

Theoretical Study and Clinical Application of Zhenwu Tang

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Abstract: *In order to increase the use of Zhenwu Tang in the treatment of the disease, this paper examines Zhenwu Tang as the research object, specifically from its historical source, the experience of well-known experts, and its application in chronic kidney disease. It does this by analyzing theoretical, clinical, and experimental research on Zhenwu Tang in chronic kidney disease.*

Keywords: Zhenwu Tang, Theoretical study, Clinical study, Experimental study.

1. Introduction

Briefly explains the composition, effectiveness, and experience of well-known experts along with the historical background of Zhenwu Tang. Exploring Zhenwu Tang related to its theoretical research and clinical application. Chronic kidney disease (CKD) is currently one of the main illnesses threatening people's health and safety. It is getting more common. So people look forward to the treatment of CKD in Chinese medicine. Zhenwu Tang is a well-known and traditional prescription found in the book "Treatise on Febrile and Miscellaneous Diseases". Many medical professionals in the community have acknowledged its beneficial therapeutic effects on a range of illnesses. As a result, Zhenwu Tang's study discoveries, which include innovative approaches and concepts for treating diseases in clinical research, may offer some important new perspectives on the treatment of chronic kidney disease.

2. Zhenwu Tang's Theoretical Knowledge in Chinese Medicine and Renowned Masters' Application Experience

2.1 Origin of Zhenwu Tang

According to the existing literature, it is pointed out that the name of this prescription, Zhenwu Tang, comes from Zhang Zhongjing's "Treatise on Febrile and Miscellaneous Diseases", which has the efficacy of warming and reinforcing kidney-Yang, inducing diuresis and reducing edema [1]. It was called Xuan Wu Tang before. Enough to see that Zhenwu Tang has a very high standing in the old society, "Xuanwu" is one of the four favorite mascots of the ancient Chinese people, named after Xuanwu. To escape taboo, the name Xuanwu was changed to Zhenwu during the reign of Emperor Zhenzong of the Song Dynasty. This change can be found in the "Sentimental Knowledge of Typhoid Fever" written by Asada Utsunori, a representative of the Japanese Eclectic School of Examiners. The book states that during Song Dazhong Xiangfu's fourth year, word spread throughout the world's subjects and populace that Xuan had been renamed to Yuan in order to avoid being associated with the Holy Ancestor. Also, replace Xuan with Zhen because Xuan and Yuan have similar pronunciations. Furthermore, recent evidence suggests that the author may be Tao Hongjing's "Fuxing Xie viscera

medication method" referenced in the little Xuanwu Tang and the "Typhoid Fever" in the Zhenwu Tang, with the sole distinction being the different ginger. "Fuxing line trick viscera medicinal law" in the ginger used for dry ginger; and Zhenwu Tang used for ginger, which can also prove that Xuanwu is Zhenwu [2]. This demonstrates the early appearance, frequent application, and potent medicinal effects of Zhenwu Tang in the treatment of illness.

2.1.1 Composition and Compounding Features

Zhenwu Tang, as a commonly used Yang-warming and water-relieving agent, is prescribed as follows: Poria, Paeonia lactiflora, ginger, Atractylodes macrocephala, Monkshood [3]. In this formula, Radix Polygoni Multiflori, which is pungent, sweet and very hot, is used as the monarch to warm and tonify Kidney-Yang, while Poria and Rhizoma Atractylodis Macrocephalae are used to benefit Qi, strengthen the Spleen and dry up dampness. Then use ginger to help warm yang and dissipate cold by combining the warmth of ginger with the great heat of the epiphyllum. In addition, Poria and Atractylodes can not only promote water retention and dampness, but also harmonize the stomach and stop vomiting. Finally, with the acidic and astringent nature of white peony, one of which can facilitate urination of water to reduce swelling, and secondly, peony is acidic, acidic can slow down the pain. Thirdly, Paeonia lactiflora has the effect of astringing yin, which can be harmonized when used with Radix et Rhizoma Polygoni Multiflori to avoid Radix et Rhizoma Polygoni Multiflori from injuring yin by drying heat. The whole formula is complementary in diarrhea, taking into account both the symptoms and the root cause, and jointly participating in the promotion of the effect of warming yang and promoting water retention.

2.1.2 Effects of Zhen Wu Tang

The efficacy of Zhenwu Tang is to warm and tonify the kidney yang, promote diuresis and reduce swelling. It is used to treat 1. Yang deficiency and water flooding syndrome. Manifestation of cold limbs, edema, body sleepiness, back pain and leg weakness, the tongue is pale fat moss slippery tongue. 2. Sun disease sweating too much, Yang deficiency and water flooding evidence. It manifests as palpitations, dizziness, body vibrations, and unsteadiness [4]. Too much water in the body leads to spillage of the skin of the limbs,

which is manifested externally as swelling of the limbs and a feeling of heaviness and discomfort in the body. The attenuation of yang qi easily leads to a decrease in the function of warming and transforming qi. Therefore, the bladder cannot be warmed by yang qi, leading to a decrease in the function of qi and transforming qi, and an unfavorable urinary excretion. When yang qi is weak, cold is prevalent. Cold coagulates in the abdomen, leading to pain, and condenses in the large intestine, leading to loose stools and discharges. All the symptoms are due to the weakness of kidney yang, water stops in the internal organs and or overflow in the limbs. Therefore, Zhongjing summarized the pathogenesis of edema as "this is having water qi" and used Zhenwu Tang to treat it by warming yang and inducing diuresis. Yang deficiency and water flooding are prone to edema, and edema is divided into yin and yang. For example, in "Yan Shi Ji Sheng Fang - Edema Gate", Song Yan Yun He said that in the disease caused by yin water, the pulse is mostly dull and slow, the face color is mainly greenish white, there is no heartburn or thirst, the urine is clear and long and small, and the stools are loose; However, the disease caused by Yang Shui is characterized by a sunken pulse, a yellowish-reddish complexion, irritable thirst, yellowish-reddish urine, and impassable stools. This record laid the foundation for the defense of yin and yang in edema. The process of water and fluid metabolism is primarily associated with the involvement of the lungs, spleen and kidneys. The most important thing is the qi-chemistry function of the kidneys. Kidney qi failure to open and close, Qi and water dysfunction, resulting in water stagnation in the internal organs so that the development of water disease. Among the three organs of the lungs, spleen and kidneys, the kidneys are responsible for water and fluid, and are the gateway to the stomach; if the gateway is unfavorable, the water will be gathered and become sick[5]. Therefore, the treatment needs to firstly warm and tonify the kidney yang, and secondly diuretic to reduce swelling. The prominent function of Zhen Wu Tang is to support Yang Qi while eliminating Yin Kites, dispelling cold evils and suppressing water. This formula warms the Kidney-Yang, induces diuresis and reduces swelling, supplemented with Paeonia lactiflora, which is an astringent of Yin. Although this formula is warm, it does not injure the yin, and converges the yin but does not promote the evil qi, which is called "benefiting the source of fire to eliminate the yin shade, and strengthening the main body of water to control the sunlight"[6]. Therefore, Kidney-Yang deficiency type edema can be treated with Zhenwu Tang.

2.2 Experience of Famous Artists

Ye Tianshi had also utilized Zhenwu Tang in his "Linzheng Guidelines for Medical Cases", while increasing the scope of its use in some ways. For example, Zhenwu Tang further expands the scope of treatment by starting from the death of yang evidence caused by excessive sweating, including cases of seminal emission, shedding, sweating and malaria, as well as cases of swelling caused by shaoyin disease, vomiting, vomiting roundworms, croup, phlegm, and diarrhea, and so on. At the same time Ye Tianshi focuses on the use of variations of Zhenwu Tang. For example, in the treatment of single abdominal distension due to too much depletion of spleen

yang and mistakenly attacking cold lumps, Zhenwu Tang was still used for treatment due to the severe damage to the yang of the spleen, but there was a change in the composition. In order to avoid the cold in the formula to reduce the paeoniae, dry ginger into ginger to warm the Taiyin, and then add thick Park to move qi in addition to fullness. If the damage to spleen yang is aggravated, add Wicker Bark and Fenugreek to support spleen yang.

Fang Youjian said in "Typhoid Treatise on Articles and Discriminations" that if there is a disease of solar stroke, manifested by floating and tight pulse, fever, fear of cold, pain in the body, and irritability without sweating, use Daqinglong Tang to treat it. If the pulse is floating and weak, and there is sweating and fear of cold, then Da Qing Long Tang should not be taken. If it is taken it leads to fainting, vibration of the muscles of the limbs and other inversions, which are treated with Zhenwu Tang.

Yu Jiayan said in his Shang Lun Chuan that if the wrong consumption of Da Qing Long Tang triggered coldness in the hands and feet and involuntary throbbing of the muscles of the limbs, then there was a tendency to die of yang. In this case, however, Zhenwu Tang was used instead of Siwei Tang because Zhenwu is responsible for the water in the north, and the restoration of yang qi requires the help of water, which is what Zhenwu Tang is responsible for.

Cheng Wuji recorded in "The Ming Theory of Typhoid Fever" that Zhenwu Tang is the god of water in the north, and the kidneys are the masters of water therefore it belongs to the kidneys, and it can treat edema disease. Water qi collects under the heart and manifests itself externally as a general table confirming that it is due to yang deficiency, and it is necessary to pass the water qi and treat yang deficiency at the same time, so Zhenwu Tang is used for treatment. The Spleen abhors dampness, and if there is watery air in the abdomen, then the Spleen's function is impaired. To alleviate this condition, it is necessary to consume medicines that are sweet in nature. Therefore, Poria is used as the king's medicine and Atractylodis Macrocephalae as the subject's medicine. Paeonia lactiflora is sour and cold in nature, and ginger is pungent and warm in flavor. The "Nei Jing" says that dampness is too heavy and can be removed by using pungent and sour-flavored products, so paeonia lactiflora and ginger are taken for use. Pungent and hot in nature, the "Nei Jing" says that excessive cold evil can be warmed through the meridians with pungent and hot products to dissipate the cold, so Pungent is used as an enabler. Depending on the presentation, there are different additions and subtractions. For example, a serious cough can be added to the schizandra fine Xin dry ginger, cough because the lungs are cold, the lung gas reversal with acidic products to astringent, schizandra acid and astringent; The lungs are moistened by aversion to cold with pungent flavored products, using fine pungent and dry ginger. If the urine is normal remove Poria because Poria has diuretic properties. If you vomit, remove the epiphyllum and add ginger. Vomiting is mainly due to the upward reversal of stomach qi, appendicia has the effect of tonifying qi, ginger can diffuse the stomach qi to lower the stomach qi, and the use of the two and the normalization of stomach qi without vomiting.

3. Modern Clinical Research and Basic Research on Zhenwu Tang

3.1 Clinical Study of Wu Tang for Kidney Disease

Huang Shan [7] et al. in Zhenwu Tang plus flavor in the treatment of chronic glomerulonephritis 30 cases of efficacy observation, through the experimental study concluded that Zhenwu Tang has the effect of warming the spleen and kidney, transforming the qi to move water. The clinical symptoms associated with chronic glomerulonephritis were significantly relieved by the combination of western medicine treatment at the same time.

Qiao Yinzhu[8]observed the efficacy of Zhenwu Tang Plus in the treatment of spleen-kidney yang deficiency type chronic glomerulonephritis, and proved through experimental research that in the treatment of spleen-kidney yang deficiency type chronic glomerulonephritis patients, the combination of conventional Western medical treatment and Zhenwu Tang Plus has a better effect, and it can significantly control the proteinuria and edema of the patients.

Zhang Xiaobin [9]in the clinical efficacy of Zhenwu Tang Plus in the treatment of spleen and kidney yang deficiency type chronic glomerulonephritis, demonstrated through experimental studies that Zhenwu Tang Plus effectively improved renal function and clinical symptoms of patients.

Gao Min [10] also observed the clinical efficacy of Zhenwu Tang Plus Reduction in the treatment of chronic glomerulonephritis in the "Observations on the efficacy of Zhenwu Tang Plus Reduction in the treatment of chronic glomerulonephritis. After the treatment of Zhenwu Tang, it was found that the immunoglobulin, urea nitrogen, and 24h urine protein quantification of the patients were significantly reduced, and no serious adverse effects were found. It can be seen that Zhenwu Tang can not only significantly reduce the clinical symptoms of patients with chronic glomerulonephritis and improve the patients' conditions, but also improve the quality of the treatment. At the same time, the adverse effects of the drug are mild, which is worthy of further clinical promotion.

Wu Junbiao [11] concluded in a large number of experiments that Zhenwu Tang has the ability to increase urine output, reduce the content of urinary protein in 24 hours followed by effective protection of renal function, inhibit the glomerular immune-inflammatory response, and reduce the immune response injury.

Yu Zengli [12] randomly divided patients with chronic nephritis identified as spleen and kidney yang deficiency into a control group and a treatment group, and the effect of the treatment group treated with Zhenwu Tang was better than that of the control group.

Bu Tianjie [13] and others used a network pharmacology approach to explore the core target genes and potential pathway mechanisms of Zhenwu Tang for the treatment of diabetic nephropathy, and obtained that the mechanism of action of Zhenwu Tang for the treatment of diabetic nephropathy through the modulation of immune,

inflammatory response, and hypoxia-induced signaling pathways needs to be further verified to provide a basis for the clinic.

Huang Fang et al [14] applied traditional Chinese medicine Zhenwu Tang plus flavor oral observation of 70 cases of diabetes mellitus stage IV with edema patients, after 2 weeks of treatment, the patients' edema, weight are reduced to a degree better than that of the control group, and at the same time, the 24 h urine output and electrolyte disorders and other indicators improved significantly.

3.2 Basic Research on the Treatment of Nephropathy with Zhenwu Tang

In the therapeutic effect of Zhenwu Tang on rats with C-BSA osmotic pump glomerulonephritis [15], Chouan et al. learned that Zhenwu Tang could significantly reduce 24h urinary proteins, renal function, lipids, plasma albumin and other indexes in nephritic rats through experimental studies on rats. At the same time, renal puncture was performed in the treated rat model, resulting in a significant reduction of immunoglobulin G (IgG) deposited in the tethered area, and the degree of reduction was positively correlated with the dose of Zhenwu Tang administered.

Hong Chunlan [16] found that Zhenwu Tang could effectively improve the renal function of rats with chronic renal failure, repair the histopathological damage and improve the water-liquid metabolism disorder at the same time.

Using molecular biology and other related techniques, Liu Fang [17] demonstrated that Zhenwu Tang was able to increase the levels of blood creatinine and urea nitrogen, reduce the pathological damage of renal tissues while the expression of tumor necrosis factor was down-regulated.

4. Conclusion and Outlook

Clinical manifestations of chronic kidney disease are varied and different from person to person, the condition is complex and easy to recur, and the course of the disease has been slowly progressing to the final result of chronic renal failure. In today's medicine, a complete system for the treatment of chronic kidney disease has been formed, and at the same time, drugs such as hormones, immunosuppressants, RAS blockers, etc. , have been proved to have good therapeutic effects in the clinic. However, there are certain drawbacks, such as the expensive price of the drugs, the ease of rebound after suspension of the drugs and the prominent side effects of some of the drugs after use. This study mainly focuses on the theoretical knowledge of traditional Chinese medicine (TCM) and adopts the scriptural formula Zhenwu Tang from the Treatise on Typhoid Fever. Through the theoretical knowledge of Zhenwu Tang and the experience of famous authors, clinical research and basic research, we confirm that traditional Chinese medicine (TCM) has a good effect in alleviating the clinical symptoms, controlling proteinuria and edema, protecting renal function and decreasing the renal damage of chronic kidney disease (CKD). In recent years, Chinese medicine has played a significant role in the treatment of chronic kidney diseases, and at the same time accumulated rich experience, but there are still

insurmountable limitations. Therefore, we should combine Chinese medicine and western medicine systematically, give full play to the advantages of the combination of the two in the treatment of chronic kidney disease, and take a deeper step to study the mechanism of the occurrence and development of renal diseases, to find effective treatment measures or therapeutic methods to slow down the development of chronic kidney disease.

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