

Research Progress in the Treatment of Diabetes Complications with Yiqi Huoxue Prescriptions Combined with Acupuncture and Moxibustion

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Abstract: The complication of diabetes is a chronic disease of brain, heart, kidney, nerve and other tissues caused by the gradual development of diabetes. And it is the main cause of death or disability of most diabetes patients, which seriously affects the physical and mental health and quality of life of patients. Research shows that diabetes is the third leading cause of death, after cancer and cardiovascular and cerebrovascular diseases. In recent years, clinical and experimental research has been carried out on diabetes and other diseases. Recent years, clinical and experimental research on diabetes and its complications has always been a hot spot. Compared with modern medicine, traditional Chinese medicine has the advantages of multiple benefits. Compared with modern medicine, traditional Chinese medicine has the advantages of multiple ways, levels and targets. The prescriptions for Yiqi Huoxue flow further reflect the principle of syndrome differentiation and treatment, as well as the importance of the use of traditional Chinese medicine. The prescriptions for Yiqi Huoxue flow further reflect the principle of syndrome differentiation and treatment, and play a better role in the treatment of diabetes complications. At the same time, acupuncture and moxibustion can play the role of dredging channels, activating collaterals, and harmonising qi and blood. It has gradually become an important means of treating diabetes complications. The combination of the two therapies will further expand the advantages of traditional Chinese medicine in treating diseases. Therefore, Yiqi Huoxue formula combined with acupuncture and moxibustion is an essential programme for the treatment of diabetes complications. However, at home and abroad, there is a lack of systematic and comprehensive sorting on the treatment of complications of diabetes with prescriptions for supplementing qi and moxibustion. However, at home and abroad, there is a lack of systematic and comprehensive sorting on the treatment of complications of diabetes with prescriptions for supplementing qi and activating blood circulation and the combination of acupuncture and moxibustion. This article mainly reviews the treatment of diabetic microangiopathy (nephropathy, neuropathy, retinopathy) and

diabetic foot (DF) with Yiqi Huoxue prescription combined with acupuncture and moxibustion in recent years, in order to provide better ideas for clinical treatment.

Diabetes mellitus (DM) is a chronic metabolic disease characterised by hyperglycaemia caused by absolute or relative insulin deficiency due to a variety of factors. The number of people aged 20-79 years with diabetes mellitus is estimated to be 53.72 billion globally in 2021, and is projected to grow to 78.3 billion by 2046, with a predominance of middle-income countries[1,2]. In China, there are 116.4 million people with diabetes, and by 2030, the number of people over 65 with diabetes is expected to grow to 54.3 million people[3,4]. Insulin, metformin and other medications require long-term injections or oral treatment, and poor glycemic control is associated with many complications, including microangiopathy[5], diabetic foot (DF), etc. with adverse reactions. It can be seen that there is much room for the development of Chinese medicine to actively participate in the treatment of diabetic complications. According to the principle of TCM diagnosis and treatment, diabetic complications can be treated by replenishing qi and boosting yang, resolving turbidities and lowering lipids, activating blood circulation and combining with spleen diagnosis and treatment.[6-8] The principle of diabetic complications can be treated according to the principle of TCM diagnosis and treatment. At the same time, modern research has shown that Chinese medicine and acupuncture can treat diabetes and its complications by inhibiting cell death, anti-inflammation, improving insulin secretion, and controlling multiple pathways to promote wound healing.[9-12]. The details are summarised in Table 1.

1. Chinese medicine's understanding of diabetic complications and the application of the principle of "benefiting qi and activating blood circulation".

Traditional medicine believes that DM belongs to the category of "thirst-quenching disease". The Spiritual Pivot has a cloud: "The five organs are all weak, good disease and disease." It can be seen that thirst disease and the important relationship between innate endowment, coupled with worry and depression, exogenous evil, fatigue injury, dietary disorders and other factors leading to the occurrence of the disease, the basic pathology for the yin deficiency for this, dry heat for the standard. Complications of diabetes are mainly related to two causes, in short, the liver and spleen deficiency is not enough, too much living and eating, mainly manifested as "three more and one less", more drinking, more eating, more urination, weight loss symptoms.[6,13] The main symptoms are "three more and one less", more drinking, more eating, more urination and weight loss. With the development or aggravation of the disease, oedema, stroke, blindness, impotence, gangrene and other complications may appear. Modern medical doctors treat diabetic complications with their own strengths, mainly adopting the principle of diagnosis and treatment. Academician Tong Xiaolin believes that diabetic nephropathy (DN), diabetic retinopathy (DR), diabetic distal symmetric polyneuropathy have the pathogenesis of "stasis", and treatment is based on the principle of "invigorating blood circulation and removing blood stasis", and in the later stage, "benefiting qi and warming yang". "[14] The treatment is to "activate blood circulation and eliminate stasis" and "benefit qi and warm yang" in the later stage. Professor Lu Renhe took "activating blood circulation and removing blood stasis, benefiting qi and nourishing yin" as the main treatment principle, and created a treatment method for diabetic nephropathy mainly based on "removing blood stasis and dispersing stagnation", and commonly used medicines for activating blood circulation and relieving pain in combination with medicines for tonifying qi in clinical practice.[15,16] He also used

blood-activating and pain-relieving medicines with qi tonic medicines in clinical practice. According to State Medical Master Shang Dejun, the key to the pathogenesis of diabetic foot is "stasis due to deficiency, stasis obstructing the meridians", and when the disease lasts for a long time, there will be a mixture of deficiency and reality, so the treatment can be based on the evidence-based therapy by using traditional Chinese medicines that benefit qi and activate blood and combining them with acupoint injections.[17] The treatment can be based on the combination of internal administration of Chinese medicines that benefit vital energy and promote blood circulation and acupoint injection.

2. Benefiting qi and activating blood formulae combined with acupuncture in the treatment of microvascular lesions

2.1 Diabetic nephropathy

DN is a major complication of diabetic microangiopathy, and according to the symptoms, it belongs to the categories of "oedema", "fatigue" and "Guan Ge" in Chinese medicine. About one third of type 1 or type 2 diabetic patients worldwide develop diabetic nephropathy, and gradually form end-stage renal disease (ESRD).[18] The Chinese medicine is based on the identification of evidence and treatment. Traditional Chinese Medicine (TCM) is based on the identification and treatment of diabetic nephropathy according to the DN patients with different types of evidence mainly from the "spleen and kidney" to carry out integrated treatment of Chinese medicine, the specific treatment is as follows:

Warm Kidney, tonify Qi and invigorate blood formula consists of Astragalus, Chinese yam, Poria, Radix Rehmanniae Praeparata, Rhizoma Ligustici, Rhizoma Ligustici Chuanxiong, Peach kernel, Radix Angelicae Sinensis, Radix Paeoniae Alba, Cornu Cervi Pantotrichum, Zedoariae, Safflower, Dampy, and Dilang[19,20]. Shan Liufeng[21] combined with Wenshen Buqi Huoxue prescription to treat Qi-Yin deficiency and blood-stasis type DN on the basis of lowering blood sugar, diuresis and detumescence and moxibustion (bilateral Shenshu, Geshu, Guanyuan and Zusanli). After treatment, the HbA_{1c}, urinary albumin excretion rate (UAER), 24h urinary protein quantity (24hUAE) and meridian energy index of the patients were significantly lower than those of the control group, treated with moxibustion alone and conventional treatment. The mechanism of action was related to increasing immunity, accelerating insulin secretion, improving glomerular filtration barrier and renal microcirculation.

Yishen Huoxue Xiezhuo prescription is composed of Pueraria root, Ghost arrow, Raw astragalus, Cicada flower, Litchi core, and Dijin grass. It has the effect of invigorating qi and spleen-turbidness, activating blood circulation and removing blood stasis. Lu's school of acupuncture, as one of the most influential schools of acupuncture in China at home and abroad, focuses on the deficiency of kidney qi and makes good use of warm needles, which can be better used for the treatment of diabetic complications.[22,23] which can be better used for the treatment of diabetic complications. Hu Jing[24] et al. combined Lu's acupuncture (Ganshu, Pishu, Sanjiaoshu, Shenshu, and Fuai, Fujie, Guanyuan, Zhangmen, and Zsanli, etc.) with the above additions and subtractions for DN with deficiency of spleen and kidney qi and dampness stasis and obstruction and found that it could reduce the level of inflammatory cytokine expression and improve the inflammatory response, and the patient's fasting blood glucose (FBG) was lower than that of the kidney qi.

In the group with the combination of western medicine alone and Chinese and western medicine, the 2h postprandial glucose (2hPG), HbA_{1c} and inflammatory cytokines (MCP-1, TGF- β 1, TNF- α) were better than those in the group with the combination of western medicine alone and Chinese and western medicine, and the goal of slowing down the progression of renal function was achieved.

Jianpi Gushen decoction is composed of *Codonopsis pilosulae*, *Jinchuanzi*, *Cuscuta chinensis*, *Atractylodes macrocephala*, *Poria*, *Astragali*, *Fructus Mori*, *Angelica sinensis*, *Rhubarb*, *Salviae Miltiorrhizae*, which together play the role of "benefiting the qi and promoting the yang, and activating the blood to eliminate blood stasis" effect. At the same time, warm acupuncture and moxibustion organic combination, with the effect of moving qi, warm meridians and dispersal of cold. Wang Yonggang[25] et al. combined warm acupuncture (kidney Yu, Yishe, Qihai, Taichong, Taixi, Ashigaru, Huanjiu, etc.) to treat diabetic nephrotic syndrome of spleen-kidney yang deficiency, and found that this method could improve type IV collagen and connective tissue growth factor, slow down the progress of fibrosis, and promote the improvement of renal function, and the patients' Chinese medicine symptom scores, albumin (Alb), creatinine (Scr), urea nitrogen (BUN) and other indexes improved. Then clinical symptoms were relieved.

Yiqi Yangyin Huoxue formula is composed of *Astragalus*, *Cornus officinalis*, *Yam*, *Poria*, *Ophiopogon*, *Peony bark*, *Red peony root*, *Rehmannia rehmanni*, *Yellow essence*, *Scrophulariae* and *Chuanxiong*. Acupuncture has a good effect in improving clinical symptoms and renal function in patients with diabetic nephropathy, while acupuncture kidney points have the effect of enhancing urinary function and reducing urinary protein[26,27]. Quan Liugen[26] et al. used the above additions and subtractions combined with acupuncture (Quchi, Ashigangsanli, Zhigou, Hegu, Diqi, Sanyinjiao, Tianshu, Zhongkou, Blood Sea, Kidney Yu, and Zhongji) to treat DN with deficiency of qi and yin and obstruction of blood stasis, and the patients' total Chinese medicine symptom scores, glomerular filtration rate (eGFR), and 24hUAE were lower than that of the control group, and the mechanism of action was related to the reduction of the inflammation response, which led to improvement of clinical symptoms and protection of renal function of patients with DN and protect renal function.

2.2 Diabetic peripheral neuropathy

The most common complication in patients with DM is peripheral neuropathy (DPN). Peripheral nerve damage can manifest as progressive distal symmetrical polyneuropathy, autonomic neuropathy, etc., which is characterised by the sensation of wearing gloves or stockings, as well as a possible loss of motor function, most commonly in the hands and lower limbs.[28,29]. At present, the research on the combined use of Chinese medicine in DPN with the evidence of phlegm and stasis obstruction, yang deficiency and cold coagulation, qi and yin deficiency, and collateral paralysis obstruction has been successful.

Jianpi Yiqi Tongluo formula consists of *Raw astragalus*, *Mulberry*, *Chuanxiong*, *Yam*, *Eucommia*, *Poria*, *Salvia miltiorrhiza*, *Stir-fried White art*, *Radix Pseudostellariae*, and *Scorched Licorice*. The combined use of these medicines can achieve the functions of strengthening spleen and supplementing qi, drying dampness and water, activating blood circulation and removing blood stasis, relaxing tendons and activating collaterals. Acupuncture point injection organically combines meridians, medicines and needling, and produces benign stimulation to the acupoints for a long period of time.[30,31] It enhances the efficacy of activating blood circulation and removing blood stasis. Foot Sanli acupoint injection is a safe and effective treatment for DPN, with obvious advantages in relieving pain and improving nerve conduction velocity.[32] The advantages are obvious in relieving pain and improving nerve conduction velocity. Yang Wei[33] utilized Zusanli, Yanglingquan, and Fenglong acupoints for acupoint injection (danshen injection) in combination with this formula to treat phlegm and blood stasis obstruction type DPN. This treatment approach promoted nerve repair, reduced levels of glycosylation end products (AGEs) and high mobility group protein (HMGB1), decreased inflammation, oxidative stress, and damage to tubular endothelial cells in the patients. It also improved levels of endothelial cell-related factors and nerve

conduction velocity, effectively alleviating clinical symptoms such as numbness, pain, and sensory abnormalities.

Danggui Guizhi Zhuyang Decoction is composed of *Angelica officinalis*, *Cinnamomum officinalis*, *Paeony*, *Astragalus*, *Blood rattan*, *Tongcao* and *Asarum*. It has the function of benefiting qi and tonifying blood, warming the meridians and opening the channels.[34] At the same time, some studies have found that acupuncture can make the pain and other symptoms caused by neuropathy disappear completely, and there are no side effects[35]. Gao Zhongyu[36] discovered that the combination of this formula and acupuncture at ying-spring and shu-stream point (Ganshu, Pishu, Shenshu, Dadu, Erjian, Sanjian, Laogong, Xianggu, Neiting, Qianggu, Houxi, Zusanli, Shangjuxu, and Xiajuxu) for the treatment of Yang-void and cold-congealed type of DPN could regulate meridian qi, tonify the blood, consolidate the surface, and help Yang flow through the collaterals. This treatment approach resulted in lowered TCM score and Toronto Coneurological Symptom Score (TCSS), accelerated conduction speed of the peroneal and median nerves, and alleviated clinical symptoms.

Diqi tongbi decoction consists of *Raw radix rehmanniae*, *Radix astragali*, *Radix pseudostellariae*, *Rhizoma anemarrhenae*, *Rhizoma coptidis*, *Radix trichosanthis*, *Caulis spatholobi*, *Winged euonymus twig*, *Rhizoma corydalis*, *Radix paeoniae rubra*, *Earthworm*, *Scorpion*, *Radix cyathulae*, *Dried ginger*, all parties share, altogether plays ziyin yiqi, detoxification of t2dm work; At the same time, acupuncture is also beneficial to Qi and blood circulation. Abdominal Acupuncture Therapy is developed from the theory of traditional acupuncture, which is painless, simple, safe and effective. Xue Bo[37]found that the combination of abdominal acupuncture (middle epigastric, lower epigastric, Qihai, Guanyuan, slippery meat gate, Waoling, lower rheumatism point, lower rheumatism point, upper rheumatism point, upper rheumatism point) with the addition of Diqi Tongpao Tang had a significant effect on the patients with deficiency of qi and yin and collateral channel paralysis obstruction, and that the medication of nourishing yin and tonifying qi, clearing heat and dispersing blood stasis together with the treatment of the acupoints that dredged up collateral channel qi and eliminated congestion and stagnation of the evil qi could lower and maintain blood glucose, and the patients' traditional Chinese medicine symptoms, such as Points, tactile sensation, sensory threshold (CPT), FBG, etc. were significantly improved.

3. Diabetic retinopathy

Diabetic retinopathy (DR) is one of the common microvascular complications of diabetes mellitus, which is classified as "bird's eye" or "internal obstruction" in traditional Chinese medicine (TCM), creating a precedent for TCM nomenclature of diabetic eye diseases.[38] It is expected that by 2045, the number of DR patients will increase to 1.5 million. The number of people with DR is expected to rise to 160.5 million by 2045.[39] The number of people with DR is expected to rise to 160.5 million by 2045. It has been shown that acupuncture, Chinese herbs, or a combination of both can significantly improve vision and slow the disease process without adverse events.[40] The article states that acupuncture, herbs, or a combination of both can significantly improve vision and slow the progression of the disease without adverse events. Based on what was found, the combined therapeutic approach was mainly applied to the qi and yin deficiency type of DR.

Jiawei Buyang Huanwu decoction is composed of *Astragalus*, *Raw dihuang*, *Xuanshen*, *Poria*, *Yam*, *Peach kernel*, *Safflower*, *Angelica sinensis*, *Lumbricus*, *Atractylodes macrocephala*, *Red peony*, and *Chuanxiong*, which is beneficial to qi, nourishes yin and invigorates the blood and collaterals. Organic iodide promotes the uptake of inflammatory factors as well as diseased tissues, which is enhanced by acupoint injections. Yuan Xiaoyan[41] et al. used the above plus and minus combination of Xinming 3 and 2 acupoints for the treatment of DR with deficiency of qi and yin,

which could relax the vascular smooth muscle and improve the levels of plasma endothelin (ET-1) and nitric oxide (NO) to achieve vasoconstriction and ultimately improve the clinical symptoms of the patients.

Astragalus, Dred rehmannia root, Goji berries, Pueraria root, Trichosanthin, Yam, Ligusticum Chuanxiong, Salvia miltiorrhiza, Leeching, Hangzhou chrysanthemum, Notoginseng powder (infusion), licorice together to form a Chinese herbal compound Yeshe Fuming decoction, with beneficial qi filling essence, promoting blood circulation and removing blood stasis, tonifying kidney and spleen work, combined with acupuncture, further enhance the effect of supplementing Qi and promoting blood circulation. In addition, modern studies have shown that acupuncture can improve ocular vascular microcirculation, promote the metabolism of oxygen and energy in the ischaemic area, and thus improve DR[42,43] . Meanwhile, it has been documented that acupuncture combined with conventional medication is more effective than medication alone in treating DR without adverse events[44]. The study conducted by Feng Yuan[45] et al. highlighted that in DR patients with qi and yin deficiency, the addition of night-vision reminder soup combined with acupuncture (Eyeming, Zanzhu, Chengqi, Sizhukong, Pupilosus, Hegu, Taichong, Xuehai, and Zusanli) may ameliorate retinal ganglion cell disorders, regulate glucose metabolism, and promote apoptosis of retinal endothelial cells. This treatment approach was found to increase the patient's serum calcium and magnesium ion levels, decrease levels of soluble intercellular adhesion molecule-1 (sICAM-1) and connective tissue growth factor (CTGF), and improve retinal fundus arterial haemodynamics and other indicators. Furthermore, the treatment resulted in the improvement of clinical symptoms such as blurred vision, dry eyes, and tiredness

Tangwangling is composed of Panax quinquefolius powder, Notoginseng powder, Radix polygoni, Radix yam, Radix pueraria root, Bupleurum, Selfheal, vinegar, Raw cattails, Hawthorn, Qing Xiangzi, and Licorice. It has the effect of invigorating qi and nourishing Yin, activating blood and clearing collaterals. Camptothecin Injection can act directly in the patient's nervous system, promote the recovery of ocular neurological activity, and at the same time relieve the blood supply of ocular tissues to gradually restore the patient's vision.[46] The injection of camphorine can work directly on the patient's nervous system to promote the recovery of the active function of the eye nerves, while relieving the blood supply to the eye tissues and gradually restoring the patient's vision. Acupuncture point injection embodies the characteristic therapy of Chinese medicine and further accelerates drug absorption. Zhang Shizhong[47] Zhang Shizhong et al. found that in the non-proliferative stage of DR (deficiency of qi and yin, and stasis in the collaterals), the combination of glycyrrhizin and camptothecin acupoint injection (adjacent to the superficial temporal artery of the affected eye) effectively improved the visual acuity, fundus haemorrhage, and the count of retinal microangiomas of the patient, which was related to the avoidance of platelet aggregation and the improvement of vasorelaxation function.

4. Diabetic foot

Diabetic foot complications belong to the categories of "gangrene" and "sores" in Chinese medicine, which refer to the distal neuropathy and/or vascular lesions of the lower limbs of diabetic patients with varying degrees of severity, and are usually associated with foot infections, ulcers, or destruction of tissues.[48,49] The prevalence of diabetic foot ulcers in China. The prevalence of diabetic foot ulcers in China is 4.1%, and the amputation rate is 2.14%, which is the main cause of death and disability. In order to alleviate the socio-economic burden and reduce the amputation and morbidity/death rates, there are more and more researches on the treatment of DF by traditional Chinese medicine (TCM)[50,51] , and the combined treatment protocols are dominated by the qi deficiency and blood stasis type of DF.

Table 1: The mechanism and results of Yiqi Huoxue formula combined with acupuncture and moxibustion in the treatment of diabetes complications

| Name of complication | Type of certificate (e.g. medical certificate) | Programme | Mechanism of action | Result | References |
|----------------------|--|---|--|--|------------|
| DN | Blood stasis due to deficiency of qi and yin | Wenshen Buqi Huoxue prescription + Moxibustion | Body immunity ↑, insulin secretion ↑, improvement of glomerular filtration barrier and renal microcirculation | HbA1c, UAER, 24hUAE, Meridian Energy Index ↓ | [21] |
| | Spleen and kidney qi deficiency, dampness and stagnation | Yishen Huoxue Xiezhuo prescription + Lu's moxibustion | can reduce the level of inflammatory cytokine expression and improve the inflammatory response in vivo. | FBG, 2hPG, HbA1c and inflammatory cytokines (MCP-1, TGF-β1, TNF-α) ↓ | [24] |
| | Deficiency of the spleen and kidney yang | Jianpi Gushen decoction + Warm Acupuncture | Improvement of type IV collagen and connective tissue growth factor, renal function, and retardation of fibrosis progression | TCM evidence points, Alb, Scr, BUN ↓ | [25] |
| | Deficiency of qi and yin, blood stasis and blockage of collaterals | Yiqi Yangyin Huoxue formula + Acupuncture | Reduces inflammatory response and protects kidney function | Total TCM symptom score, eGFR and 24hUAE ↓ | [26] |
| DGP | Obstruction of the channels by phlegm and stasis (TCM) | Jianpi Yiqi Tongluo formula + Acupuncture Point Injection | Reduction of inflammation, oxidative stress and tubular endothelial cell damage in patients, improvement of endothelial cell-related factor levels and nerve conduction velocity | AGEs, HMGB1 ↓ | [33] |
| | Condensation of cold and deficiency of yang (TCM) | Danggui Guizhi Zhuyang Decoction + Acupuncture | Enhancement of common peroneal nerve and median nerve conduction velocity | TCM Evidence Score, TCSS ↓ | [36] |
| | Deficiency of qi and yin, paralysis of the channels (TCM) | Diqi tongbi decoction + Abdominal Acupuncture | Lowering and maintaining blood glucose levels | Improved TCM evidence score, tactile sensation, CPT, FBG | [37] |
| DR | Deficiency of both qi and yin | Jiawei Buyang Huanwu decoction + acupoint injection | Relaxation of vascular smooth muscle relaxes and constricts blood vessels | Improved ET-1, NO levels, FBG, 2hPG ↓ | [41] |
| | Deficiency of both qi and yin | Yeshi Fuming decoction + Acupuncture | Improvement of retinal ganglion cells, disorders of glucose metabolism and promotion of retinal endothelial cell apoptosis | Serum calcium and magnesium ion levels ↑, s ICAM-1 and CTGF ↓, retinal fundus arteriosus haemodynamics and other indices improve | [45] |
| | Deficiency of qi and yin, and stasis in the channels (TCM) | Tangwangling Acupuncture Point Injections | Avoids platelet aggregation and improves vasodilation | Improvements in patient visual acuity, fundus haemorrhage and retinal microangioma counts | [47] |
| DF | Yang deficiency, internal cold, blood stasis | Yiqi Wenyang Huoxue decoction + Acupuncture + Electromagnetic Waves | Promote blood circulation in the foot, reduce swelling and pain, resist the formation of local ulcers and promote the repair of damaged tissues. | Overall effective rate 91.1%, skin colour improved | [52] |
| | Qi deficiency and blood stasis (TCM) | Buyang Huanwu decoction + Acupuncture | Improves coagulation and reduces inflammatory response | Foot trauma condition, TCM symptom score improvement | [53] |

Note: Up: ↑; Down: ↓; Joint: +

Clinical Effect of Yiqi Wenyang Huoxue decoction is composed of Astragalus, Cassia twig,

Angelica sinensis, Red peony root, Chuanxiong, Salvia miltiorrhiza, Shengdi, Sichuan Achyranthes, Dilong, White rigidopsis, Soodi, Ephedra and Licorice. The whole formula plays the work of warming Yang dispersing cold, supplementing Qi and promoting blood circulation and removing blood stasis. Zhang Shiyong[52] et al. used the above plus and minus combination of acupuncture on the affected side of Shenshu, Geshu, Yinlingquan, Sanyinjiao, Taixi, Zusanli, Jiexi, Chongyang, Neiting, Kunlun, and the skin near the lesion, as well as electromagnetic wave therapy, which can jointly play a role in promoting the circulation of blood in the foot, reducing swelling and pain, lowering blood glucose, resisting the formation of lesion ulcers, and promoting the repair of damaged tissues, thereby achieving the goal of improving and curing the diabetic foot. The aim is to improve and cure the diabetic foot.

Buyang Huanwu decoction is from "Reform and Error of the Medical Forest", and consists of Astragalus, Angelica sinensis, Chuanxiong, Peach kernel, Safflower, Dilong, and Red peony. Liang Zunxiao[53] et al. added chicken blood vine, cow's knee, Angelica dahurica, dandelion and combined acupuncture (Qihai and bilateral Sanyinjiao, Xuehai, Yanglingquan, Xuangzhong, Taixi and Zusanli acupoints) to treat DF of the qi deficiency and blood stasis type, the patients' foot trauma condition and Chinese medicine symptom scores were lower than those of the conventional Western medicine treatment group, and the mechanism was related to the improvement of the coagulation function and the alleviation of inflammatory reactions.

5. Summary and Outlook

Benefiting qi and activating blood formula combined with acupuncture therapy gives full play to the advantages of Chinese medicine in treating diabetic complications and reflects the diversity and effectiveness of Chinese medicine in treating the disease. Chinese medicine treatment of diabetic complications mainly focuses on benefiting qi, activating blood circulation and opening up the channels, and microvascular lesions and DF are always carried through this treatment principle. Acupuncture and moxibustion are based on acupoints, with significant therapeutic effects and easy acceptance by patients, and the acupoints are mainly Zusanli, Shenshu, etc. which is similar to the principle of prescription of qi activation and blood activation, reflecting the theory of Chinese medicine that "prolonged illnesses have more deficiencies and more blood stasis". According to the actual situation of diabetic patients, it is appropriate to combine qi and blood-boosting prescriptions with acupuncture therapy in the prevention and treatment of diabetic complications to improve the clinical therapeutic effect, delay the occurrence of complications, and further expand the advantages of Chinese medicine in treating diabetic complications. However, there are many shortcomings in the current treatment programme: ① Identification and typing methods, expert consensus failed to unify the views of the lack of standardised diagnostic and treatment standards; ② There are many complications of diabetes mellitus, but the combination of acupuncture and moxibustion with qi and blood type formulas used for DM complications are relatively few clinical and experimental studies, and should also be increased for the combined treatment of diabetic osteoporosis, diabetic pruritis, diabetes mellitus, depression, and other complications research; ③ The research and development level of new drugs is not high, and at present, Chinese medicine mainly plays an auxiliary role in the treatment of diabetic complications, and it is hoped that Chinese medicine will further enhance the therapeutic role in the space, and look for more new drugs and acupuncture therapies; ④ There are fewer clinical or experimental samples of data used for the research and they are mainly dominated by the domestic ones, and there are fewer records of the foreign journals, and the conclusions may be with certain limitations, such as whether there are effects in the populations of different regions, ethnic groups, and environments, or not. The conclusions may have some limitations, such as for different regions, different races, different environments, whether the effect

of the population also need to be further in-depth study. It is believed that in future research, Chinese medicine will give full play to the disciplinary advantages and characteristics of "holistic regulation" and "individualised diagnosis and treatment", and be better used in the diagnosis and treatment of diabetic complications and other diseases.

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