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# Positive Effects of Acupuncture on Menstrual Irregularity and Infertility in a Patient with Polycystic Ovary Syndrome

Sahin AE1, Cayir Y2\* and Akcay F3

- <sup>1</sup>Palandoken State Hospital, Anesthesiology Clinic, Erzurum, Turkey
- <sup>2</sup>Ataturk University, Faculty of Medicine, Department of Family Medicine, Erzurum, Turkey
- <sup>3</sup>Ataturk University, Research and Application Center for Acupuncture and Complementary Medicine Therapy Modalities, Erzurum, Turkey

\*Corresponding author: Yasemin Cayir, Department of Family Medicine, Faculty of Medicine, Ataturk University, Erzurum, Turkey; Tel: 0904423448750; E-mail: dryasemincayir@yahoo.com

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#### Abstract

**Introduction:** Polycystic Ovary Syndrome (PCOS) is an important health problem seen in fertile women. Treatment in women with PCOS is commonly symptomatic. Positive effects of acupuncture on menstrual frequency and androgenic hormone levels have been demonstrated, as well as in some diseases with endocrinological disorders such as PCOS. Here, a patient who had presented with menstrual irregularity and infertility and had regular menstruations and pregnancy after acupuncture treatment is presented.

Case Report: A 32-year-old female presented to receive acupuncture treatment for menstrual irregularity, obesity, and infertility. She was diagnosed with PCOS ten years ago. The patient had menstrual irregularity for five years and amenorrhea for the last one year, and discontinued using combined oral contraceptives due to weight gain. Her body mass index (BMI) was 32.9 kg/m². Her laboratory values were FSH: 4.34 mIU/ml, LH: 5.15 mIU/ml, and TSH:1.87 uIU/ml. Patient was given 24 acupuncture treatment sessions twice a week in three months. Bilateral we selected LI4, ST36, SP6, GB34, CV5, CV6, CV12, GV4, Yintang, Taiyang acupuncture points, also ear shenmen, ear gastric point. The patient started to have regular menstruation during her follow-up. She lost 8 kg in three months and her BMI was 29.7 kg/m². She became pregnant after two months and could not continue acupuncture treatment.

**Discussion:** Acupuncture is thought to provide ovulation through its effects on the neuroendocrine system, metabolism, and ovarian blood flow in anovulatory conditions, such as PCOS. In addition, it provides good results for infertility through its effects on immune function and mood. Our patient, who was infertile, got pregnant after acupuncture.

**Conclusion:** This case demonstrated that the use of acupuncture seemed to be helpful for menstrual irregularity and infertility in a patient with PCOS.

**Keywords:** Polycystic ovary syndrome; Infertility; Acupuncture

## Introduction

Manifestations of polycystic ovary syndrome (PCOS) are menstrual irregularities, hirsutism, multiple cysts in the ovary, and infertility. It is the most commonly seen disease in fertile women, with an incidence of 6-8% [1,2]. Metabolic disorders such as obesity and insulin resistance are also seen in most of the patients. In particular, menstrual irregularity and infertility are the most significant complaints that bring a patient to a physician. Treatment is based on a symptomatic approach. Low dose combined oral contraceptives are the first choice drug of use for the treatment of the symptoms [3,4].

Acupuncture is a 3000-year-old method of treatment that uses the body's own healing power performed by stimulating predefined points on the body. Positive effects of acupuncture on menstrual frequency and androgenic hormone levels have been demonstrated, as well as in some diseases with endocrinological disorders such as PCOS [5,6]. Here, a patient who had presented with menstrual irregularity and

infertility and had regular menstruations and pregnancy after acupuncture treatment is presented.

### Case Report

A 32-year-old female presented to receive acupuncture treatment for menstrual irregularity, obesity, and infertility. She was diagnosed with PCOS ten years ago. The patient had menstrual irregularity for five years and amenorrhea for the last one year, and discontinued using combined oral contraceptives due to weight gain. Her body mass index (BMI) was 32.9 kg/m². Her laboratory values were FSH: 4.34 mIU/ml, LH: 5.15 mIU/ml, and TSH: 1.87 uIU/ml.

Patient was given 24 acupuncture treatment sessions in three months. Needles were stainless steel, and 0.25 mm diameter and 25 mm length. We selected bilateral L14, ST36, SP6, GB34, CV5, CV6, CV12, GV4, *Yintang, Taiyang* acupuncture points, also ear *shenmen*, ear gastric point. Needle stimulation or *moxatherapy* was not applied. Same acupuncture points were selected in each session and the needles were retained for 30 minutes. Acupuncture treatments were performed twice a week.

The patient had amenorrhea upon presentation, and had menstrual bleeding after two sessions of acupuncture and started to have regular menstruation during her follow-up. She lost eight kg in three months and her BMI was 29.7 kg/m². She became pregnant after two months and could not continue acupuncture treatment. No side effects were seen during the treatment. The patient was seen seven months after the cessation of treatment. It was learned that her pregnancy ended with abortion; however she continued to have regular menstruations in every 28 days.

## Discussion

PCOS is an important health problem seen in fertile women with long-term associations with obesity, insulin resistance, type 2 diabetes, dyslipidemia, and endometrium carcinoma. Treatment in women with PCOS is commonly symptomatic. Medicine, surgery, and life style changes are used in the treatment. High costs, multiple pregnancies, and other adverse effects can be seen with the use of current western treatment methods. Acupuncture is an affordable method of treatment with low risk of adverse effects, and multiple pregnancies [8].

Women with PCOS were demonstrated to be hesitant to receive acupuncture treatment at the beginning; however, they were reported to feel better at the end of the treatment and also to feel that their bodies functioned normally [9]. Our case was a patient with long-term amenorrhea and when she had menstrual bleeding immediately after the second session, she became faithful and committed to the treatment. Therefore, she was able to continue the treatment for three months, twice weekly.

Acupuncture is thought to provide ovulation through its effects on the neuroendocrine system, metabolism, and ovarian blood flow in anovulatory conditions, such as PCOS. In addition, it provides good results for infertility through its effects on immune function and mood [10]. Our patient, who was infertile, got pregnant after the 24th session. Although the pregnancy ended with abortion, it is remarkable in a woman who was infertile for three years to become pregnant after acupuncture treatment.

We suggest that acupuncture can be used in patients with polycystic ovary syndrome to have positive effect on menstrual irregularity and to help induce pregnancy as an adjuvant treatment.

## Conclusion

It was observed that the use of acupuncture had a positive effect on menstrual irregularity and infertility in a patient with PCOS. Randomized controlled studies are needed to demonstrate the effectiveness of acupuncture on menstrual irregularity and infertility which are two of the most important complaints in PCOS.

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