

Ruixia Pei's Experience in the Treatment of Hypothyroidism

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Abstract: This study is to summarize Professor Pei's experience in treating hypothyroidism. Professor Pei has been engaged in clinical endocrinology for more than 30 years and has unique insights into hypothyroidism. She believes that the disease is caused by liver depression, phlegm binding, yin deficiency, and fire effulgence. The basic principles of treatment are regulating Qi movement and harmonizing viscera. During treatment, the emphasis is on the influence of emotions on the disease. Both the liver and spleen should be given equal attention and the medication should be mild with balanced cold and heat.

Keywords: Hypothyroidism; Case verification; Academic thought; Ruixia Pei

Publication date: September 2021; **Online publication:** September 30, 2021

1. Introduction

Hypothyroidism is a common clinical disease. It is characterized by an insidious onset and slow progress. The prevalence rate of the disease among women is often higher than that of men ^[1,2]. If women with hypothyroidism during pregnancy are not treated in time, there would be adverse effects on the mental and intellectual aspects of their babies ^[3-5]. In recent years, with the influence of the pace of life along with environmental factors, the incidence of hypothyroidism is increasing year by year. Studies have shown that the incidence of hypothyroidism in adults is 1.02% and the prevalence of subclinical hypothyroidism is 12.93%, in which most patients with subclinical hypothyroidism have no obvious symptoms ^[6]. At present, Western medicine mainly emphasizes on lifelong thyroid hormone replacement therapy while traditional Chinese medicine has its unique advantages in relieving symptoms and improving indicators ^[7]. According to the clinical manifestations of hypothyroidism, traditional Chinese medicine divides hypothyroidism into "nontoxic goiter," "vacuity taxation," "edema," and other categories ^[8].

Professor Ruixia Pei, a traditional Chinese medicine doctor in Shaanxi Province, has been engaged in clinical endocrinology, teaching, and scientific research for more than 30 years. She has rich clinical experience and profound theoretical attainments. She inherits the "harmonizing method" thought of Jingao Qin, attaches great importance to the liver and spleen during treatment, as well as the influence of negative emotions on the disease. The clinical effect is remarkable, which is deeply recognized by patients.

2. Etiology and pathogenesis

Professor Pei believes that the etiology and pathogenesis of hypothyroidism are closely related to emotions ^[9]. With the acceleration of urbanization, the pressures in people's lifestyles are gradually increasing, thus anxiety, tension, and depression are becoming more and more common. Imbalance emotions lead to liver

dysfunctions, loss of its regulation function, depression, and transformation into fire, suffering from yin essence, condensing humor into phlegm, and blockage of the front neck. On the other hand, it can lead to the stagnation of liver-Qi, transverse invasion of the liver into the spleen, dysfunction of the spleen in transport, as well as phlegm dampness and internal resistance caused by a strong liver but weak spleen. The spleen is the source of acquired constitution; it affects the muscles of the limbs, and it is the source of the biochemistry of Qi and blood. Deficiency of spleen Qi as well as the insufficiency of Qi and blood result in limb weakness, shortage of qi, loss of strength, somnolence, deterioration of memory, alopecia, chills, and other symptoms.

3. Principle of treatment

During treatment, Professor Pei emphasizes on the treatment of liver and spleen. The drugs used are usually cold drugs, which are assisted by the restriction from warm drugs. Five flavors are concentrated in bitter, sweet, and spicy. Meridian tropism is mostly attributed to spleen meridian and liver meridian, thus soothing the liver and strengthening the spleen while treating according to different symptoms are the focus. Patients with blood stasis block are treated with blood circulation products, such as *Rhizoma Ligustici* and *Curcumae Radix* whereas patients with water-dampness and stagnation, drugs that fortify the spleen, percolate dampness, activate Qi, and eliminate phlegm are used, such as *Poria*, *Rhizoma Pinelliae*, *Cortex Magnoliae Officinalis*, etc. On the other hand, *Rhizoma Dioscoreae*, *Corni Fructus*, *Radix Rehmanniae Preparata*, and other drugs that nourish the kidneys and strengthen the essence are added in cases of long-term disease, endangering the kidneys.

4. Example of a medical record

The first visit to a doctor (or hospital) on March 15, 2021: Mr. X, male, 32 years old. The patient came to see a doctor with the chief complaint of abnormal thyroid function for 2 years and generalized fatigue for more than 1 month. The patient was found with abnormal thyroid function through examination 2 years ago (specific data is unknown) and was diagnosed with hypothyroidism after visiting a local hospital but the patient was not compliant. One month ago, due to reduced cognitive function and general fatigue, he was found in another hospital for a re-examination. The thyroid function test showed that his FT3 (free triiodothyronine) and FT4 (free thyroxine) were normal, but TSH (thyroid stimulating hormone) level was 6.36 mIU/L and TGAb (thyroglobulin antibodies) level was more than 1000 U/mL. He was treated with oral levothyroxine sodium tablet (Euthyrox) 25ug, once a day. His current symptoms included tiredness, poor spirit, impaired memory, and daytime somnolence but he had difficulty to fall asleep at night. His intake of food was regular with normal defecation. His tongue was red with few mosses, and his pulse was thin. The TCM diagnosis was nontoxic goiter, deficiency, syndrome differentiation for hyperactivity of heart-liver fire, deficiency of both Qi and yin. The treatment was to clear the liver and reduce fire, nourish yin, the heart, and qi to invigorate the spleen. The formula was to add and subtract Minor *Bupleurum* Decoction combined with Pulse-Engendering Powder. The specific drugs are as follows: *Radix Glehniae*, *Radix Ophiopogonis*, *Radix Curcumae* vinegar 15 g, *Bupleurum chinense* vinegar, *Rhizome Pinelliae Preparata*, *Cortex Magnoliae Officinalis*, *Rhizoma Ligustici*, mix-fried licorice 10 g, *Schisandra chinensis* vinegar 6 g, stir-fried bitter orange 12 g, and *Radix Scrophulariae* 20 g. Six doses were given, decocted in water, 1 dose a day, taken in the morning and evening after meals. He was advised to regulate his emotions, work and rest regularly, as well as abstain from seafood, high iodine food, spicy irritants, and fried food.

The second visit on March 22, 2020: The patient mentioned that his palpitations significantly improved along with his daytime sleepiness and night rest. Otherwise, his food intake was good, and defecation was normal. His tongue was red with white moss and his pulse was thin. *Radix Scrophulariae* and *Rhizoma*

Ligustici were removed from the prescription, but 6g of Herba Menthae and 15g of wine Cornus were added. Similarly, 6 doses were given, and the decocting method was the same.

The third visit on March 29, 2021: The patient had no obvious palpitations after taking the medication but was slightly sleepy. Otherwise, his food intake was good, he was able to rest at night, and had normal defecation. His tongue was red with white and thick moss, and his pulse was thin. Radix Rehmanniae Preparata and wine Cornus were removed from the prescription, but 30g of Radix Trichosanthis and 15g of Radix Rehmanniae Recens were added. The decocting method was the same as before but this time, 12 doses were given.

In his subsequent follow-up visits, the above prescriptions were the basic prescriptions and were modified according to evidence. Until his visit on June 19, the patient had no obvious discomfort and his TSH level had returned to normal. The patient was instructed to stop his medication for observation while reviewing his thyroid function regularly, improving his mood, and adjusting his diet. He was reminded to come for follow-up if he feels unwell.

5. Conclusion

In summary, Professor Pei emphasizes on the influence of emotions on diseases. Based on the principle of regulating the functioning of Qi and harmonizing viscera, she attaches equal importance in soothing the liver, regulating Qi, strengthening the spleen, and tonifying deficiency. The medication used is gentle with barely any harsh products and the dosage is light in addition to a balanced cold and heat.

Disclosure statement

The authors declare that there is no conflict of interest.

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