Autoimmune thyroiditis - an ancient approach of traditional Chinese medicine to a modern disease

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Traditional Chinese Medicine (TCM) has a wealth of experience in treating autoimmune diseases, such as autoimmune thyroiditis (AT), for which it thoroughly explains its pathogenesis. TCM also expounds on the mechanism of acupuncture sanogenetically from the standpoint of the ancient natural philosophy.

Chinese medicine treats the human body holistically, taking into consideration the unity of body and spirit and their relationship to the environment. Chinese Medicine appears as a proto-scientific system of health observations and practices based on a syndromatic classification of disease, using two elemental dynamic-processes pattern categorization schemes: a non-hierarchical and combinatorial inhibiting–activating model (Yin-Yang), and a hierarchical and associative five-parameter semantic network (5-Elements/Agents).1 By challenging the classic theories of western medicine, of which the ultimate goal is to combat symptoms and diseases, new options for thought may be found. For Chinese Medicine, a symptom or disease is a sign of imbalance derived from and affecting the whole body and indicates that other aspects of the patient’s life need evaluation as well, not just the apparent organ or system affected 2.

Traditional Chinese Medicine treatment of autoimmune thyroiditis has a long history. Treating both hypothyroidism and hyperthyroidism, it is important to notice that in literature hyperthyroidism is mentioned more often. Before reviewing the latest studies, let’s try to track the disease and its symptoms back to the first records. There are no exact name records of this disease to be found in ancient medical recordings. But in the 3rd century BC, the ancient book 《诸病源候论》“General Treatise on the Causes and Symptoms” of Disease describes a diffuse painless thyroid enlargement, with hard texture on the neck as the clinical manifestation, that can be classified under autoimmune thyroiditis. Chinese medicine names it “gall disease” yingbing. The relation to emotional state was also described in ancient China. The book 《济生方·瘿瘤论治》 says: “patients with gall decease can easily become furious, worry too much”.

Also, the explanation of clinical manifestations were mentioned in the Orthodoxy Manual of External Diseases “夫人生瘿瘤之症，非阴阳正气结肿，乃五脏淤血、…瘀滞而成。” where the symptoms were explained as a result of disharmony between Yin and Yang leading to nodule, edema, and phlegm stagnation.

As we see the symptoms were described and treated by the Chinese doctors long before the disease was clearly diagnosed in modern medicine.

However, according to Dr. Dharmananda, until the past fifty years, thyroid disease could not be definitively diagnosed in China; rather, Chinese doctors could only detect a certain set of symptoms to be treated and could palpate any moderate or large nodules in the area of the thyroid gland, undeniable, but fact. The syndromatic classification is a basis of traditional Chinese medicine.4] Luckily now, objective measures, such as altered levels of thyroid hormone, can give a clue as to the site of the disease and can further elucidate the influence of various therapeutic measures that might be applied.

Traditional diagnostic indicators

In the last 20 years there were numerous researches dedicated to diagnostic and treatment of AT. Commonly, autoimmune hypothyroidism is classified into 4 types: yang-insufficiency of the spleen and kidney: yang-insufficiency of the heart and kidney; yang-qi failure; the type of deficiency and loss of kidney essence. (Tao Chunxiang Journal of Traditional Chinese Medicine 2008; 28(3):231-232) [5])

The main cause of hypothyroidism is Yang Deficiency in which the body’s function to warm, motivate, and transform is inadequate. The primary organ systems include the Spleen and Kidney, and the Heart organ system becomes more involved in the advanced stage.6] According to Dr. Wei Liu In the pattern of Yang Deficiency with Spleen and Kidney Deficiency, the key symptoms are: lassitude; sleepiness; poor memory; dizziness; ringing in the ears (tinnitus); weakness of the lower back and knees; aversion to cold; dry skin; dry hair; constipation; edema; impotence (men); irregular periods (women); pale, puffy tongue body with tooth marks along the edge; white, sticky tongue coating; and a pulse that is deep and thin or deep and slow. In the pattern of Yang Deficiency with Heart and Kidney Deficiency, the characteristic symptoms are: heart palpitations; chest congestion and pain; sleepiness; feeling cold; pale, tender tongue body with a white, slippery coating; and a deep, slow pulse.

Three patterns of Yin Deficiency are differentiated for

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of hypothyroidism were reported by Zhang Yaohua. As the symptoms are enlarged, soft, smooth thyroid; anxiety; anger; aversion to heat; flushed, warm face; dry mouth with a bitter taste; increased appetite; bulging eyes; tremor; increased volume of bowel movements, a red tongue body with a dry, yellow coating; and a wiry, rapid pulse. In the pattern of Yin Deficiency with Heart and Liver Deficiency, the symptoms are: heart palpitations; anxiety; insomnia; increased appetite with weight loss; dry throat; a red tongue body with a yellow tongue coating or no coating; and a thin, rapid pulse. In the pattern of Yin Deficiency with Heart and Kidney Deficiency, the characteristic symptoms are: heart palpitations; chest congestion and pain; sleepiness; feeling cold; pale, tender tongue body with a white, slippery coating; and a deep, slow pulse. [7]

Chen HP, He JS, Hu GS. [Analysis on the traditional Chinese medicine syndromes of the patients with autoimmune thyroid diseases. Changes in the thyroid and immune functions in 109 cases] // Zhong Xi Yi Jie He Za Zhi. 1990 Sep; 10 (9): 538-9, 517. The authors found that patients with syndrome of deficiency of Yin content of T4 and T3 were higher, TSH - below normal levels. Patients with Yang deficient syndrome, the levels of T4 and T3 were lower, and TSH - above the normal range. The percentage of OKT 4 cells and the ability of lymphocytes to autorecognition at thyroid specify (Yin deficiency syndrome) have been reduced, while hypothyroidism (Yang deficient syndrome) - elevated. Moreover, in both situations, the content of autoantibodies was increased.

**Acupuncture/moxibustion**

In the past years there were numerous researches dedicated to acupuncture treatment of autoimmune thyroiditis. But in my opinion it is important to admit, that a great number of researches in China, and many other counties mainly use herbal treatment for AT. [4], [8]: [10] Acupuncture as an individual method has not been very widely used. So far it is only on a path of finding solid scientific basics, but the results are predominantly positive. Acupuncture can regulate on different levels the autonomic nervous system, hormone, and neuropeptide release to help control metabolism and may aid in regulating the immune system.[11][12] As well as regulating the emotional state of a patient.

From the classical books of traditional Chinese medicine the most common points are recommended. Comprehensive Guide To Chinese Herbal Medicine mentions the following points for hyperthyroidism: naohui (TB13), zusanli (ST36), hegu (LI4).

The Treatment of Knotty Diseases with Chinese Acupuncture and Chinese Herbal Medicine lists the following for “senile hyperthyroidism:” guanyuan (CV4), shenshu (BL23), mingmen (GV4).

This source also lists moxa points: guanyuan (CV4), qihai (CV6), mingmen (GV4), and shenshu (BL23) for cases of impairment of yin affecting yang.

Acupuncture can be used in conjunction with conventional medical treatment, or it can be the prevalent treatment. [13] According to the latest researches, acupuncture can be successfully used to treat autoimmune thyroiditis. 51 cases of hypothyroidism were reported by Zhang Yaohua. As the results show 67 % (32 cases) were cured, 19,6 % markedly effective after a long term treatment course.

The research in Russia also shows positive results. Corporal acupuncture and ear acupuncture were used primary to treat autoimmune thyroiditis. ”Irrespective of its initial index, thyroid status had a tendency to normalize with all the patients. 20% of the patients stopped receiving hormonal therapy, 77 % of the patients could reduced the doses of the hormonal medication three times. In all the cases the level of anxiety and depression diminished. In 90% of the cases the quality of life improved.”[14]

**Conclusion**

The general methodology of classical acupuncture, based on the philosophical concept of Yin-Yang and Wu Xing fully consistent with the synergy - evolutionary paradigm of modern science and the provisions of the modern systems theory. The results of theoretical analysis allow us to consider the concept of Yin and Yang as the prototype of the dialectical law of unity and struggle of opposites. As a naturalistic interpretation suggested to consider the concept of Yin and Yang from the standpoint of the hypothesis of an integral regulator of the continuum, the biochemical component of which corresponds to the category of Yin and biophysical - Yang categories.

Acupuncture is aimed at the recovery of broken psychosomatic relationships at biochemical as well as biophysical levels. But the mechanisms of acupuncture need to be more deeply studied in order to fully explain its therapeutic effects.

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Acupuncture – alternate approach to subclinical hypothyroidism correction. Ongoing research

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Background & Introduction
The replacement therapy (RT) of subclinical hypothyroidism (SHT) with individually selected doses of levothyroxine (L-T4) which provides supporting the normal level of thyrotropin hormone (TTH) is considered to be “the gold standard” of modern endocrinology. The issue of the appropriateness of RT at subclinical hypothyroidism (SHT) has been the subject for discussion at large for more than 30 years already [1]. SHT has been initially defined as a laboratory phenomenon stipulated by the introduction of highly-sensitive tests for the hormone level in blood plasma into practice. Further research has shown that this “laboratory phenomenon” may be accompanied with yet nonspecific but rather manifested symptomatology which results in life quality decrease [2], that, of itself, requires medical aid. In addition, the advocates of RT application at SHT give reasons with the data of the possibility for its transformation into clinically overt hypothyroidism. Against a SHT background there is the increase of the risk for the genesis of mental and psycho-emotional dysfunctions [3 - 5], dyslipidemia and cardio-vascular pathology [6], oncological diseases [7], reproduction abnormalities [8, 9], a number of other diseases and pathological states. Such a wide range of possible risks is probably associated with mitochondrial dysfunctions at SHT [10]. However, even individually selected RT does not always provide the TTH level normalization, and 10% of the patients with its normal level feel sick [11]. The above circumstances stipulate the urgency of the search for approaches to the SHT problem solution that are alternative to RT. The issues of acupuncture (AP) application in the treatment of thyroid gland diseases are covered in the contemporary medical literature considerably less extensive than AP treatment of other illnesses and syndromes. For instance, on the whole, on 09.12.2010 in PubMed the search words «acupuncture treatment» found 15147 sources, the words «acupuncture low back pain», «acupuncture bronchial asthma», «acupuncture gastrointestinal», «acupuncture allergy asthma asthma», «acupuncture bronchial asthma», «acupuncture gastrointestinal», «acupuncture allergy asthma asthma»

Table 1. The most widespread complaints and symptoms at the start of treatment (n = absolute number of the patients with above complaints and symptoms, N (=27) = total number of the patients)

<table>
<thead>
<tr>
<th>No.</th>
<th>Complaints and symptoms</th>
<th>n (n/N=100)</th>
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<tbody>
<tr>
<td>1</td>
<td>Pain syndromes (arthralgia, fibromialgia)</td>
<td>21(78)</td>
</tr>
<tr>
<td>2</td>
<td>Asthenia, rapid fatigability under exercise and psychic stress</td>
<td>20(74)</td>
</tr>
<tr>
<td>3</td>
<td>Apathy, indifference to the ambient situation, drowsiness</td>
<td>20(74)</td>
</tr>
<tr>
<td>4</td>
<td>Poor memory, delayed response, disability to concentrate attention</td>
<td>15(55)</td>
</tr>
<tr>
<td>5</td>
<td>High nervousness, irritability</td>
<td>14(52)</td>
</tr>
<tr>
<td>6</td>
<td>Edema, increased body weight, constipation</td>
<td>13(48)</td>
</tr>
<tr>
<td>7</td>
<td>Chills, low tolerance of cold</td>
<td>12(44)</td>
</tr>
<tr>
<td>8</td>
<td>Sensitive skin, fragility of nails and hair</td>
<td>6(22)</td>
</tr>
<tr>
<td>9</td>
<td>Hoarse voice</td>
<td>5(18)</td>
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