

Unique Traditional Chinese Medicine Therapy for Painful Diabetic Peripheral Neuropathy

Jinjin Chai¹, Defen Wang^{2*}

¹Shaanxi University of Chinese Medicine, Xianyang 712046, Shaanxi Province, China;

²Department of Endocrinology, Xi'an Hospital of Traditional Chinese Medicine, Xi'an 710021, Shaanxi Province, China

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Abstract: Painful diabetic peripheral neuropathy is one of the common chronic complications of diabetes. "Pain" is the most typical symptom in patients, which seriously affects their quality of life. Traditional Chinese medicine (TCM) treatment of the disease includes oral administration of Chinese medicine, TCM fumigation and acupuncture, etc., which can significantly reduce the pain of patients and reduce the frequency of disease. Chinese decoctions regulate the imbalance of yin and yang in the human body through syndrome differentiation, so as to achieve the balance of yin and yang, which will then eliminate the disease. Chinese medicine fumigation make the medicine seep into the body from the skin to exert the medical effects, and nourish and dredge the meridians. There is no pain if the meridians are smooth flowing, there will be pain if the meridians are blocked, fumigation can be used alone or assisted by other treatment methods to enhance the efficacy. The characteristics of acupuncture are rapid pain-relief, economic and convenient, and can quickly relieve pain for patients with low tolerance.

Keywords: Painful Diabetic Peripheral Neuropathy; Traditional Chinese Medicine; Treatment Characteristics

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***Corresponding author:** Defen Wang, wangdefen69@sohu.com

1 Introduction

Painful diabetic peripheral neuropathy (PDPN) is one of the common complications of diabetic peripheral neuropathy. With the increase in the incidence of diabetes, investigations have shown that the incidence of this complication can be as high as 10% to 26%^[1]. Modern studies^[2] have shown that high blood sugar damages Schwann cells in the human body and degenerates glial-axons, which ultimately leads to pain. Western medicine treatment drugs include: tricyclics and other antidepressants, anticonvulsants, opioids and non-opioid analgesics^[3]. These drugs were found to have poor patient compliance during clinical use, and have more drug resistance and side-effects after long-term use. Seeking safer and more effective treatments has become the concern of PDPN patients. With the continuous development and progress of traditional Chinese medicine (TCM), it has attracted more attention. Whether TCM can effectively treat PDPN has become a hot topic of discussion.

TCM believes that the disease belongs to the category of "emaciation-thirst and numbness diseases (xiaoke bibing)". Chronic diabetes illness does not heal, deficiency of both qi and yin, blood cannot fill the veins, susceptible to exogenous evils, leading to disharmony between the ying (camp) and the wei (guard), the blood flow is not smooth and leads to pain. This pathogenesis is the same as the pathogenesis of blood numbness discussed in the "Jingui Yaolue • Xulao Bing" (Synopsis of the

Golden Chamber • Chronic Fatigue Diseases). Under the guidance of basic theories, TCM distinguishes the yin-yang imbalance of qi and blood, and uses TCM decoctions, TCM fumigation, acupuncture and other therapies to reduce pain, improve symptoms, and reduce the frequency of disease. A large number of clinical evidences have proved that TCM is effective in treating PDPN. Doctors should grasp the opportunity and devise the best treatment plan according to the patient's conditions and needs.

2 Oral Chinese Medicine

With syndrome differentiation under the guidance of the theory of TCM, TCM decoction is the most commonly used clinical treatment method, combining the unique experience of physicians to regulate the imbalance of qi and blood, and achieve the treatment of both symptoms and root causes.

2.1 Treatment Characteristics

First, prioritizing the "whole". TCM follows the holistic concept when treating PDPN and adjusts yin and yang, which not only relieves pain, but also regulates the physique susceptible to the disease. It is mentioned in the Neijing that "when yin calms and yang is solid, the spirit is cured". TCM believes that the cause of PNPD is the yin-yang imbalance of qi and blood, followed by the generation of pathological products. To treat the disease, it is not only necessary to improve the symptoms of the patients, but to treat the symptoms if it is urgent, while also to seek the root cause(s) of the disease through the syndrome differentiation of the six channels or the organs, and to treat the cause if it's chronic.

Second, unique ingenuity. The characteristic of TCM is that it can treat the same disease with different treatment methods. Based on many years of clinical experience, physicians can "observe the pulse of the syndrome, know what is wrong, and treat it according to the syndrome." Professor Wu Shentao^[4] on the characteristics of medicines used in syndrome differentiation and treatment: Chuanwu and Caowu should be used heavily for cold arthralgia; large doses of rehmannia glutinosa for yin deficiency arthralgia; insects such as earthworm and leech are used for stubborn arthritis.

2.2 Clinical Efficacy

Chinese decoction medicine is flexible in

modification. The physicians' combination of syndrome differentiation and experience is unique among other therapies, and the scope of application is throughout the whole course of the disease. Li Mei^[5] selected 60 patients with PDPN, with the control group given oral mecobalamin tablets to improve neurotrophics and the treatment group was given Yiqi Jianpi Lishui decoction on the basis of the control group treatment. The results showed that the treatment group had reduced vascular endothelium damage, and sped-up nerve conduction which relieved pain.

3 TCM Fumigation

TCM fumigation is the easiest viable treatment method; it also plays a good auxiliary role.

3.1 Treatment Characteristics

First, painless and non-invasive. TCM fumigation is painless, non-invasive, and has high patient compliance. Fumigation is a special external treatment method of TCM. The Chinese medicine is decocted and then fumigated to make the active ingredients in the medicine enter the body from the skin and exert their effects.

Second, no side effects. TCM fumigation can reduce the pain and side-effects of oral drugs for patients. As a method of external application, TCM fumigation does not undergo gastrointestinal, liver and kidney metabolism. By stimulating the patient's nerves, blood circulation is improved.

3.2 Clinical Efficacy

TCM fumigation is simple to handle for patients and has better continuity. It can also be used as an adjuvant therapy or used alone to consolidate prevention or remission. Applicable to: patients with adverse reactions caused by the use of drugs; patients with poor efficacy in long-term use of drugs; patients who refuse to take Chinese and Western medicines; patients who are resistant to acupuncture. In these cases, it is more appropriate to choose traditional Chinese medicine fumigation treatment. Zhang Ying^[6] selected 64 patients with painful diabetic neuropathy, the control group received conventional treatment, and the treatment group was treated with additional TCM foot bath for replenishing qi, activating blood, stopping numbness and pain relief on the basis of conventional treatment and nursing.

The results showed that: The TCM foot bath therapy can significantly improve the clinical efficacy on painful diabetic neuropathy.

4 Acupuncture Therapy

As the quintessence of TCM, acupuncture has a long history and established development. It has unique advantages in the treatment of many diseases. Many physicians believe that PNPB belongs to the category of collateral disease (luobing). The term "collateral disease" first appeared in "Suwen•Miu Ci Lun". Pain is the most common symptom, and acupuncture is the conventional treatment for this type of disease.

4.1 Treatment Characteristics

First, safe and non-toxic. Acupuncture is a non-drug treatment, which reduces the damage to the body by drugs, and has good patient compliance. It is currently the most widely applicable type of TCM treatment.

Second, economical and sterile. The earliest prototype of acupuncture and moxibustion was Bianstone, and has now developed into silver needles and stainless steel needles. Currently, most clinical needles are disposable stainless steel needles, which avoid cross-infection, and the cost is more economical than oral medicine.

4.2 Clinical Efficiency

Acupuncture has a faster effect on pain, and is the first choice for patients with recurrent attacks and severe pain. It is suitable for patients with acute pain of the disease; those who find Chinese decoction hard to swallow, those who refuse to take Chinese medicine; those who suffer from serious illness and whose liver and kidney function cannot metabolize drugs. Chi Yanru^[7] compared the psychological counseling group, the drug group, and the acupuncture group and found that the treatment effect of PNPB patients in the acupuncture group was the most significant. 95% of the patients had markedly reduced pathological conditions and the progress of the disease was curbed.

5 Combination Therapy

In addition to the above three therapies, other therapies include: Chinese medicine smearing, electroacupuncture, moxibustion and suction-cupping, traditional Chinese medicine application, and traditional exercises, etc. These methods have the characteristics of traditional Chinese medicine,

and the combined clinical application of multiple therapies will not only enhance the efficacy, but also complement each other. He Peiwen^[8] proved through clinical trials that electroacupuncture combined plus infrared radiation combined with Huangqi Guizhi Wuwu Decoction can relieve pain and improve nerve conduction function in the treatment of PNPB.

6 Conclusion

In conclusion, TCM does not adhere to a fixed model for the treatment of PNPB, and must not be generalized. The treatment should be based on syndrome differentiation, and the combination of body differentiation, disease differentiation and syndrome differentiation should be achieved to realize the individualization of TCM treatment schemes. In clinical practice, doctors choose one or more therapies according to the characteristics of the treatment method, the scope of application, and the patient's conditions to let Chinese medicine fully exert its effects, so that the patient's pain can be relieved as soon as possible with half the effort.

Although the advantages of TCM in the treatment of the disease are prominent and the efficacy is widely praised, it lacks evidence-based clinical evidences compared with Western medicine. Further evidence-based medical research is needed to provide a more scientific basis for TCM treatment of the disease.

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