

## **Case report – Acupuncture treatment in patient with high TSH (thyroid-stimulating hormone)**

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### **Abstract**

A condition where there is elevated level of TSH and normal T4 and T3 levels is defined as subclinical hypothyroidism. Several studies showed that 4% to 8.5% of the individuals without known previous thyroid disease may actually have subclinical hypothyroidism as it was evidenced by the mildly elevated TSH level. TCM has a holistic view on the development of the diagnostic methods and treatment strategies for every patient individually. The purpose of the treatment is to help the individual's body ability to awaken to naturally heal itself. In this article is reported a case of a 49 year old woman diagnosed with hypothyroidism due to high levels of TSH. The diagnosis was made shortly before the acupuncture treatment began. The patient wasn't taking any additional medication therapy. 18 acupuncture treatments were made starting from 07.07.2018 to 20.03.2020. Before the treatment the TSH level was increased above the normal rate (5.31 mUI/ml) and after the treatment the TSH level was normalized (3.39 mUI/ml). Acupuncture is an effective treatment for patients with hypothyroidism due to high level of TSH. The treatment can effectively regulate the energy in the body and restore the hormonal balance and the balance of the endocrine system.

**Key words** – traditional Chinese medicine, acupuncture, endocrinology, hypothyroidism

## 1. Introduction

The pituitary hormone TSH (thyroid-stimulating hormone), is the primary biomarker for evaluating the function of the thyroid. The thyroid hormone secretion is regulated and managed from inside the central nervous system. The central nervous system allows modulation from the periphery, via feedback from the autonomic nervous system or nutrient intake. [1]

A condition where there is elevated level of TSH and normal T4 and T3 levels is defined as subclinical hypothyroidism. Subclinical hypothyroidism is a very common condition. Several studies showed that 4% to 8.5% of the individuals without known previous thyroid disease may actually have subclinical hypothyroidism as it was evidenced by the mildly elevated TSH level. In healthy individuals, the TSH distribution is directed towards the lower end of the reference range which is around 1.5 mUI/ml (reference range is 0.4-4.0mUI/ml). Coming from this point, it is possible that individuals that might appear to be healthy with TSH levels in the upper end of the reference range, may actually have elevated TSH levels as a response of early thyroid gland imbalance. These individuals should be considered for having subclinical hypothyroidism. [2]

Hypothyroidism, especially if not treated, might lead to: fatigue, mood changes, cognitive dysfunction, increased body weight, coronary heart disease abnormal serum lipids, recurrent miscarriages and infertility. [2]

TSH levels estimates (Most commonly used reference values in labs):

- Hyperthyroidism 0.0 – 0.4 mUI/ml
- Normal 0.4 - 4.0 mUI/ml
- Mild hypothyroidism 4.0 – 10 mUI/ml
- Hypothyroidism >10 mUI/ml [3]

Acupuncture and herbal medicine are the treatment methods that the Traditional Chinese Medicine (TCM) offers for thyroid disorders. These treatments are usually long-term, due to the nature of the disease. [4] TCM has a holistic view on the development of the diagnostic methods and treatment strategies for every patient individually. The purpose of the treatment is to help the individual's body ability to awaken to naturally heal itself. [5]

## 2. Case report

In this article is reported a case of a 49 year old woman diagnosed with mild hypothyroidism due to high levels of TSH. The diagnosis was made shortly before the acupuncture treatment began. The patient wasn't taking any additional medication therapy. 18 acupuncture treatments were made starting from 07.07.2018 to 20.03.2020.

The treatments were made in the clinic for Traditional Chinese Medicine and acupuncture in Skopje by a doctor specialist in acupuncture. Treatments were done indoor, on a room temperature, one treatment per week, with duration of 30-45 minutes. In the treatments were used fine sterile needles, made by Wujuiang City Medical & Health Material Co., LTD, size 0.25x25mm. Acupuncture points used in the treatment are: LI4 (HeGu), DU20 (BaiHui), DU14 (DaZhui), ST9 (RenYing), GB20 (FengChi), BL20 (PiShu), BL15 (XinShu), BL23 (ShenShu), DU4 (MingMen), RN4 (QuanYuan), RN6 (QiHai), SP9 (YinLingQuan), ST36 (ZuSanLi), LR2 (TaiChong), SP6 (SanYinJiao) and KI3 (TaiXi),

In table 1 are shown the blood results made before and after the acupuncture treatment. Before the treatment the TSH level was increased above the normal rate (5.31 mUI/ml) and after the treatment the TSH level was normalized (3.39 mUI/ml).

*Table.1 Blood results before and after the treatment*

	<b>TSH (0.4-4.0)</b>	<b>ft4 (9-20)</b>
<b>Before treatment</b>	5.31mUI/ml	12.04pmol/L
<b>After treatment</b>	3.39mUI/ml	12.24pmol/L

When there are such test results for the thyroid hormones, classical medicine doctors immediately prescribe hormone tablet therapy like Euthyrox to normalize the hormone levels.

TCM has a holistic approach to the human body and takes in consideration the unity of the spirit and body and their connection to the environment. TCM views a disease or a symptom as a sign of imbalance of some body part and affects the whole body. Therefore, not just the affected organ or system, but the other aspects of patient's life need be evaluated too.[4]

The main cause of hypothyroidism is deficiency in the Yang energy, which causes the function of the body to be insufficient and fails to warm, transform and motivate the body energy. Main affected organs are the Spleen and Kidney, and the Heart system is more affected in advanced stages. [5]

The purpose of the acupuncture treatment is to increase the energy in the Kidney, Heart and Spleen, strengthen the affected organs, regulate and balance the thyroid hormones, remove the accompanying symptoms, improve the endocrine function, improve the general health condition of the patient and other. [6]

### **3. Conclusion**

Acupuncture is an effective treatment for patients with hypothyroidism due to high level of TSH. The treatment can effectively regulate the energy in the body and restore the hormonal balance and the balance of the endocrine system.

### **References**

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