acupuncture and Chinese herb group and 80.6% in the simple Chinese herb group, the former being significantly better than the latter (P < 0.05). The decrease of T in the combined acupuncture and Chinese herb group was significantly su perior to that in the simple Chinese herb group (P < 0.01). CONCLUSION: Acupuncture combined with Chinese herb therapy is superior to the simple Chinese herb in the clinical therapeutic effect on polycystic ovary syndrome of kidney deficiency and phlegm stasis type and decrease of T level, indicating this method is a better one for polycystic ovary syndrome of kidney deficiency and phlegm stasis type.

Acupuncture in polycystic ovary syndrome: current experimental and clinical evidence

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This review describes the aetiology and pathogenesis of polycystic ovary syndrome (PCOS) and evaluates the use of acupuncture to prevent and reduce symptoms related with PCOS. PCOS is the most common female endocrine disorder and it is strongly associated with hyperandrogenism, ovulatory dysfunction and obesity. PCOS increases the risk for metabolic disturbances such as hyperinsulinaemia and insulin resistance, which can lead to type 2 diabetes, hypertension and an increased likelihood of developing cardiovascular risk factors and impaired mental health later in life. Despite extensive research, little is known about the aetiology of PCOS. The syndrome is associated with peripheral and central factors that influence sympathetic nerve activity. Thus, the sympathetic nervous system may be an important factor in the development and maintenance of PCOS. Many women with PCOS require prolonged treatment. Current pharmacological approaches are effective but have adverse effects. Therefore, nonpharmacological treatment strategies need to be evaluated. Clearly, acupuncture can affect PCOS via modulation of endogenous regulatory systems, including the sympathetic nervous system, the endocrine and the neuroendocrine system. Experimental observations in rat models of steroid-induced polycystic ovaries and clinical data from studies in women with PCOS suggest that acupuncture exert long-lasting beneficial effects on metabolic and endocrine systems and ovulation.

Acupuncture and exercise restore adipose tissue expression of sympathetic markers and improve ovarian morphology in rats with dihydrotestosterone-induced PCOS

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Altered activity of the sympathetic nervous system, which innervates adipose and ovarian tissue, may play a role in polycystic ovary syndrome (PCOS). We hypothesize that electro-acupuncture (EA) and physical exercise reduce sympathetic activity by stimulating ergoreceptors and somatic afferent pathways in muscles. Here we investigated the effects of low-frequency EA and physical exercise on mRNA expression of sympathetic markers in adipose tissue and on ovarian morphology in female rats that received dihydrotestosterone (DHT) continuously, starting before puberty, to induce PCOS. At age 11 wk, rats with DHT-induced PCOS were randomly divided into three groups: PCOS, PCOS plus EA, and PCOS plus exercise. The latter two groups received 2-Hz EA (evoking muscle twitches) three times/week or had free access to a running wheel for 4-5 wk. In mesenteric adipose tissue, expression of beta(3)-adrenergic receptor (ADRB3), nerve growth factor (NGF), and neuropeptide Y (NPY) mRNA was higher in untreated PCOS rats than in controls. Low-frequency EA and exercise downregulated mRNA expression of NGF and NPY, and EA also downregulated expression of ADRB3, compared with untreated rats with DHT-induced PCOS. EA and exercise improved ovarian morphology, as reflected in a higher proportion of healthy antral follicles and a thinner theca interna cell layer than in untreated PCOS rats. These findings support the theory that increased sympathetic activity contributes to the development and maintenance of PCOS and that the effects of EA and exercise may be mediated by modulation of sympathetic outflow to the adipose tissue and ovaries.