

Treatment of Hyperthyroidism

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Hyperthyroidism is an endocrine disorder that is characterized by an overactive thyroid gland with increased levels in secretion and circulation of the thyroid hormone. The thyroid gland is located in the neck and has an enormous impact on health and well-being. It secretes the thyroid hormone, which in turn regulates human growth, maturation and the speed of metabolism. Optimal functioning of the thyroid gland depends on proper functioning of the hypothalamus and the pituitary gland, adequate supply of iodine, and proper conversion of thyroxine (T4) to tri-iodothyronine (T3). When one of these factors is out of balance, the affected individual will begin to experience either hyperthyroidism or hypothyroidism (a deficient quantity of thyroid hormone). Hyperthyroidism is a rather common disorder. In general, it occurs more frequently in young adults between the ages of 20 and 40, and is found more often in women than in men, with an approximate ratio of 4:1.

TCM Treatment

Etiology: According to TCM, hyperthyroidism is a combination of *qi* and *yin* deficiencies, liver fire uprising, and phlegm stagnation. In Western medicine, liver fire corresponds to the continuous excitation caused by excessive thyroid hormone; *qi* and *yin* deficiencies represent the weakness and fatigue of the body from prolonged overstimulation; and phlegm stagnation is illustrated in the enlargement of the thyroid gland. The root of hyperthyroidism is deficiency, but the symptoms are excess. Treatment, therefore, must address both the cause and the symptoms simultaneously.

It is important to differentiate excess or deficiency in hyperthyroid patients in order to give the most appropriate formula. The three organs involved include the liver, heart and kidney. Besides clearing heat, it is also important to nourish the *yin* as most bitter herbs can injure *yin* and, when used for a prolonged period of time, will improve symptoms but not treat the root of the condition. Clinically, the symptoms of hyperthyroidism are very similar to that exhibited in *xiao ke* (wasting and thirsting) syndrome. It is important to diagnose correctly so the accurate formula can be prescribed.

Liver Fire: Clinical manifestations are fidgeting, irritability, increased appetite, palpitation, red tongue, yellow thin coat, and wiry rapid pulse. The herbal formula would be *Zhi Zi Qing Gan Tang* (Gardenia Decoction to Clear Liver), which clears the liver and purges fire. This would consist of *zhi zi* (Fructus gardeniae), *mu dan pi* (Cortex moutan), *chai hu* (Radix bupleuri), *dang gui* (Radix angelicae sinensis), *bai shao* (Radix paeoniae alba), *fu ling* (Poria), *chuan xiong* (Rhizoma ligustici chuanxiong), *niu bang zi* (Fructus arctii) and *gan cao* (Radix glycyrrhizae).

Qi and Yin Deficiencies: Clinical manifestations are fatigue, shortness of breath, dry eyes, palpitation, profuse perspiration, disturbed sleep, dry mouth, decreased fluid intake, hand tremor, red tongue, thin coat and a deep, thready rapid pulse. The herbal formula to use, *Yi Guan Jian* (Linking Decoction), which tonifies *qi* and *yin*, softens the liver and calms the heart. The ingredients are: *sheng di huan* (Radix rehmanniae), 30 g; *sha shen* (Radix glehniae seu adenophorae), 15 g; *mai men dong* (Radix ophiopogonis), 15 g; *dang gui shen*, 15 g; *gou qi zi*

(Fructus lycii), 15 g; and *chuan lian zi* (Fructus toosendan), 8 g.

Qi and Phlegm Stagnation: Clinical manifestations are irritability, feeling of oppression in the chest, plum-seed syndrome, enlarged thyroid gland, red tongue, thin greasy tongue coat, and wiry or slippery-wiry pulse. There are two herbal formulas to use, *Chai Hu Shu Gan Tang* (Bupleurum Powder to Spread the Liver) and *Ban Xia Hou Po Tang* (Pinellia and Magnolia Bark Decoction), both of which resolve phlegm, regulate *qi* circulation and soothe the liver. The formula for *Chai Hu Shu Gan Tang* is: *chai hu*, 19 g; *chen pi* (Pericarpium citri reticulatae), 19 g; *chuan xiong*, 14 g; *xiang fu* (Rhizoma cyperi), 14 g; *zhi qiao* (Radix paeoniae alba), 14 g; and *zhi gan cao* (Radix glycyrrhizae preparata), 5 g. The formula for *Ban Xia Hou Po Tang* is: *ban xia* (Rhizoma pinelliae), 28 g; *sheng jiang* (Rhizoma zingiberis recens), 26 g; *fu ling*, 21 g; *hou po* (Cortex magnoliae officinalis), 16 g; and *zi su ye* (Folium perillae), 10 g.

Liver, Kidney and Heart Yin Deficiencies: Clinical manifestations are irritability, insomnia or light sleep, tremors, emaciation, dry mouth and throat, red tongue with scanty or no coating, thready and rapid pulse. There are also two herbal formulas for this, *Tian Wang Bu Xin Dan* (Emperor of Heaven's Special Pill to Tonify the Heart) and *Zhi Bai Di Huang Wan* (Anemarrhena, Phellodendron, and Rehmannia Pills). The formula for *Tian Wang Bu Xin Dan* is: *sheng di huan*, 31 g; *ren shen* (Radix ginseng), 4 g; *fu ling*, 4 g; *yuan zhi* (Radix polygalae), 4 g; *wu wei zi* (Fructus schisandrae chinensis), 8 g; *xuan shen* (Radix scrophulariae), 4 g; *bai zi ren* (Semen platycladi), 8 g; *jie geng* (Radix platycodonis), 4 g; *tian men dong* (Radix asparagi), 8 g; *dan shen* (Radix salviae miltiorrhizae), 4 g; *suan zao ren* (Semen zizyphi spinosae), 8 g; *dang gui*, 8 g; and *mai men dong*, 8 g. The formula for *Zhi Bai Di Huang Wan* is: *shu di huang* (Radix rehmanniae preparata), 28 g; *shan zhu yu* (Fructus corni), 14 g; *shan yao* (Rhizoma dioscoreae), 14 g; *mu dan pi*, 10 g; *ze xie* (Rhizoma alismatis), 10 g; *fu ling*, 10 g; *zhi mu* (Radix anemarrhenae), 7 g; and *huang bai* (Cortex phellodendri), 7 g.

Liver Fire with Phlegm and Underlying Qi and Yin Deficiencies: Clinical manifestations are low-grade fever, tachycardia (90-120 heartbeats per minute), tremors of the tongue and fingers, enlarged thyroid glands, unilateral or bilateral swollen and bulging eyes, palpitations or tachycardia, fatigue, weight loss, fidgeting, irritability, bad temper, aversion to heat, perspiration, hunger and increased appetite, and increased blood pressure. The formula to treat this would be Empirical Formula for Hyperthyroidism, which includes: *xuan shen*, *zhi mu*, *zhi zi*, *xia ku cao* (Spica prunellae), *bie jia* (Carapax trionycis), *chuan niu xi* (Radix cyathulae), *mu li* (Concha ostreae), *zhe bei mu* (Bulbus fritillariae thunbergii), *yuan zhi*, *huang qi* (Radix astragali), *fang feng* (Radix saposhnikoviae) and *gan cao*.

Patients with hyperthyroidism (other than thyrotoxicosis) should notice dramatic improvement within one month of herbal treatment. Most symptoms should completely subside within three to six months of treatment, however, ocular protrusion may persist.

Herbal formulas offer consistent and reliable benefits in the treatment of hyper- and hypothyroidism. Although the onset of action for herbal therapies may be slower than more immediate conventional therapies, the effects of herbal medicine are consistent and reliable once the patients are stabilized. In short, herbal therapies are excellent alternatives for patients who cannot tolerate or do not wish to be treated with Western medicine.

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