

Traditional Chinese Medicine Treatment of Subacute Thyroiditis

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Abstract: This article mainly introduces the TCM disease name, etiology, understanding of subacute thyroiditis, as well as the use of the unique syndrome differentiation and treatment thinking of traditional Chinese medicine, according to different causes to determine different treatment, through Traditional Chinese medicine decoction oral, Specific acupoint moxibustion, local external application of traditional Chinese medicine, ear acupoint pressure pills characteristics of traditional Chinese medicine to treat subacute thyroiditis, embodies the specific advantages of TCM intervention disease, make Chinese medicine better clinical service.

Keywords: Subacute Thyroiditis; Goiter Pain; Traditional Chinese Medicine Treatment

1. Introduction

Modern western medicine believes that viral infection is the main pathogenic factor of subacute thyroiditis (SAT), thyroid pain or radiation pain, accompanied by general discomfort, fever as the main clinical manifestations, is a self-limited disease^[1], The majority of the patients were women aged 20 -50 years^[2], SAT was classified into hyperthyroid, hypothyroid, and convalescent phases based on the results of laboratory tests. At present, western medicine uses antipyretic analgesics or glucocorticoids for symptomatic treatment of this disease, but the problems such as long drug time, many adverse reactions, and easy recurrence gradually appear^[3]. Compared with the single treatment plan of western medicine, combined with Chinese medicine intervention treatment can achieve better clinical effect.

2. Source of TCM disease name

Thyroid diseases of modern medicine were recorded as "galls disease" in ancient medical books more than two thousand years ago, after the ancient doctors constantly clinical practice and experience and more systematic division of galls disease, Chao Yuanfang in the Sui Dynasty most initially classified "galls disease" into blood gall, polyp gall and air gall in the "General Treatise on the Cause and Symptoms of Diseases"^[4]. In the Song Dynasty, Chen Yan clearly put forward the "five galls" said, and discussed stone galls, meat galls, tendon galls, blood galls, and air galls in the "Three Causes and One Disease Syndrome Theory Gall Syndrome Treatment"^[5], according to the premise of clinical manifestations, combined with the modern medical understanding of subacute thyroiditis, because this disease is pain as the main clinical manifestation, so the diagnosis of traditional Chinese medicine disease name as "goiter pain" or "painful goiter" is more appropriate^[6].

3. The Causes of Goiter Pain in Traditional Chinese Medicine

"The Inner Canon of Huangdi" said: "All diseases are caused by wind and rain, cold and heat, Yin and Yang, eating and drinking, and fear." This sentence summarizes TCM's understanding of the source of the disease, for SAT, exogenous six pathogens, body deficiency and personal emotional factors are all important factors leading to the occurrence of this disease. Li Hong^[7] believes that this disease is related to exogenous factors. When the daily life is inappropriate, it is invaded by exogenous wind-heat toxic pathogens on the body surface. Therefore, patients with heat pathogens entering the internal heat will have symptoms of fever. When the heat toxin is formed in front of the neck, there will be manifestations of swelling and pain. The heat toxin injures the body fluid into phlegm. The phlegm hinders the patency of qi, blood and meridians and will have very painful symptoms. Pei Zhengxue^[8] believes that this

disease is caused by insufficient vital qi in the human body and the invasion of six evil spirits, whether it is wind-cold cold or wind-heat cold, and evil spirits enter the body to internalize the fire. Ancient people cloud "righteousness exists, evil can not do", due to the changes of the times, rapid development of social economy, science and technology level, modern people's life rhythm becomes faster, excessive life pressure and serious lack of physical exercise, most people can not have a healthy lifestyle of "The law is in yin and yang, and in the number of procedures", the body lacks righteousness to resist exogenous pathogens. Chen Ruquan [9] believes that stagnant heat in the liver meridian is an important factor in the pathogenesis, and in the theory of meridians, the circulation position of the Foot-Jueyin Liver Meridian meridian passes through the thyroid gland, so the occurrence of this disease is closely related to the liver. It is recorded in the "San Ji Tong Lu Gall Gall Gate Five Galls" that: "The arrival of the emotion, the qi follows, or remains, or knots do not disperse is also". When the movement of qi in the human body is affected by emotional factors, irritability and excessive mood swings lead to qi surging, and the accumulation of stagnant qi in the neck leads to this disease, and excessive qi stagnation leads to neck swelling and pain.

4. Oral treatment of traditional Chinese medicine

Traditional Chinese medicine (TCM) does not discuss the detailed syndrome differentiation and treatment of "goiter pain", but according to the diagnostic and therapeutic criteria of TCM symptoms and the treatment experience of modern medicine, the course of this disease can be divided into three phases, that is, the acute phase, remission phase and recovery phase [10], in which the acute phase shows "heat syndrome", "exterior syndrome" and "empirical", mostly acute onset, fever, anterior neck swelling and pain, accompanied by ear back, subjaw, neck pain, hyperhidrosis, irritability and irritability, constipation, yellow urine, red tongue, yellow fur, pulse string or float. In remission stage, there are manifestations of "deficiency and deficiency mixed" syndrome, such as "qi stagnation", "phlegm-dampness" and "phlegm and blood stasis", relieved anterior neck pain, pharyngeal discomfort, sigh, red or dark red tongue, thin white fur, and pulse string. In the recovery period, there are many manifestations of "deficiency of vital energy". As the late stage of disease development, there is basically no obvious pain sensation in front of the neck at this time, but there may still be enlargement of the neck, accompanied by fatigue, fear of cold, loss of appetite, loose stools and other manifestations of spleen and kidney deficiency, fat tongue, toothed tongue, white fur, and thin pulse.

4.1. Staging treatment theory

Treatment based on syndrome differentiation is a major feature of TCM treatment of diseases. Various doctors and scholars have put forward different therapeutic thinking when undergoing clinical syndrome differentiation, which provides us with valuable experience in treating diseases. Zhang Ning [11] advocated staging treatment, proposed that the early stage of the disease mostly use heat-clearing, detoxifying, Sanjie drugs to achieve the purpose of removing evil, with the development of the disease to the stage of coexistence of deficiency and excess, advocated the use of drugs that nourish yin and soothe the the liver, in order to achieve the purpose of tonifying deficiency and removing evil common treatment, the late stage of the disease is mostly assisted by the use of Yiqi Fuzheng Shengjin products, supplement the vital qi in the body, and pay attention to the treatment of "heat" image in different periods, providing effective ideas for clinical treatment of this disease. Wang Ze [12] et al. summarized Lin LAN's stage in disease treatment, Put forward that the initial invasion by external evil, With evil solid mainly with silver warping powder and small Chaihu soup plus and subtraction treatment, So as to achieve the purpose of clearing away heat and detoxification, dredging the wind and dispersing the evil, reconciliation and less Yang; In the middle stage of the disease, When to eliminate phlegm and blood circulation, eliminate swelling and dispersing knot with Liuwei Dihuang soup as the basis of warm tonifying kidney Yang; Late disease for too long is easy to consume the human body's healthy spirit, But there are still endogenous sputum and blood stasis and other residual evil, Treatment should be mainly to fuzheng and dispel evil; Moreover, because thyroid disease has an inseparable intrinsic association with the liver, Advocate that the common four reverse dispersion or Chaihu sparse liver dispersion is based on the characteristics of the liver, It is suggested that the treatment of liver and qi throughout the treatment.

4.2. Related treatment research

According to the clinical characteristics of the course of different periods of subacute thyroiditis, the

common prescription or self-developed characteristic prescription, all see the advantages of traditional Chinese medicine in the treatment of diseases in clinical research. He Yuefei^[13] with small pleurum soup plus losoprofen sodium treatment observation group, studies show that after treatment observation group FT3 and FT4 indicators in thyroid function 4 are lower than pure western medicine group, TSH is higher than western medicine group, observation group more effective than single patients' thyroid function, improve patients' condition, and combined treatment adverse reactions than western medicine group, improve the comfort of patients. He Shenglin^[14] and other self-drafted subhealth prescription and triamcinolide treatment observation group, studies have shown that the combination can better reduce the time of remission, recurrence rate, and serum inflammatory factor level of adverse symptoms. Lu Wenjun^[15] et al self-prepared detoxification Tongluo tang and prednisone tablets, the research results showed that the pain relief time, heat regression time and swelling disappearance time of the TCM group were shorter than those of the western medicine group, and the incidence of adverse reactions was low, which improved the clinical efficacy.

4.3. Treatment according to the dialectical theory of six meridians

Treatise on Febrile Diseases summarizes and distinguishes the syndromes of the evolution of exogenous diseases into six meridian diseases: Taiyang, Yangming, Shaoyang, Taiyin, Shaoyin, and Jueyin, and takes the six meridians as a program to continuously play a new role in guiding clinical practice. Li Jingjing^[16] et al., according to the principle that the six meridians dialectically grasp the main symptoms, the formula corresponds, and the treatment must be based on this principle, used Tongmai Sini Decoction to treat SAT patients with yang deficiency constitution and toxic pathogens directly in Shaoyin, achieved unexpected efficacy and provided new ideas for the clinical use of the six meridians dialectical treatment. Yanpu^[17] et al. treated Shaoyang syndrome from the sun, grasped the patients' long-term emotional discomfort, Shaoyang stagnant heat on the basis of exogenous wind-heat, the use of Yinqiao powder combined with Bupleurum preparation addition and subtraction to achieve the purpose of dispelling wind and relieving exterior symptoms, reconciling Shaoyang, internal and external treatment, and achieved satisfactory results.

4.4. Treat according to theory of febrile disease

Warm disease is a general term for a kind of exogenous acute fever caused by feeling warm evil, which coincides with the theoretical basis of the onset of SAT being affected by exogenous fever poison. Zhang Guangde^[18] believed that exogenous warm poison epidemic, Shaoyang cardinal as the main pathogenesis, external warm poison, blocking in Shaoyang, with Xiaochaihu Decoction Puji disinfectant drink and Haoqin Qingdan Decoction Wuwei disinfectant drink treatment to achieve the purpose of reconciling Shaoyang, clearing away heat and toxic substances; in the regression of evil, deficiency of both qi and yin using Zhuye Gypsum Decoction Shengmai Powder addition and subtraction treatment to achieve the effect of supplementing qi and nourishing yin to support vital qi, remove residual heat; at the same time, it is also recommended that in the treatment of thyroid diseases, the whole process needs to take into account the combing of liver qi, the use of Cyperus rotundus, Yujin. Sanren decoction, derived from "Warm Disease Differentiation", is mostly used to treat dampness and temperature, with the effect of clearing away dampness and heat, and promoting qi. Li Shengxuan^[19] used Sanren decoction combined with Shengjiang powder to treat SAT patients with dampness and temperature type, and Sanren decoction played the role of promoting, smooth, and seepage, so that dampness and heat evil was separated from up and down, inside and outside; Shengjiang powder adjuvant therapy not only promoted the body to restore triple energizer qi, but also achieved the dissipation of strengthening Sanren decoction. Modern studies have also shown that^[20] Sanren Decoction can regulate the content of inflammatory factors in the body, reduce the inflammatory response, and accelerate the rate of cure.

5. External treatment of traditional Chinese medicine

Ginger-separated moxibustion has the effects of dredging meridians, regulating body immunity, and adjusting the function of viscera. Jin Zhe^[21] et al. used ginger moxibustion combined with traditional Chinese medicine treatment observation group, traditional Chinese medicine oral treatment control group A, ginger moxibustion treatment group B, acupoints according to the "specimen matching point" method to select Zusanli, Qihai, Guanyuan, thyroid local Ashi points, the results showed that the cure rate of the observation group was higher than the control group, the time to fever subsidence, swelling and pain subsidence time can be effectively shortened, reduce the expression levels of TgAb, TMAb in patients,

ginger moxibustion combined with oral drugs treatment is better than the use of oral drugs alone. Chen Yan^[22] treated the observation group with external application of Jiedu Xiaoying Powder combined with Huazhuo Jiedu Miaojian Granule, and the control group was treated with Huazhuo Jiedu Miaojian Granule only. The results showed that the external application made the drug reach the lesion site directly to improve the clinical symptoms of anterior cervical enlargement and pain, and effectively reduce the degree of inflammatory reaction. Some scholars have systematically analyzed the external application drugs for the treatment of SAT^[23] and summarized that the heat-clearing drugs are most frequently used in clinical practice, followed by the drugs for activating blood circulation and resolving phlegm, and the use rates of *Phellodendron amurense*, *Prunella vulgaris*, *Coptis chinensis*, *Lonicera japonica*, *Curcuma longa*, *Corydalis yanhusuo*, *Cyperus rotundus*, and *Boswellia*. Liao Liyi^[24] and others used Zhizi Qinggan Decoction orally and externally combined with auricular point sticking at the liver, heart, spleen, and Shenmen acupoints of both ears to treat the observation group, and the results showed that the FT3, ET4, and ESR levels in the observation group were lower than those in the western medicine alone group, effectively relieving clinical symptoms and reducing inflammatory reactions.

6. Summary

In the clinical treatment of diseases, we also have feelings, western medicine treatment techniques are relatively clear but appear too single, adverse reactions, easy to relapse, symptoms are not easy to improve, treatment time is prolonged and other problems gradually highlighted. With the continuous clinical practice of TCM, more and more physicians continue to share their therapeutic insights into this disease. Although TCM treatment of this disease has not formed a unified diagnosis and treatment specification, it can not only play the effect of combined treatment when used with western medicine, but also reduce the side effects of western medicine, shorten the course of disease and reduce the recurrence of the disease. Whether it is oral administration of traditional Chinese medicine decoction or the use of external treatment, it can play its advantages in the treatment of diseases and escort the health of patients.

References

- [1] Liao Binary, Mo Zhaohui. *Practical Internal Medicine [M]*. Beijing: People's Medical Publishing House, 2011: 1281.
- [2] Subacute thyroiditis [J]. *Clinical misdiagnosis and mistreatment*, 2020, 33 (03): 2.
- [3] Ni Qing, Du Lijuan. *Diagnosis and Treatment Strategy of Subacute Thyroiditis with Traditional Chinese Medicine [J]*. *Chinese Journal of Clinicians*, 2018, 46 (9): 1009-1011, 1006.
- [4] Sui Chao Yuanfang, Huang Zuo array point calibration. *The waiting theory of various sources of disease [M]*. Shenyang: Liaoning Science and Technology Press, 1997:143.
- [5] Song Chen Yan. *Three-factor extreme one-disease syndrome theory [M]*. Beijing: People's Medical Publishing House, 1957:206.
- [6] Editor-in-Chief Zhao Jinxi. *Chinese and Western medicine diagnosis and treatment of endocrine and metabolic diseases [M]*. Shenyang: Liaoning Science and Technology Press; 2004:87
- [7] Chen Yuting, Li Hong. *Professor Li Hong's Experience in Staged Treatment of Subacute Thyroiditis [J]*. *Chinese Journal of Emergency Medicine*, 2019, 28 (8): 1482-1484.
- [8] Pei Zhengxue. *Peizheng Medical Records Collection of Medical Dialectics [M]*. Lanzhou: Gansu Science and Technology Press, 2005:114.
- [9] Chen Jidong, Zhao Yong, Xu Wenhua, et al. *Professor Chen Ruquan's Experience in Treating Subacute Thyroiditis [J]*. *Shizhen Sinopharm*, 2015, 26 (6): 1506-1507.
- [10] State Administration of Traditional Chinese Medicine. *Diagnostic and therapeutic criteria for TCM syndromes [S]*. Nanjing: Nanjing University Press, 1994:230.
- [11] Louwenfeng; Zhang Ning; Yu Fangning; Guo Xingyun. *Professor Zhang Ning's medication regularity and treatment idea for subacute thyroiditis [J]*. *World Journal of Integrated Traditional Chinese and Western Medicine*, 2021, (11): 1989-1993.
- [12] Wang Ze; Baoyinlan; Ni Qing; Chen Yan; Lin Lan. *Review of Lin Lan's Experience in Treating Subacute Thyroiditis [J]*. *Chinese Medicine*, Beijing, 2021, (11): 1194-1196.
- [13] He Yuefei. *Clinical efficacy of loxoprofen sodium combined with Xiaochaihu Decoction in the treatment of subacute thyroiditis [J]*. *Journal of Clinical Rational Drug Use*, 2022, (03): 29-31 + 35.
- [14] He Shenglin; Chi Water Man. *Study on the Efficacy of Triamcinolone Acetonide Combined with Yakufang in the Treatment of Subacute Thyroiditis [J]*. *Chinese Journal of Clinical Drugs*, 2022, (02): 180-184.

- [15] Lv Wenjun; Ding Jingxian; Cao Liping; Guo Ling; Liu Jia. *Clinical Effect of Jiedu Tongluo Decoction Combined with Glucocorticoid on Subacute Thyroiditis [J]. Inner Mongolia Traditional Chinese Medicine, 2021, (10): 43-45.*
- [16] Li Jingjing; Luo Yan. *Tongmai Sini Decoction based on syndrome differentiation of six meridians in the treatment of subacute thyroiditis [J]. Modern Distance Education of Traditional Chinese Medicine in China, 2021, 19 (22): 158-159.*
- [17] Qi Pu; Zhang Ning. *A case of subacute thyroiditis treated from the combination of Taiyang and Shaoyang [J]. Global Traditional Chinese Medicine, 2021, (11): 2070-2071.*
- [18] Zhang Baiyu; Zhang Guangde; Han Shuhua. *Zhang Guangde's Experience in Treating Subacute Thyroiditis from Shaoyang Syndrome of Febrile Disease [J]. Shaanxi Journal of Traditional Chinese Medicine, 2021, 42 (06): 776-779.*
- [19] Li Shengxuan. *One case of subacute thyroiditis of dampness-temperature type treated with Sanren decoction [J]. Chinese Folk Medicine, 2020, (19): 97-98.*
- [20] Yan Qin, Jia Yuechang, Sui Yanhua, et al. *Effect of Sanren Decoction on Interleukin and Immunoglobulin in Rat Model of Febrile Disease with Dampness-heat Syndrome [J]. Chinese Journal of Integrated Traditional and Western Medicine on Digestion, 2014, 22 (9): 506-509.*
- [21] Jin Zhe; Meilan. *Effect of Ginger-separated Moxibustion Combined with Traditional Chinese Medicine on Serum 25- (OH) D3, ghrelin, Tg Ab and TMAB Expression in Patients with Subacute Thyroiditis [J]. Shanghai Journal of Acupuncture and Moxibustion, 2021, (07): 835-840.*
- [22] Chen Yan. *Clinical Study on Jieduxiaoying Powder Combined with Huazhuo Jiedu Miaojian Granule in the Treatment of Subacute Thyroiditis [J]. Journal of Practical Traditional Chinese Medicine, 2022, 38 (02): 168-169.*
- [23] Zhang Dan; Chen Xin; Wang Gang; Liu Jie; Zhu Qi. *Analysis of Recipe Regularity of External Application of Traditional Chinese Medicine in Treating Subacute Thyroiditis [J]. Journal of Clinical Rational Drug Use, 2020, (36): 22-24.*
- [24] Liao Liyi; Wei Aisheng. *Observation on the therapeutic effect of Gardenia Qinggan Decoction combined with auricular point pressing bean on subacute thyroiditis [J]. Chinese Journal of Traditional Chinese Medicine Emergency, 2020, 29 (12): 2154-2157.*