

Acupuncture treatment for regulating TSH hormone

Blagica Zhu Arsovska^{1, 2} Jihe Zhu^{1,2} Kristina Kozovska¹ Julijana Velkovska¹

1 Center of Traditional Chinese Medicine "Tong Da Tang", Republic of N. Macedonia;

2 University "Skopje", Skopje, Republic of N. Macedonia

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Abstract

Thyroid stimulating hormone or TSH is another name for thyrotropin. TSH signals the thyroid on how much thyroid hormone to produce. The thyroid, a small butterfly-shaped gland in the front of the neck, is regulated by the pituitary gland in the brain. To diagnose thyroid disorder doctor's use TSH test results, it can be hypothyroidism and hyperthyroidism. Thyroid dysfunction is more common in females than in males. In Traditional Chinese Medicine, hypothyroidism is primarily classified as a deficiency disorder. Hypothyroidism arises from a chronic deficiency of one or more vital substances in the body, including Qi, Blood, Yang, Yin, and Essence. It is a systemic disorder that often begins with general Qi deficiency and gradually impacts all organ systems as the disease progresses over time. In this article is presented a case of 26 years old women with high TSH ie hypothyroidism. She has had this problem since June 2024 and has been given therapy by a doctor with 75mcg of Euthyrox. She started acupuncture treatments on August 20, 2024. Results made on 11.06.2024, TSH is 11.2 and the reference value is (0,4-4 µIU/ml), Ft4 is 1.13 and the reference value is (0.89-1.76 ng/ml). Five days after first acupuncture treatment she made new results and the TSH result was 0.73, after that she start to drink 50mcg of Euthyrox and she continue with acupuncture treatments once a week. After 8 treatments she again made new results, her THS is 3.70 and Ft4 is 11.45 (7.86-14.41 ng/ml). After this good results she start to drink 25mcg of Euthyrox and continue with acupuncture treatment. Hypothyroid patients are often deficient in Yang and Qi, acupuncture as a part of TCM with long needle retention or strong stimulation can improve circulation of Qi and blood.

Key words: Acupuncture, TCM, TSH hormone, hypothyroidism, case report

Introduction

The thyroid, a small butterfly-shaped gland in the front of the neck, is regulated by the pituitary gland in the brain. Thyroid hormones influence nearly every organ in the body, playing a vital role in regulating essential functions such as breathing, heart rate, digestion, weight management, and mood. To diagnose thyroid disorder doctor's use TSH test results, it can be hypothyroidism and hyperthyroidism. The normal TSH range varies based on age and pregnancy status. Generally, TSH levels tend to increase with age. Research has not found a consistent difference in TSH levels between males and females. Doctors typically define the normal range as 0.4 to 4.0mU/L. [1]

The symptoms of hypothyroidism vary in severity and typically develop gradually, often over the course of several years. Initially, symptoms of hypothyroidism, such as fatigue and weight gain, may be barely noticeable. Other symptoms include: tiredness, more sensitivity to cold, constipation, dry skin, weight gain, puffy face, muscle weakness, menstrual cycles that are irregular or heavier than usual, thinning hair, memory problems, depression etc. [2]

Individuals who are at an increased risk for hypothyroidism include the following groups: pregnant women, women older than 60 years, patients with autoimmune disease or diabetes type1, family history of thyroid disorders etc.

Effective treatment alleviates the signs and symptoms of hypothyroidism, enhances patient well-being, and restores normal TSH and free T4 levels. However, because hypothyroid symptoms are nonspecific, a symptomatic patient with normalized lab results while on thyroid replacement therapy may indicate an alternative underlying cause. In such challenging cases, the clinician must reassess the patient, and strong counseling skills can be invaluable in managing the situation.

Hypothyroidism impacts multiple organ systems across all age groups, affecting both patient well-being and daily functioning. This condition is best managed by a primary care physician or an endocrinologist, with levothyroxine monotherapy being the standard treatment. [3]

Females are more likely to develop this condition compared to males. According to the Office of Women's Health, 1 in 8 females will experience thyroid issues at some point. A 2020 study also revealed that elevated body mass index and high blood pressure in females can further increase this risk. Certain medical interventions can raise the chance of developing hypothyroidism. These may involve specific medications, surgeries, or other treatments. In particular, some surgical procedures may heighten the risk of hypothyroidism. [4]

Case report

In this article is presented a case of 26 years old woman with high TSH ie hypothyroidism. She has had this problem since June 2024 and has been given therapy by a doctor with 75mcg of Euthyrox. She started acupuncture treatments on August 20, 2024. Results made on 11.06.2024, TSH is 11.2 and the reference value is (0,4-4 µIU/ml), Ft4 is 1.13 and the reference value is (0.89-1.76 ng/ml). Five days after first acupuncture treatment she made new results and the TSH result was 0.73, after that she started to drink 50mcg of Euthyrox and she continued with acupuncture treatments once a week. After 8 treatments she made new results again, her TSH is 3.70 and Ft4 is 11.45 (7.86-14.41 ng/ml). After these good results she started to drink 25mcg of Euthyrox and continued with acupuncture treatment.

The acupuncture treatments were made in an acupuncture clinic for acupuncture and TCM in Skopje, North Macedonia by a doctor specialist in acupuncture. Acupuncture treatments were with a duration of 30 to 45 minutes. Treatments were done indoors, on a room temperature, with normal (dry) acupuncture with fine sterile disposable needles sized 0.25x25mm. Acupuncture points used in the treatments are: DU20, DU21, DU22, BL4, ASHI, RN9, RN5, ST25, LI4, ST36, SP9 and LV3

In Traditional Chinese Medicine (TCM), hypothyroidism is primarily categorized as a deficiency disorder. The diagnosis is individualized and depends on the patient's specific clinical presentation. TCM views hypothyroidism as a condition stemming from the chronic deficiency of one or more vital substances in the body, such as Qi, Blood, Yang, Yin, or Essence. In the pathogenesis of hypothyroidism, the Spleen, Kidney, and Heart are the primary organs involved, while the Lung and Liver are indirectly affected. Contributing factors include constitutional predisposition, dietary habits, overexertion, emotional stress, trauma, chronic debilitating illnesses, and side effects from medical

treatments. According to TCM, patients with hypothyroidism have the following symptoms: fatigue and weakness, cold intolerance, constipation, edema, dry and flaky skin, thinning of hair or loss of hair, Irregular menstruation and menorrhagia. In men with hypothyroidism, chronic deficiency of Kidney Yang Qi and Essence may lead to symptoms such as impotence and infertility and etc. [5]

The goal of acupuncture treatment is to enhance energy in the Kidney, Heart, and Spleen, strengthen these organs, regulate and balance thyroid hormones, alleviate accompanying symptoms, improve endocrine function, enhance the patient's overall health, and address other related concerns. [6]

Acupuncture is a medical treatment within Traditional Chinese Medicine that involves the application of small needles to specific points on the human body, known as acupoints. Acupuncture is becoming increasingly popular as a treatment, and its popularity is expected to grow. This is largely due to the satisfaction of those receiving acupuncture, with most expressing a positive opinion about the treatment. [7]

Conclusion

For patients with hypothyroidism caused by elevated TSH levels, acupuncture is considered an effective treatment. The thyroid tissue, has a potential to revive and resume the production of adequate amounts of thyroid hormones. Human body poses mechanisms of self-restoration, and acupuncture as a part of TCM can help the patients to live a complete life full of vitality by restoring the thyroid glands function.

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Conflict of interest

The author have declared that no competing interests exist.

Acknowledgement

None.

Statement of Informed Consent

Written informed consent was obtained from the patient for his anonymized Information to be published in this article