# Flexible Application of Chaihu Guizhi Decoction Based on Abdominal Diagnosis and Original Dose of Prescription

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*Keywords:* Clinical Experience; Chaihu Guizhi Decoction; Perimenopausal syndrome; Side effects of chemotherapy; Acute adverse reactions of zoledronic acid

*Abstract:* Chaihu Guizhi Decoction is the main prescription for treating concurrent disease of Taiyang and Shaoyang Channels. This article introduces the experience of tutor Wang Keqiong, Chief physician, in applying the original dose of Chaihu Guizhi Decoction from three aspects: perimenopausal syndrome, chemotherapy side effects, and Zoledronic acid acute side effects.

# **1. Introduction**

Chief physician Wang Keqiong is the director of the Third Department of Cancer of the Second Affiliated Hospital of Shaanxi University of Chinese Medicine, and a doctor of typhoid. He has been engaged in the research of classical prescriptions for nearly 40 years. He has advocated abdominal diagnosis in clinical practice and made good use of the original dose of classical prescriptions to treat miscellaneous internal diseases. And he said: The classic prescription is "Less medicine, special force, good effect". Although the condition is complex at the time of onset, if the main symptom can be grasped, and the prescription is followed carefully, the effect can be satisfactory. The students are lucky to be around. This is to introduce the experience of tutor Wang Keqiong, Chief physician, in applying Chaihu Guizhi Decoction to the readers.

## 2. Source and Medical Theory of Chaihu Guizhi Decoction

Chaihu Guizhi Decoction comes from the "Typhoid Miscellaneous Diseases" article 146: "Typhoid fever for six or seven days, fever, slight aversion to cold, arthralgia of extremities, slight vomiting, feeling obstructed in epigastrium, external syndrome has not gone, Chaihu Guizhi Decoction master." It is the combination of Sho-Saiko-To and Guizhi Decoction. It was originally used to treat concurrent disease of Taiyang and Shaoyang Channels due to exterior pathogens of Taiyang unrelieved and pathogenic Qi spread to Shaoyang. Sho-Saiko-To is used in Combination of Frigotherapy and Pyretotherapy, reinforcement and elimination in combination, coordination between ascending and descending. It has the effect of reconciling Shaoyang, evacuating and relieving heat, catharsising tri-jiao, adjusting up and down, promoting internal and external circulation, and operating pivot. Guizhi Decoction has the effect of Harmonizing Ying-qi and Weiqi, dispelling pathogenic wind from muscles, regulation Qi and blood, adjusting yin and Yang. Chaihu Guizhi Decoction combines two formulas, so its efficacy should be the sum of the two [1]. (Figure 1)

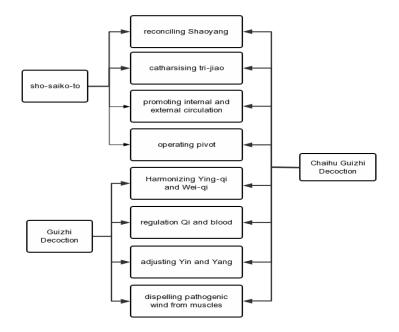


Figure 1: Effect of Chaihu Guizhi Decoction

# 3. Composition of Chaihu Guizhi Decoction and common original dosage

Radix bupleuri(4 liang) 60g, cassia twig (1. 5 liang) 23g, Scutellaria baicalensis (1. 5 liang) 23g, ginseng(1. 5 liang) 23g, repared licorice (1 liang) 15g, Pinellia ternata(2. 5 ge) 32g, White peony(1. 5 liang) 23g, Jujube (6 pieces), ginger (1. 5 liang) 23g. As shown in Figure 2. (Dose conversion shall be carried out in accordance with the "Chinese Prescription Source Dose Dictionary" <sup>[2]</sup> edited by Wang Keqiang: During the Han Dynasty, 1 liang was approximately equivalent to the current 15g).



Figure 2: Composition of Chaihu Guizhi Decoction and common original dosage

#### 4. Usage

The above nine traditional Chinese medicines are boiled in 7 sheng (1400ml) of water, 3 sheng (600ml) are taken, the dregs are removed, and 1 sheng(200ml) is taken warm, three times a day. (Figure 3)

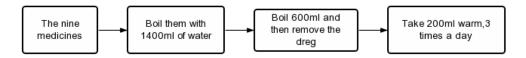
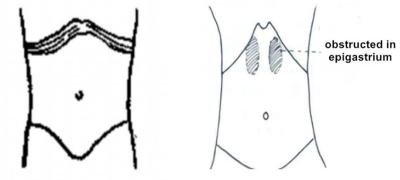


Figure 3: Usage of Chaihu Guizhi Decoction

### 5. Abdominal diagnosis and Using standards

Abdominal diagnosis: feeling obstructed in epigastrium, or fullness and discomfort in chest and hypochondrium. Using standard: The use standard of Sho-saiko-to is added with arthralgia of extremities, slightly nauseated and hidrosis [3]. (Figure 4, Figure 5)



Fullness chest and hypochondrium Feeling

Feeling obstructed in epigastrium

Figure 4: Abdominal diagnosis of Chaihu Guizhi Decoction

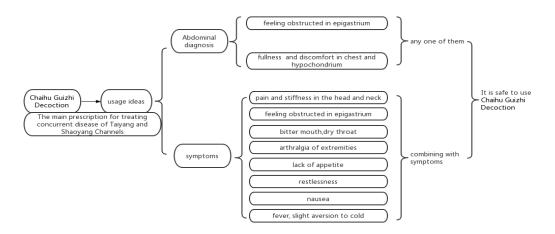


Figure 5: The usage ideas of Chaihu Guizhi Decoction

#### 6. Example of Successful Cases

#### 6.1. Cases of Menopausal Syndrome

Liao Moumou, a female, 53 years old, was diagnosed on September 17, 2021. Chief complaint: irritability, crying, fever, sweating for over three months. Her husband was diagnosed with lung cancer four months ago. She was very worried and tired. Then, she has become irritable and prone to tears, suddenly experiencing fever and sweating, eight to nine episodes a day. She has a bitter mouth, is upset, has poor sleep, and is prone to waking up at night. Her stomach is swollen and painful, as if she has been hit by someone. She also suffers from anorexia, lower back pain, and soreness and pain throughout the whole joint. She has not had menstruation in the past six months. Abdominal examination: Full medication is flat and soft, with strong abdominal strength and feeling obstructed in epigastrium. The tongue is red, the coating is thin and white, and the veins are stringy. Western medicine diagnosis: Menopausal syndrome; Diagnosis of Traditional Chinese Medicine: Menopausal Disorders, Syndrome types: obstructive cardinalate of Shaoyang, disharmony between Ying and Wei, and stagnation of liver Qi. Treatment: Reconcile Shaoyang, regulating Ying and Wei and relieve liver stagnation. Prescription: Chaihu Guizhi Decoction Original dose: Radix bupleuri 60g, Cassia twig 23g, Scutellaria baicalensis 23g, ginseng 23g, repared licorice 15g, Pinellia ternata 32g, White peony 23g, Jujube 6 pieces, ginger 23g. 3 Fu, take method: 1 Fu/day, the above nine traditional Chinese medicines are boiled in 1400ml of water, 600ml are taken, the dregs are removed, and 200ml is taken warm, three times a day. On October 15, 2021, follow-up visit: she reported that she began menstruating after taking the medicine, and the amount, color, and quality was as usual. Symptoms such as suddenly experiencing fever and sweating, lower back pain, and overall joint soreness and pain disappeared, and her appetite improved. She still feels a slight discomfort in the stomach, occasionally irritable and is prone to tearing. Her symptoms such as bitter mouth, poor sleep, and easy to wake up at night were alleviated compared to before. It is effective, so the medicine should not be changed. Original dose of Chaihu Guizhi Decoction, 7 Fu, all discomfort relieved.

Explanatory note: Menopausal syndrome is a series of physical and psychological symptoms that occur in women before and after menopause due to fluctuations or decreases in sexual hormone levels in the body [4]. The main manifestations are paroxysmal feeling hot and sweating, irritability, palpitations, insomnia, hot flashes, blushing, dizziness, tinnitus, and other symptoms [5]. Traditional Chinese medicine believes that the main pathogenesis of this disease is the disharmony between Ying and Wei, stagnation of Qi and imbalance of yin and Yang, which are closely related to the kidney, spleen and stomach, liver and gallbladder, heart and other viscera [6]. Teacher Wang believes that in women's "7-7" period, the sexual function of both sexes is nearly exhausted, vital essence of the kidney is deficient, essence and blood is inadequate, Chong-Ren debility. These led to an imbalance of yin and yang, disharmony between the Qi and blood as well as dysfunction of the viscera. The basic treatment principle is to regulate and supplement yin and yang, regulate Qi, blood, ying and wei. Using Chaihu Guizhi Decoction, one can reconcile Shaoyang, regulate Qi and blood, promote the popularity of Ying and Wei, and promote the coexistence of Yin and Yang. This patient was in her 7-7 period, the sexual function of both sexes is nearly exhausted. However, due to poor emotional state and mental depression, the Qi movement is abnormal, and the symptoms of perimenopausal syndrome were exacerbated. Emotional depression leads to sadness and crying, while prolonged depression leads to irritability. Disharmony between Ying and Wei causes suddenly experiencing fever and sweating. Due to the disharmony of Qi and blood, the meridians are blocked, which leads to pain, resulting in lower back pain and overall joint soreness. The Shaoyang pivot is unfavorable, affecting the flow of the stomach, so feeling obstructed in epigastrium is seen. According to the statement that Chaihu Guizhi Decoction has "arthralgia of extremities, feeling obstructed in epigastrium", and "Shaoyang is diseased, with dry throat, bitter mouth, and dizziness", "there is Chaihu syndrome, but if one syndrome is seen, there is no need to notice all the syndromes". Therefore, Chaihu Guizhi Decoction is chosen for treatment. Teacher Wang thinks that "having evidence and using it as a prescription", and all discomfort is relieved.

#### 6.2. Case of Side effects after chemotherapy

Sun Moumou, male, 66 years old. On October 12, 2021, First diagnosis: Chief complaint: 4 days after the fourth round of chemotherapy for left lung squamous cell carcinoma, nausea and vomiting for 3 days. The patient was diagnosed with left lung squamous cell carcinoma (stage IV CT4N3M1) in an external hospital 4 months ago and underwent systemic chemotherapy with paclitaxel combined with carboplatin (specific dosage unknown). Current symptoms: On the 4th day after 4 rounds of chemotherapy, nausea, vomiting, vomitus consisting of gastric contents, dry mouth, poor appetite, gastric distention, fatigue, restlessness, general joint pain, pale tongue, white coating, and thin pulse strings. Blood routine test: WBC: 1. 45×109/L, HGB: 105g/L, PLT: 51×109/L. Diagnosis of Traditional Chinese Medicine: Concurrent disease of Taiyang and Shaoyang Channels. Principle of treatment: harmonizing yingfen and weifen, reconciling Shaoyang. Prescription: Chaihu Guizhi Decoction Original dose: Radix bupleuri 60g, cassia twig 23g, Scutellaria baicalensis 23g, ginseng 23g, repared licorice 15g, Pinellia ternata 32g, White peony 23g, Jujube 6 pieces, ginger 23g. 3 Fu, take method: 1 Fu/day, the above nine traditional Chinese medicines are boiled in 1400ml of water, 600ml are taken, the dregs are removed, and 200ml is taken warm, three times a day. On October 16, 2021, follow-up visit: The overall joint pain disappeared, with slight nausea and no vomiting. Abdominal distension and fatigue were alleviated. The patient was treated with two doses of the original medicine, all his discomfort disappeared.

Explanatory note: The common adverse reactions of paclitaxel combined with carboplatin chemotherapy are gastrointestinal reactions, bone marrow suppression, myalgia and arthralgia, liver and kidney dysfunction, etc. <sup>[7]</sup>. After chemotherapy with paclitaxel combined with carboplatin, this patient developed symptoms such as nausea, vomiting, poor appetite, abdominal distension, restlessness, and systemic joint pain, which are undoubtedly adverse reactions to chemotherapy drugs. The main pathogenesis of this disease is obstructive cardinalate of Shaoyang and disharmony between Ying and Wei. Nausea and vomiting occurred due to the adverse of stomach Qi. Because of the disharmony between Ying and Wei, the circulation of Qi and blood is not smooth, resulting in joint muscle soreness. Teacher Wang used Chaihu Guizhi Decoction based on the differentiation of symptoms such as "vomiting, arthralgia of extremities". It can not only reconcile Shaoyang, but also balance Ying and Wei, and can also build up healthy vital energy. It can be described as "one arrow aiming at three eagles".

#### 6.3. Case of Acute adverse reactions of zoledronic acid

Kang Moumou, female, 58 years old. Initial diagnosis: October 12, 2021. Chief complaint: confirmed Adenocarcinoma of the lung with bone metastasis for half a year. The patient was diagnosed as Adenocarcinoma of the lung with bone metastasis half a year ago. At present, he takes Gefitinib 250mg once a day for anti-tumor treatment, and intravenous drip of Zoledronic acid 2 days ago. Current symptoms: He felt pain and discomfort in joints and muscles throughout the body, nausea, bitter mouth, poor appetite, restlessness, coughing, expectoration, no fever and chills. Abdominal examination: The whole abdomen is flat and soft, with weak abdominal strength. Pressing Xinxia can cause pain. The tongue is red in color, with dentate marks on the edges of the tongue, yellow and greasy fur, and smooth string pulse. Diagnosis of Traditional Chinese Medicine: concurrent disease of Taiyang and Shaoyang Channels, phlegm and heat gather together in the chest.

Treatment: Reconciling Shaoyang, harmonizing yingfen and weifen, Clearing heat and clearing phlegm. Prescription: Chaihu Guizhi Decoction combined with Xiaoxianxiong Decoction: Radix bupleuri 60g, cassia twig 23g, Scutellaria baicalensis 23g, ginseng 23g, repared licorice 15g, Raw Pinellia ternata 65g, White peony 23g, Jujube 6 pieces, ginger 23g, Coptis chinensis 15g, Trichosanthes kirilowii fruit 80g. 3 Fu, take method: 1 Fu/day, the above 11 traditional Chinese medicines are boiled in 2600ml of water, 600ml are taken, the dregs are removed, and 200ml is taken warm, three times a day. On October 16, 2021, follow-up visit: After taking the medication, the symptoms of joint and muscle soreness disappeared throughout the body, bitter mouth, restlessness, and poor appetite were alleviated. Pain released while pressing the epigastric region. The tongue was red, the yellow and greasy fur was reduced. Continue to use 3 pairs of this medicine for treatment.

Explanatory note: Bone metastases manifest as severe pain, hypercalcemia, and some patients are accompanied by pathological fractures, which seriously affect the quality of life of patients [8]. Zoledronic acid has a good effect in alleviating the pain of cancerous bone metastasis, and can reduce bone-related negative complications and treat hypercalcemia, which is widely used in clinical [9]. Its acute adverse reactions are the adverse reactions occurring within 3 days after intravenous infusion of Zoledronic acid. The main symptoms include fever, musculoskeletal pain, anorexia, nausea, vomiting, eye infection, hypocalcemia and acute kidney injury [10]. Two days after intravenous drip of Zoledronic acid in this case, nausea, bitter mouth, upset, pain and discomfort of joints and muscles in the whole body and other symptoms occurred, which should be regarded as the acute adverse reaction of Zoledronic acid. According to Article 146 of the "Treatise on Febrile and Miscellaneous Diseases": Typhoid fever for six or seven days, fever, slight aversion to cold, arthralgia of extremities, slight vomiting, feeling obstructed in epigastrium, external syndrome has not gone, Chaihu Guizhi Decoction master. Article 138: Hypogastric disease, which is in Xinxia, causes pain when pressed, and for those with smooth string pulse, Xiao Xianxiong Decoction is the main treatment. Teacher Wang is familiar with the classics, and believes that this kind of performance (bitter mouth, upset, aching and uncomfortable joints and muscles) should be the syndrome of Chaihu Guizhi Decoction. The patient is accompanied with pain when pressing Xinxia, the tongue is red, the fur is yellow and greasy, and the pulse is slippery. Teacher Wang dares to use Chaihu Guizhi Decoction and Xiaoxianxiong Decoction.

#### 7. Conclusions

Analyze Teacher Wang's experience in using Chaihu Guizhi Decoction. In these three cases, the principle of "having evidence and using prescription" is followed, combined with abdominal diagnosis. Abdominal diagnosis is one of the commonly used diagnostic methods in Traditional Chinese medicine, which belongs to the category of palpation in the "Four Diagnoses". Yu Genchu's "Popular Typhoid Miscellaneous Diseases" states: "The chest and abdomen are the palace city of the five internal organs and the six hollow organs, the source of yin, yang, Qi and blood. If you want to know how the organs are, you should press the chest and abdomen, which is called abdominal diagnosis. During the clinical examination, Teacher Wang attached great importance to abdominal examination, and every patient diagnosed would undergo abdominal examination without exception. Teacher Wang summarized in practice: "Abdominal strength is moderate or slightly weak, accompanied by feeling obstructed in epigastrium, or fullness and discomfort in chest and hypochondrium", which is the abdominal diagnosis of Chaihu Guizhi Decoction. This formula has certain rules to follow in clinical use. In clinical practice, if there is abdominal diagnosis of feeling obstructed in epigastrium or fullness and discomfort in chest and hypochondrium, combined with symptoms of pain and stiffness in the head and neck, bitter mouth, dry throat, lack of appetite, restlessness and nausea, it can be used without doubt.

Based solely on the case of Chaihu Guizhi Decoction, this article demonstrates Teacher Wang's clinical thinking: 1. Advocating the use of abdominal diagnosis: Teacher Wang believes that abdominal diagnosis provides guidance for the selection of prescriptions and medication to a certain extent. For example, in the case of Zoledronic acid acute adverse reaction, the key entry point for selecting Xiaoxianxiong Decoction is that "pressing Xinxia can cause pain". The decisive abdominal sign of using Chaihu Guizhi Decoction is feeling obstructed in the epigastrium. 2. He pays attention to the use of the original dosage of formulas: Teacher Wang believes that after the principles, methods, formulas, and drugs, the dosage is the key to determining the therapeutic effect. When the prescription is corresponding but the therapeutic effect is not good, it may be due to insufficient dosage of the prescription, rather than a diagnostic error. When there is confidence, the original dose of the classic formula can be used, and the effect can be achieved. 3. Ensure that the prescription and syndrome type correspond. At the time of diagnosis, although the symptoms are varied and the condition is complex, if the main symptom can be grasped among many symptoms, and we can be sure the prescription and syndrome type correspond, we will achieve accurate treatment and satisfactory therapeutic effect.

#### References

[1] Wu Yunfang, Yao Fang, Cheng Ying. The Clinical Application of Chaihu Guizhi Decoction in Gynecology [J]. Chinese Medicine Modern Distance Education of China, 2018, 16(13): 86-88.

[2] Wang Keqiong. Original dose ceremony of Chinese prescription [M]. Shaanxi: Shaanxi Science and Technology Publishing House, 2020: 27-29.

[3] Wang Keqiong. Standards for the use of formulas [J]. Shaanxi: Shaanxi Science and Technology Publishing House, 2021: 150.

[4] Liu Yanfeng, Wang Tiefeng. Review on the Treatment of Perimenopausal Syndrome with Integrated Traditional Chinese and Western Medicine [J]. Journal of Beijing University of Traditional Chinese Medicine, 2022, 45(01): 15-20.
[5] Zhang Bingming, Lu Qibin. Clinical research progress on the differentiation and treatment of perimenopausal syndrome with traditional Chinese medicine viscera [J]. Traditional Chinese Medicinal Research, 2021, 34(11): 68-72.
[6] Zhang Shuai, Li Hao, Wang Zhiyong, Yang Yang, Wu jiahui. Exploring the Pathogenesis of Perimenopausal Syndrome Based on the Theory of Yin Yang-Qi Blood-Ying Wei [J]. China Journal of Traditional Chinese Medicine and Pharmacy, 2018, 33(02): 466-469.

[7] Qian Xinyu, Xiao Yunfeng, Luo Xuan, Li Wenyan, Li Hui. Meta analysis of the efficacy and adverse reactions of paclitaxel combined with carboplatin in the treatment of non-small cell lung cancer [J]. Journal of North Pharmacy, 2020, 17(08): 117-121.

[8] Jing Jie. Clinical nursing care of 25 patients with cancerous pain caused by bone metastasis from lung cancer [J]. Medical Journal of National Defending Forces in Northwest China, 2015, 36(3):208-209.

[9] Cai Bo, Wang Jianlong. The efficacy of Ergusan combined with zoledronic acid in the treatment of bone metastasis cancer and its impact on quality of life and cancer pain [J]. Modern Journal of Integrated Traditional Chinese and Western Medicine, 2017, 26(30): 3373-3375.

[10] Wang Lixin, Yang Xinjun, Lv Gang. Recent research status of Zoledronic acid in the treatment of fever after osteoporosis [J]. World Latest Medicine Information, 2018, 18(68): 117-118+120.