

A Preliminary Study on Fan Xiufeng's Clinical Experience in Treating Chest Arthralgia and Heart Pain with Yang Deficiency and Phlegm and Blood Stasis

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Abstract: Chief physician Fan Xiufeng is a famous expert in traditional Chinese and western medicine in the treatment of cardiovascular disease, who has his unique views in the treatment of coronary atherosclerotic heart disease (hereinafter referred to as coronary heart disease). Coronary heart disease belongs to the category of "chest arthralgia" in traditional Chinese medicine. Director Fan believes that the main pathogenesis of this disease are heart pulse obstruction, lung failure, blood stasis, liver loss, qi depression and blood stagnation, spleen loss of health, accumulation of phlegm turbidity, deficiency of qi and blood, kidney yin loss, heart blood loss, kidney yang deficiency, and monarch fire failure. The Xuanbi Tongmai decoction created by Director Fan according to his many years' clinical experience in the treatment of chest arthralgia caused by the combination of Yang deficiency and phlegm and blood stasis has remarkable clinical effect and is worth popularizing.

Chest arthralgia is equivalent to coronary atherosclerotic heart disease in western medicine^[1]. It is a heart disease caused by coronary artery occlusion or stenosis, resulting in myocardial ischemia and hypoxia, which is mainly divided into acute coronary syndrome and stable coronary heart disease^[2]. The pathogenesis is more complicated. Modern studies have found that excessive inflammation occurs in the proliferation of fibers in the subintimal arterial space. And thrombus is formed after various forms of traumatic stimulation, which is often manifested as chest tightness, chest pain, angina pectoris and so on, which seriously threatens the physical and mental health of patients. With the aging of the population and the rapid development of social economy, the incidence of coronary heart disease in China is increasing year by year. The most common manifestation of coronary heart disease is angina pectoris. Modern medicine has achieved a certain effect in the treatment of angina pectoris, but there are also some problems such as drug treatment intolerance and adverse reactions, so it is very important to study supplementary replacement therapy^[3]. In recent years, TCM has a broad prospect of individualized treatment based on syndrome differentiation, and recurrent and refractory coronary heart disease has attracted people's

attention. Traditional Chinese medicine has been confirmed to play a good role in the prevention and treatment of coronary heart disease. It has unique advantages in improving clinical symptoms, delaying disease progression, improving prognosis and so on^[4]. Chief physician Fan Xiufeng is the first famous traditional Chinese medicine in Xi'an and the academic heir of Lei Zhongyi, a master of traditional Chinese medicine. Now the experience of Chief physician Fan Xiufeng in treating chest arthralgia from qi and blood is summarized as follows.

1. Mechanism of disease differentiation and pathogenesis

Although there is no disease name of "coronary atherosclerotic heart disease" in traditional Chinese medicine, it belongs to the category of "chest pain" and "true heartache" according to the characteristics of symptoms. The so-called "phlegm gives rise to all kinds of diseases", modern medicine believes that arterial wall lipid deposition is the key factor of atherosclerosis, similar to the process of poor blood circulation caused by turbid phlegm in traditional Chinese medicine^[5]. According to the "three causes and one disease syndrome methodology", the disease is mainly related to emotional loss of temperament, cold evil invasion, eating disorders, fatigue and internal injuries, aging and physical deficiency and other factors. Its pathogenesis is deficiency and excess, in fact, cold coagulation, blood stasis, qi stagnation, phlegm turbidity, blocking chest yang, blocking heart pulse; deficiency is qi deficiency, yin injury, yang failure, the lesion site involves lung, spleen, liver, kidney, heart pulse loss^[6]. Teacher Fan believes that the main pathogenesis of this disease are heart pulse obstruction, heart pulse obstruction, lung failure, blood stasis, liver loss, qi depression and blood stagnation, spleen loss of health, accumulation of phlegm turbidity, deficiency of qi and blood, kidney yin loss, heart blood loss, kidney yang deficiency, and monarch fire failure. As the "quasi-syndrome treatment of chest arthralgia" said: "chest arthralgia, chest Yang micro bad luck, for a long time Yin by Yang position, and for arthralgia also." The pulse of chest arthralgia, Yang micro-yin string, Yang micro-knowledge in the upper coke, Yin string is heartache. "

2. Treatment of traditional Chinese medicine

The Internal Classic puts forward the acupoints and methods of acupuncture treatment, such as Zhongfu acupoint, Qihai acupoint, Qimen acupoint, Zusanli and other acupoints. "Lingshu Wuwei" has a record of "heart disease is suitable to eat". In the synopsis of the Golden Chamber, there are ten prescriptions, such as Trichosanthes Xiebai Banxia decoction, mainly Tongyang Xuanbi. In the Song, Jin and Yuan dynasties, "Taiping Sheng Hui Fang" used the products of fragrance, Wen Tong and Xin San, which were used mutually with the drugs of tonifying qi, nourishing blood, nourishing yin and warming Yang. Yuan Wei Yilin's "Shiyi Dexiao prescription" proposed to use Suhe Xiang pills to "treat sudden heartache". The "syndrome and treatment criterion" of Wang Kentang in the Ming Dynasty used Shixiao Powder and large agents such as peach kernel, safflower and Jiangxiang to treat heartache. Chen Nianzu in the Qing Dynasty treated heartache with Salvia miltiorrhiza drink, and Wang Qingren's Yilin Correction decoction was used to treat chest pain and heartache.

3. Prescription for use of medicine

On the basis of many years of clinical experience, on the basis of "Yang Weiyin string" put forward in the synopsis of the Golden Chamber, and combined with the syndrome of patients with phlegm and blood stasis syndrome, Chief physician Fan Xiufeng summed up the dialectical classification of chest arthralgia disease of "Yang deficiency and phlegm and blood stasis". As the treatment method, Xuanbi Tongmai decoction was selected as the treatment method. Specific

prescription composition: *Trichosanthes*, *Allium macrostemon*, *Pinellia ternata*, cinnamon twig, tangerine peel, *Poria cocos*, licorice, safflower, *Salvia miltiorrhiza*. In the prescription, *Trichosanthes*, *Allium macrostemon* and *Pinellia ternata* are selected as the monarch medicine. *Trichosanthes* sweet cold enters the lung meridian, and is good at resolving phlegm and dispersing knots, regulating qi and wide chest^[7]. "Materia Medica thinking record" cloud: "Gualou solid long, in the phlegm turbid downward, so chest arthralgia, unless this does not treat." *Allium macrostemon* warm into the heart and lung meridian, warm smooth, Tongyang scattered knot, qi to relieve pain. The combination of the two drugs, resolving upper coke turbid phlegm, dispersing chest yin and cold, promoting chest qi, is an important medicine for the treatment of chest arthralgia. The Gualou Xiebai Banxia decoction recorded from the synopsis of the Golden Chamber is based on Gualou Xiebai, combined with *Pinellia ternata* and liquor, which can clear yang, resolve phlegm and widen chest, and has strong function of resolving phlegm and dispersing knot. It is suitable for the syndrome of deficiency of upper Jiao Yang, combination of phlegm and qi, pungent temperature of *Pinellia ternata* and meridian of spleen and lung, which has the effect of eliminating phlegm, dryness and dampness, reducing adverse reaction and stopping vomiting, eliminating ruffles and dispersing knot^[8]. *Trichosanthes*, *Allium macrostemon* and *Pinellia ternata* all have the effect of resolving phlegm, *Trichosanthes* is good at dispelling dryness and resolving phlegm, Xuan Bai is good at expelling phlegm, and *Pinellia ternata* is partial to reducing adverse reactions and resolving phlegm. The combination of the three drugs has the effect of relieving arthralgia and dredging yang, expelling phlegm and relieving turbid. The subject medicine is *Poria cocos*, *salvia miltiorrhiza*, safflower, tangerine peel, tangerine peel, bitter and warm dry, regulating qi stagnation, dryness and resolving phlegm, which means "treating phlegm first, and then phlegm disappears". *Poria cocos* is sweet and light, permeating dampness and invigorating the spleen with du Sheng phlegm source, the two drugs are combined, one tonic and one elimination, replenishing qi and resolving phlegm. The combination of the two drugs can make the blood stasis go away and the new blood be born, and activate the blood without harming the body, so as to remove blood stasis and dredge collaterals and relieve pain. The combination of four drugs can regulate qi, invigorate spleen and remove phlegm, activate blood circulation, remove blood stasis and dredge collaterals, make phlegm have no place to grow, dispel endogenous toxin and go out, and help *Trichosanthes*, *Allium macrostemon*, *Pinellia* repellent phlegm and promote arthralgia. Adjuvant medicine: cassia twig, licorice. *Cinnamomum* twig warm, warm meridians, help Yang Huaqi, water dampness and phlegm drink evil, licorice taste sweet, reasonable priority, tonify spleen and qi, expectorant and cough, Xin Gan combined, help *Trichosanthes*, *Allium macrostemon* warm heart yang, promote heart pulse.^[9]

Modern pharmacological studies show that *Trichosanthes* can reduce the content of blood lipids, inhibit ischemic cardiomyocyte necrosis and maintain cardiovascular function in rats with acute myocardial ischemia combined with hyperlipidemia. Total flavonoids of *Trichosanthes mandshurica* can resist thrombosis and inhibit platelet aggregation and serum tumor necrosis factor- α (TNF- α) caused by low density lipoprotein (LDL).^[10] *Allium macrostemon* can promote fibrinolysis, reduce arterial lipid plaque, blood lipid, serum lipid oxidation, anti-atherosclerosis, inhibit platelet aggregation and release and arterial smooth muscle cell proliferation.^[11] *Pinellia ternata* has anti-inflammatory and antibacterial, anti-atherosclerotic and antihypertensive effects.^[12] *Salvia miltiorrhiza* has the effects of anti-atherosclerosis, anti-hyperlipidemia, anti-oxidation, anti-fibrosis and protecting cardiomyocytes.^[13] Safflower yellow pigment has the effect of dilating coronary artery and surrounding vessels, inhibiting the formation of thrombus, antioxidation, reducing blood viscosity, thus improving myocardial blood supply function, and has a good therapeutic effect on vascular inflammatory diseases.^[14] The volatile oil and methyl hesperidin contained in tangerine peel can dilate blood vessels, regulate lipids and increase coronary flow, thus lowering blood pressure and slowing down heart rate.^[15] *Poria cocos* have the effects of anti-inflammation, immune regulation, anti-oxidation and anti-aging.^[16] Cassia twig has the effects of analgesia, cardiostonic, increasing coronary blood flow, diuresis and lowering blood pressure.^[17] Licorice has the effects of anti-virus, anti-inflammation and regulating immunity, and can be used as a lipid repair agent and

vascular protective agent to regulate the disorder of endothelial cell function and the instability of atherosclerotic plaque.^[18]

4. Examples of medical records

The patient, Zhao, male, 74 years old, was first diagnosed on August 31, 2022. Coronary heart disease has a history of 10 years, has been taking medication, regular review. Before 2 months, there was no obvious inducement for the aggravation of chest pain, the nature of the pain was intermittent acupuncture-like pain, and the pain was tolerable. With chest tightness, shortness of breath, no nausea, vomiting, black in front of the eyes. Sodium can, sleep poorly, adjust two stools. The tongue is dark purple, the fur is thin and greasy, and the pulse is slippery. Blood routine test report indicates that the ratio of large platelets is 43.8%, and blood lipids suggest: apolipoprotein A0.97g/L, low density lipoprotein 1.77mmol/L, high density lipoprotein 0.90mmol/L, triglyceride 2.97mmol/L. Glucose 6.6mmol/L, uric acid 481umol/L. TCM diagnosis: chest pain, phlegm and blood stasis syndrome; Western medicine diagnosis: coronary atherosclerotic heart disease, hypertension, hyperuricemia. Treatment principles: dredging yang and removing blood stasis, eliminating phlegm and promoting arthralgia. Prescription: modified Xuanbi Tongmai decoction. Specific prescription composition: Trichosanthes 15g, Allium macrostemon 12g, Pinellia ternata 12g, Salvia miltiorrhiza 30g, safflower 6g, tangerine peel 12g, Poria cocos 12g, grilled licorice 5g, Jiangxiang 10g, bran fried Fructus Aurantii 10g, fried Radix Paeoniae Alba 10g, Radix Bupleuri 10g, Ligusticum chuanxiong 10g. 7 doses, fried in water, 1 dose a day in the morning and evening.

Second visit on September 7, 2022: the patient's chest pain was obviously relieved, chest tightness and shortness of breath were relieved, Naco, sleep, smooth urination, not yellow color, normal stool, once a day. The tongue is dark, the coating is thin and white, and the pulse string. Prescription: 15g of Trichosanthes, 12g of Allium macrostemon, 12g of Pinellia ternata, 30g of Salvia miltiorrhiza, 6g of safflower, 12g of tangerine peel, 15g of Poria cocos, 5g of licorice, 10g of Jiangxiang, 10g of Fructus Aurantii, 10g of fried peony, 10g of Bupleurum, 10g of Ligusticum chuanxiong, 30g of Polygonum multiflorum. 7 doses, fried in water, 1 dose a day in the morning and evening.

Note: The patient is an elderly male with a history of hypertension for 5 years, diabetes for 8 years and heart disease for 10 years. When asked about his medical history, most of the patients had deficiency of origin for a long time, such as deficiency of heart qi, depression of heart yang, even kidney, blood stasis, phlegm and dampness, and even heat and toxin were aggravating and inducing factors. According to its tongue, pulse and clinical symptoms, it can be judged that the syndrome belongs to the syndrome of combination of yang deficiency and phlegm and blood stasis, so my teacher uses Xuanbi Tongmai decoction to dredge yang and remove blood stasis, eliminate phlegm and purge arthralgia. Attention should be paid to the application of eliminating methods (activating blood circulation and removing blood stasis, resolving phlegm and removing dampness, cooling blood and detoxification), and the compatibility of qi regulating drugs is also a common method. When the patient was revisited one week later, the symptoms of chest tightness and pain were obviously relieved, the spirit was improved, the fur was greasy and the pulse was gentle and strong. Chest arthralgia is more common in the elderly, should always pay attention to exorcism in the disease, exorcism do not forget to support the upright, attack and tonic at the same time, can be free from worry. Teacher Fan often teaches patients that on the basis of drug treatment, they need to pay attention to personal self-care to prevent the disease caused by internal and external causes.

5. Summary

Chest arthralgia is a common clinical disease and frequently-occurring disease, because of its many risk factors, many patients are difficult to find a single risk factor, and traditional Chinese medicine has the advantages of multi-target, multi-faceted comprehensive treatment, the treatment

of this disease is effective. Chief physician Fan Xiufeng flexibly used Xuanbi Tongmai decoction in the treatment of chest arthralgia caused by the combination of yang deficiency and phlegm and blood stasis, adding or decreasing with syndrome differentiation, using the method of combination of disease differentiation and syndrome differentiation, and achieved good clinical results.

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References

- [1] Fioranelli M, Bottaccioli A G, Bottaccioli F, et al. Stress and Inflammation in Coronary Artery Disease: A Review Psychoneuroendocrineimmunology-Based[J]. *Front Immunol*, 2018, 9: 2031
- [2] Lin Qi, Guo Qiong. Efficacy of Atto vastatin combined with trimetazidine in the treatment of coronary atherosclerotic heart disease [J]. *Contemporary Medicine*, 2022, 28 (07): 98-100.
- [3] Liu Shujun, Xu Jiamin, Xie Jianhui, etc. Systematic re-evaluation of Danhong injection in the treatment of angina pectoris of coronary heart disease [J]. *Chinese Journal of Hospital Pharmacy*, 2022, 42 (08): 854,859. DOI:10.13286/j.1001-5213.2022.08.17
- [4] Liao Jiangquan, Shi Zaixiang, du Jinxing. Modern research progress and thinking of prevention and treatment of coronary heart disease with traditional Chinese medicine [J]. *Chinese Journal of traditional Chinese Medicine*, 2018, 33 (11): 4813-4816.
- [5] Wang Yonggang, Qi Jing, Zhong Wei, et al. Understanding and exploration of etiology and pathogenesis of coronary heart disease in traditional Chinese medicine [J]. *Journal of traditional Chinese Medicine*, 2015, 56 (17): 1449-1452.
- [6] Zhang Boli, Wu Mianhua. *Traditional Chinese medicine internal medicine [M]. The tenth edition.* Beijing: China traditional Chinese Medicine Publishing House, 2017: 93-94.
- [7] Li Ji, Lian Jianwei. *Prescription [M]. The tenth edition.* Beijing: China traditional Chinese Medicine Publishing House, 2016.8: 335, 336.
- [8] Yu Huayun, Fu Yingkai, Ji Xuming. Study on Ancient Literature of Gualou Xiebai Banxia decoction [J]. *Proprietary Chinese Medicine*, 2020, 42 (07): 1884-1888.
- [9] Shi Feifei. Effect of Xuanbi Tongmai decoction on cardiac function and serum CTnI and NT-proBNP levels in patients with acute myocardial infarction [J]. *Electronic Journal of Medicine and Health Research*, 2020, 4 (18): 56-58.
- [10] He Huanxiang, Guo Qingmei. Research progress on chemical constituents and pharmacological effects of *Trichosanthes* and prediction and analysis of quality markers [J]. *Chinese Herbal Medicine*, 2019, 50 (19): 4808-4820.
- [11] Li Li, Yan Jiang, Jia Lei, et al. To explore the mechanism of brain-heart simultaneous treatment of Gualou Xiebai Banxia decoction based on integrated pharmacology [J]. *Shaanxi traditional Chinese Medicine*, 2021, 42 (02): 256,261.
- [12] Shen Yingjun. *Pharmacology of traditional Chinese medicine [M]. Version 2.* Beijing: people's Health Publishing House, 2011: 672,673.
- [13] Shan Xiaoxiao, Hong Bangzhen, Liu Jie, et al. Research progress of chemical composition, pharmacological action, clinical application and prediction and analysis of quality markers of *Salvia miltiorrhiza* [J]. *Chinese Journal of traditional Chinese Medicine*, 2021 Magazine 46 (21): 5496-5511.
- [14] Wang Zuomei, Xiao Hongbin, Li Xueming, etc. Research progress on pharmacological action and clinical application of safflower [J]. *Miscellaneous Chronicles of traditional Chinese Medicine*, 2021, 36 (11): 6608-6611.
- [15] Li Weixia. Pharmacological analysis and clinical application of tangerine peel [J]. *Medical Theory and practice*, 2018, 31 (10): 1521-1522 1555
- [16] Chen Qing. Advances in quality control and pharmacology of *Poria cocos* [J]. *Asia-Pacific traditional Medicine*, 2020, 16 (08): 154157.
- [17] Zhou Sanlin. Clinical application and pharmacological study of ephedra and cassia twig [J]. *Chinese Folk Therapy*, 2018, 26 (04): 108,109.
- [18] Kahleova H, Levin S, Barnard N D. Vegetarian Dietary Patterns and Cardiovascular Disease [J]. *Prog Cardiovasc Dis*, 2018, 61(1): 54-61.