

Research Progress of Traditional Chinese and Western Medicine in the Treatment of Coronary Heart Disease

Bo Ning^{1,a}, Mingjun Zhao^{2,b,*}

¹Shaanxi University of Chinese Medicine, Xiayang, Shaanxi, China

²Department of Cardiology, Affiliated Hospital of Shaanxi University of Chinese Medicine, Shaanxi, Xiayang, China

^aningbo9803@163.com, ^bzmj7125@163.com

*Corresponding author

Abstract: Nowadays, the diagnosis and treatment of coronary atherosclerotic heart disease (referred to as coronary heart disease) has developed rapidly, and the aspects of traditional Chinese medicine and western medicine have put forward new diagnosis and treatment ideas. This article from the obstruction of disease (CHD) of traditional Chinese medicine deficiency of vital energy and blood stasis, phlegm turbidity, and his dirty treatment to do the current masters in TCM diagnosis and treatment of coronary heart disease and new ideas in a simple, and its diagnosis and treatment related evidence of evidence-based medicine to do in a simple; from western medicine diagnosis and treatment of drug therapy and interventional therapy of coronary heart disease among recent findings do in a simple, the present situation and progress of diagnosis and treatment of coronary heart disease at home and abroad were briefly reviewed.

Keywords: coronary heart disease, research progress, diagnosis and treatment methods, diagnosis and treatment status

At present, the diagnosis and treatment of coronary heart disease has entered the era of "a hundred schools of thought contending". Whether it is Western medicine or traditional Chinese medicine, a series of studies and explorations are being carried out on how to diagnose and treat coronary heart disease. This article summarizes the research achievements of traditional Chinese medicine and western medicine in the diagnosis and treatment of coronary heart disease in recent years, hoping to provide reference for cardiovascular clinical practice.

1. Advances in TCM Research on CHD

Coronary heart disease belongs to the category of "chest arthralgia" in traditional Chinese medicine. With the continuous in-depth understanding of chest arthralgia in Chinese medicine for thousands of years, a complete system of syndrome differentiation and treatment has gradually been formed. From the point of view of the main symptoms and symptoms, if the patient has chest tightness, chest pain, wheezing and other symptoms, the TCM syndrome differentiation is chest paralysis; when the patient has severe heart pain, accompanied by palpitations, edema, cold limbs, sweating, shortness of breath, complexion When pale and so on, Chinese medicine calls it true pain. From the point of view of historical ancient books, ancient books such as "The Yellow Emperor's Classic of Internal Medicine" and "Synopsis of the Golden Chamber" all have certain diagnosis and treatment plans for chest pain and heartache. For example, in the ancient book "Medicine Correcting Mistakes", it was proposed to use Xuefu Zhuyu Decoction to treat chest pain and heartache, which is still in use today. Gualou Xie Bai Guizhi Decoction, Xuefu Zhuyu Decoction and other famous recipes through the ages are the great wealth left by predecessors in exploring the diagnosis and treatment of chest pain and heartache diseases^[1].

Starting from the overall concept of traditional Chinese medicine and clinical treatment based on syndrome differentiation, contemporary famous doctors treat chest arthralgia (coronary heart disease) mainly from the main aspects of blood stasis, phlegm turbidity, qi deficiency, qi stagnation, and yang deficiency. At present, the research syndromes of coronary heart disease in TCM circles mainly include the following^[2].

The blood stasis syndrome of TCM syndrome type of coronary heart disease is one of the main research directions of contemporary famous scholars. Ren Yi^[3] and others found through a study of 405 patients with coronary heart disease: after statistical analysis, the current coronary heart disease patients with blood stasis syndrome accounted for more than half of the patients, which was statistically significant and was the current coronary heart disease. The main type of evidence it has. Fu Changgeng^[4] found in the process of researching the diagnosis and treatment of patients with coronary heart disease by Academician Chen Keji, Chen Laoyou focused on the research on blood stasis syndrome types of coronary heart disease. Liang Lizhen^[5] used the medicine for promoting blood circulation and removing blood stasis to treat 45 patients with coronary heart disease in the experiment, one group of medicine for promoting blood circulation and removing blood stasis + western medicine group, and a group of pure western medicine. , the difference was statistically significant ($P < 0.05$). Liu Haibo^[6] selected 78 patients with coronary heart disease, one group was treated with Buyang Huanwu Decoction + Western medicine group, and the other group was treated with Western medicine alone. Academic significance ($P < 0.05$). LI YANMEI^[7] et al. studied the pharmacological effects of Xuefu Zhuyu Decoction and found that it blocked the expression of glycoprotein IIb/IIIa complex, which reduced platelet activity in patients. Zhong Tao^[8] studied 80 patients with coronary heart disease and angina pectoris. One group was treated with Xuefu Zhuyu Decoction + Western medicine group, and the other group was treated with Western medicine alone. It showed that 95% of the Xuefu Zhuyu Decoction group was significantly better than the 77.5% of the Western medicine group alone. The difference was statistically significant ($P < 0.05$).

Contemporary physicians have found that phlegm is also an important cause of coronary heart disease. Modern pharmacological studies have found that qi-invigorating and expectorant drugs can not only effectively reduce the content of low-density lipoprotein, but also expand coronary blood vessels^[9]. Guo Shuanggeng^[10] et al. discussed the relationship between phlegm stasis heat toxin and atherosclerotic inflammatory mechanism, and proposed that most patients with coronary heart disease with phlegm turbidity blocking syndrome have disordered lipid metabolism. When coronary artery inflammation or thrombotic plaque occurs, it is mostly related to phlegm. Shen Ning^[11] analyzed the experience of Shen Shaogong, a famous Chinese medicine practitioner, in the diagnosis and treatment of coronary heart disease and found that phlegm is often used to treat coronary heart disease in clinical practice, and it is necessary to distinguish between deficiency and excess. Li Bin^[12] pointed out in the study of the anti-epidemic "people's hero" Academician Zhang Boli's medication experience in the treatment of coronary heart disease that Academician Zhang is particularly focused on the diagnosis and treatment of coronary heart disease with the syndrome of phlegm and blood stasis.

Coronary heart disease often involves multiple viscera, the main disease location is in the heart, and it suffers from deficiency. "The middle viscera is deficient, and the evil qi gets away from it... so it is also painful." This can be proved. Patients with qi deficiency are mostly yang deficiency, and the cause is mostly the violent cold of the six evil qi, which leads to the condensation of yin and cold, the poor circulation of qi and blood, and the blockage of qi machine, which makes the heart and yang sluggish. When the external climate and temperature change, such as when the season changes, most patients with coronary heart disease are prone to symptoms such as shortness of breath, chest tightness, and back pain, suggesting myocardial ischemia. Clinical practice shows that most patients with coronary heart disease have a deficiency of heart yang, which leads to insufficient heat production in the body. Yan Yafeng^[13] found in the study of the clinical medical case of Zhang Xuewen, a master of traditional Chinese medicine, that Zhang concluded in the course of many years of clinical diagnosis in Shaanxi Central Affiliated Hospital that coronary heart disease is mainly caused by insufficient heart-qi, and blood stasis and phlegm turbidity, etc. factor. Jin Zheng^[14] and Wang Song^[15] researched the experience of Professor Deng Tietao, a master of traditional Chinese medicine, in the treatment of cardiovascular disease and found that in clinical treatment of coronary heart disease, Mr. Deng advocated qi deficiency and phlegm turbidity, and used the method of nourishing qi to remove phlegm, and proposed that "invigorating qi raises the sputum". fire" theory.

2. Advances in Western Medicine Research on CHD

Coronary heart disease is called coronary atherosclerotic heart disease^[16]. At present, Western medicine believes that when the lipid metabolism function of the body "strikes", white lipids begin to adhere to the intima of the arteries, which will cause stenosis or blockage of the lumen and block the blood flow in the lumen, and angina pectoris will occur. In addition, studies have found that inflammatory factors can cause platelets to be activated and form blood clots, which is why antithrombotic drugs are used in the treatment of coronary heart disease.

Western medicines for coronary heart disease treatment are mainly divided into the following two categories: one is drugs for preventing myocardial infarction and improving prognosis, mainly including antiplatelet aggregation drugs, statins, angiotensin-converting enzyme inhibitors, etc.; the other is for improving the prognosis. Drugs for ischemia and symptom relief mainly include beta-blockers, calcium channel blockers, and nitrates. At present, the commonly used antiplatelet drugs in clinic mainly include aspirin, clopidogrel, prasugrel, cilostazol, ticagrelor, etc. Clinical studies have shown that patients with coronary heart disease should take antiplatelet drugs for life. Aspirin is used as the first-line drug for coronary heart disease. FoxKA et al^[17] study confirmed that the incidence of major bleeding caused by aspirin in patients with coronary heart disease is very low compared with patients with coronary heart disease who do not use aspirin, only 1.5% to 1.9%. Clopidogrel is also widely used clinically in patients with coronary heart disease. However, in recent years, with the deepening of research, the efficacy of clopidogrel in different individuals is significantly different, and re-ischemia events are emerging one after another. According to Deng Shuqiang^[18] research found that the main factor affecting the efficacy of clopidogrel is its drug gene polymorphism. PON-1 (paraoxonase-1) gene polymorphism has a crucial impact on the treatment of coronary heart disease with clopidogrel.

Clinically, we mostly use dual antiplatelet (double antibody) therapy for chronic coronary heart disease or acute coronary syndrome (ACS). In general, for patients with non-ST-segment elevation ACS (NSTEMI), PCI is not usually performed clinically, and the duration of dual-antibody therapy ranges from 1 month to 1 year; for ST-segment elevation ACS (STEMI) patients, more One-year dual-antibody therapy and PCI treatment; while patients with stable coronary heart disease are often implanted with DES drug-eluting stents and treated with dual-antibody therapy for 1 year; new drug stents newly developed in recent years, some studies believe that double-drug stents after PCI Resistance time can be reduced and even ticagrelimumab can be used^[19].

Lipid-lowering therapy mainly refers to the reduction of cholesterol levels in patients, mainly LDL-C levels. At present, lipid-lowering therapy at home and abroad mainly uses statins, such as atorvastatin calcium tablets. Current clinical practice has shown that statins can effectively improve symptoms for patients. Studies have shown that LDL-C levels can effectively affect the occurrence of cardiovascular and cerebrovascular diseases. When the low-density lipoprotein content is reduced by 1%, the incidence is reduced by 1%; when the low-density lipoprotein content is reduced by 1mmol/L, the main coronary artery The event risk was reduced by 24 percent, and coronary revascularization was reduced by 24 percent.

Interventional therapy for patients with coronary heart disease has achieved rapid development in recent years in my country, mainly using percutaneous coronary interventional therapy, ie PCI. According to valid statistical data^[20], as of last year, the number of patients with coronary heart disease treated by PCI in my country has surpassed that of the United States, ranking first in the world. The world's first baremetal stent (BMS) came out in the 1980s. The birth of BMS marked the beginning of the stent intervention industry in the field of coronary heart disease prevention and treatment. BMS effectively solves the simple balloon dilation, and has become the first method of PCI treatment among many methods of coronary heart disease treatment. However, the fly in the ointment is that the problem of lumen restenosis has not been solved after BMS is placed in the patient. In order to properly solve this problem, drug-eluting stent (DES) has been delivered to patients with restenosis after coronary heart disease after PCI. Gospel. DES stents act on vascular smooth muscle cells with cytotoxic drugs, thereby inhibiting cell proliferation and achieving the requirement of no restenosis in the lumen. DES is sought after by the medical community at home and abroad, and a variety of DES stents have come out after clinical trials. Such as the advent of the Firehawk bracket. PCI technology has been developed in China for more than 30 years. According to official data, stent placement has become the preferred solution for patients with coronary heart disease. But things always have pros and cons, and the incidence of intravascular thrombosis increases after stent placement. In the course of clinical application, we found that the long-term existence of metal stents in blood vessels after completing its function will also lead to many problems. In order to solve this problem, the concept of degradable stents came into being. It can not only treat coronary heart disease, but also restore the physiological function of blood vessels. The enthusiasm of Chinese medical device companies to develop bioabsorbable stents (BRS) has not diminished, and clinical trials of domestic BRS have also made important progress in recent years. In February 2019, the domestically produced NeovasBRS took a big step forward towards the concept of "intervention without implantation" of vascular reconstruction. In 2020, Liu Yuwen^[22] showed that PCI via the distal radial artery can effectively reduce the complications after PCI compared with traditional radial artery intervention, and the incidence of radial artery occlusion is greatly reduced. Swelling is also significantly reduced, which will be the latest

breakthrough in PCI in recent years and is expected to bring good news to PCI patients with coronary heart disease.

3. Conclusion

At present, both traditional Chinese medicine and western medicine have made unprecedented progress in the diagnosis and treatment of coronary heart disease. The author, by sorting out the literature on the diagnosis and treatment of coronary heart disease in recent years, discusses the treatment of thoracic arthralgia in traditional Chinese medicine from the aspect of qi deficiency and blood stasis, and the diagnosis and treatment of coronary heart disease in western medicine from the distal end of the radial artery. Interventional therapy is very promising. In the treatment of traditional Chinese medicine and western medicine, the combination of traditional Chinese medicine treatment and interventional therapy, the integration of traditional Chinese medicine and western medicine, starting from the ancient books of traditional Chinese medicine, starting from the principle of treating diseases, and further exploring the changes of diseases and diseases, are expected to find new treatment plans, constantly improve the clinical level of coronary heart disease prevention and treatment, and effectively reduce the mortality rate of coronary heart disease^[23].

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