

Advantages of Traditional Chinese Medicine Treatment for Postherpetic Neuralgia

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Abstract: In recent years, the incidence of postherpetic neuralgia (PHN) has gradually become younger, and the incidence rate is increasing year by year. This article starts from the etiology and mechanism of PHN in Chinese medicine, briefly describes the treatment methods of western medicine, focuses on analyzing the progress of Chinese medicine in the treatment of PHN in recent years, and finds that postherpetic neuralgia is mainly related to residual toxins that are not yet cleared, liver and qi stagnation, qi and blood deficiency, and yin and collaterals obstruction, and discusses in detail the advantages of Chinese medicine in the treatment of PHN.

Keywords: Postherpetic neuralgia, Traditional Chinese medicine.

1. Western Medicine's Understanding of Postherpetic Neuralgia

The "Chinese expert diagnosis and treatment consensus on postherpetic neuralgia" clearly points out that postherpetic neuralgia (PHN) is pain that lasts for 1 month or more after the rash has healed [1]. This kind of pain is generally discussed in four clinical types: 1) the onset of the skin for continuous stimulation of the pins and needles or burning sensation 2) the performance of the intervals of cut or electric shock-like pain and chicken cut pain 3) fine touch and pain is unusually strong 4) there is a lesion local ants and numbness and other skin abnormalities such as sensation [2]. Postherpetic neuralgia occurs in middle-aged and elderly people, and its incidence is closely related to age, as well as to the degree, location, severity, duration, gender and mental status of the patient during the attack.

2. Current Status of Western Medicine Treatment of Postherpetic Neuralgia

2.1 Western Medical Treatment Measures

For this disease, the first consideration of Western medicine is sedation and pain relief, such as oral antiepileptic drugs for pain: carbamazepine, pregabalin, gabapentin, etc. If it is a milder posterior neuralgia, oral nutritional nerve drugs such as vitamin B1, methylcobalamin tablets in order to promote their own repair; if it is intractable, it is necessary to cooperate with the adjuvant treatment of antidepressant drugs such as amitriptyline, venlafaxine, etc. [3]. If the pain is intolerable and the effect of oral medication alone is not good, a combination of oral medication, local drug injection and semiconductor laser therapy is often used. Currently, western medical treatments for postherpetic neuralgia include: oral neurotrophic, antiviral, and analgesic medications, localized treatments, non-invasive physiotherapy, and neurodestructive therapy [4].

2.2 Disadvantages of Western Medical Treatment

Western medicine treatment of postherpetic neuralgia is mostly based on medication to relieve pain and other treatments, with limited efficacy and a high recurrence rate. (1) Oral nutritive, antiviral and analgesic medications: Tricyclic antidepressants achieve therapeutic effect by closing sodium channels and inhibiting α -adrenergic receptors while increasing the suppression of spinal neurons related to nociceptive sensation, and decreasing 5-hydroxytryptophan and reducing the reuptake of norepinephrine. Its side effects are confusion, urinary retention and cardiac arrhythmia; antiepileptic drug classes such as carbamazepine and pregabalin can cause damage to liver and kidney function [5]. (2) local treatment: such as fentanyl transdermal patch need to be prescribed toxic anesthesia card, 3 months to change a new card; lidocaine gel local topical application is effective for some patients, topical capsaicin ointment herpes subsides 3 months later can be used, some patients are effective, it can be seen that the local patch treatment audience is small in scope, incomplete, and the effect of the use of the effect can not be determined; local injections of anesthetic drugs to block anesthesia are mostly applicable to the elderly patients, Early herpes zoster or patients who are not willing to intervene in the treatment; the treatment cycle is longer, usually several months, and the maintenance time is shorter, mostly adapted to the early stage of postherpetic neuralgia, and there is a limitation of postherpetic neuralgia area [6]. (3) Non-invasive physical therapy: such as semiconductor laser, transcutaneous electrical stimulation, etc., need to be hospitalized for a long period of time and the cost is high. (4) Neurodestructive treatment: spinal cord electrical stimulation system implantation with rod or sheet electrodes is suitable for intractable herpes zoster postherpetic neuralgia; implantation of central target-controlled analgesic infusion system implanted in the spinal canal catheter with motorized drug storage pumps; use of morphine for analgesia; all of them need to carry out pre-tested treatment; expensive; need to change the medication every half a year; can not be done with nuclear magnetic examination [7]. Because it is an emerging treatment, there is a lack of sufficient clinical research data to prove its safety. Therefore, it is necessary to seek new treatment methods.

3. The Traditional Chinese Medicine's Understanding of Postherpetic Neuralgia

Chinese medicine called herpes zoster as snake string sores, "the source of all diseases on the theory of sores and diseases of all symptoms" first mentioned the disease, and said, "cauldron with sores, wrapped around the waist. This is also the wind and dampness beat blood gas born, the shape of a cauldron belt, because of the name. It is also said that if this sore is wrapped around the waist, it will kill people. [8]" The disease can be named differently according to the different parts of its onset, such as seen in the thoracic and hypochondriac parts can be called wrapped around the waist fire Dan, can also be called spider sores, because of its onset of lesions are mostly distributed in the form of band-like blisters, but also called fire band sores, spider sores, snake Dan. And the resultant neuralgia is very common in the clinic, the motherland medicine generally will PHN called "snake Dan healing pain", the symptoms are generally for the onset of the site of herpes collapse or dissipation, the region appeared in the purplish pigmentation, and the pain is presented as pins and needles or burning-like continuous, progressive aggravation, the scope of the fixed or diffuse.

4. Etiology of Postherpetic Neuralgia

[10] Since the disease is usually distributed along one side of the peripheral nerves, and this part of the liver meridian has a lot of qi and little blood, Chinese medicine believes that the etiology of the disease is the weakness of the spleen qi, dampness and heat, the lack of qi and blood, and the meridians and channels are blocked due to prolonged untreated disease, deficiency of the positive and the evil, depression, and dietary disorders, etc., which is what we daily refer to as "no communication is pain. Combined with the age of onset and characteristics of postherpetic neuralgia, its evidence is mainly for this deficiency and solid, so the relevant pathomechanisms are discussed from the following perspectives.

4.1 Remaining Toxins are Not Cleared, and Dampness and Heat Remain Stagnant

After timely treatment of shingles, the surface of the rash recedes, but the heat and toxicity still remain in the body, the dampness and heat is not exhausted and stagnation of the meridians, meridian obstruction, so the pain is more than [11].

4.2 Liver-Qi Stagnation, Qi Stagnation and Blood Stasis

Old and weak people, the yin and blood itself is not enough, the liver lost blood support, so the liver's excretory function is obviously reduced, the liver yin is not enough, resulting in the liver yang hyperactivity. Dampness and heat stagnation in the liver meridian can be removed after treatment, but liver qi stagnation is difficult to cure [12]. Liver depression and stagnation of qi, qi and blood stagnation, not through the pain.

4.3 Qi Deficiency and Blood Stasis, Mixed Deficiency and Reality

Old and weak people, their own positive qi is insufficient, it is difficult to glorify the five viscera and six bowels, so the five

viscera are gradually weakened. At the beginning of herpes, most of the treatment is given to clear away heat and detoxify the toxin, promote dampness and eliminate blood stasis, without taking into account the patient's own deficiency, and attacking and attacking too much, which makes the positive qi even more deficient. Qi is difficult to transport blood, blood stagnation, stasis in the network, not through the pain.

4.4 Depletion of Fluids, Yin Deficiency and Complex Obstruction

Herpes zoster is commonly due to the onset of dampness and heat, and dampness is sticky, and heat is easy to transform the fire to injure the yin, so the yin and fluid is greatly injured, the yin and blood deficiency is the most common type of its. Or in the course of treatment with bitter cold dry dampness drugs in excess, hijacking injury to the yin fluid, so that the meridian lost its nourishment, "does not glorify the pain" [13]. Blood stasis is aggravated by a deficiency of Yin and Blood, which makes it difficult to help the Qi and Blood to run, and the lack of Yin and Blood makes it difficult for the meridians to be nourished and the veins to be blocked, thus further aggravating the symptoms of stasis [14].

Postherpetic neuralgia once the onset of the disease, the general course of the disease is long, the disease is intense, the patient is often self-conscious of the pain, pain is unbearable, so most patients have a poor appetite, poor food, the essence of the water and grains are not enough to take in, it is difficult to maintain qi and blood biochemistry, and this further exacerbate the degree of qi and blood weakness, the long term vicious circle, the pain symptoms are not effectively relieved, resulting in the condition of the disease recurring difficult to cure [15].

5. Traditional Chinese Medicine for Postherpetic Neuralgia

Chinese medicine emphasizes on evidence-based treatment, according to different etiology and pathogenesis, different symptoms are listed, and then analyzed according to the specific conditions of the person, the time and the place [16]. Therefore, in this paper, we will discuss the treatment of this disease from the aspects of acupuncture and traditional Chinese medicine formulas, combined with the etiology and pathogenesis mentioned in the previous article [17].

5.1 Acupuncture Treatment

Zeng Fei [18] For the clinical study of postherpetic neuralgia, the study group was treated with acupuncture and moxibustion, with subcutaneous circumferential stabbing around the pain site, with rapid small-angle lifting and insertion twisting, leaving the needle for 1 hour, once a day, and a course of treatment for 21 days. The control group took anti-inflammatory pain tablets orally after meals, intramuscular injection of vitamin B1. 50 patients in each of the study group and control group, the cure rate of 94% in the study group was significantly higher than that of 80% in the control group, and there were no adverse reactions in the two groups. LiuFanCong [19] for herpes zoster postherpetic neuralgia clinical research, the research group main point foot SanLi, choose the complementary method, the rest of the

supporting points according to the lesion location, choose the lift insertion laxative method, at the same time in the affected area of the circumferential stab, oblique 15 ~ 45 ° into the needle, in order to get the gas for the best, can be in the center of the lesion is slightly shallow stabbing 1 to 3 needles; the control group to take vitamin B, E and anti-inflammatory pain three times a day, the duration of the treatment course are 31 days. The total effective rate of the research group was 95%, and the recurrence rate was 7.5% after the patients were cured, while the total effective rate of the control group was 80%, and the recurrence rate of the patients was 25%, which was better than the control group in terms of both therapeutic efficacy and recurrence rate. In conclusion, the clinical efficacy of millipede acupuncture therapy is satisfactory[20].

5.2 Traditional Chinese Medicine Internal and External Treatments

The Chinese herbal medicine internal treatment of postherpetic neuralgia is generally based on the principle of "clearing the channels and stopping the pain" as a general rule, and the dialectic of the condition is matched with other rules of the treatment of the real diarrhea and false supplementation, and the symptoms of the root of the disease are solidified at the same time[21]. Numerous medical doctors have examined the cause of the disease in clinical practice, and have used a large amount of clinical data to support the effectiveness of the prescription therapy [22].

5.2.1 Clearing heat and removing toxins, inducing dampness and relieving pain

Jiao Laiwen [23] believes that "Xianfang Lifesaving Drink" has significant efficacy in the treatment of posterior neuralgia caused by damp-heat residual toxins and congestion, so it was used as a basic formula for addition and subtraction and clinical trials were carried out. In the formula of the study group, frankincense, myrrh, Chenpi, red peony, angelica root activates blood, regulates qi and relieves pain; honeysuckle clears heat and removes toxins; dahuric dahurica root and antifungal root expel heat and toxins from the body; saponaria root and andrographis paniculata root clear the meridians and relieves pain; neem seed, yanhuisuo root and danshen root move qi and remove stasis to clear the menstruation; and licorice root benefits qi and alleviates urgency and harmonizes the drugs. Take one dose daily with water. The whole formula focuses on clearing heat and removing toxins, supplemented with qi and pain-relieving drugs to enhance the therapeutic effect. In the same period, the control group was given the western medical treatment of nutritive nerve and analgesic, and the total effective rate of the research group was much higher than that of the control group after 30 days of treatment.

5.2.2 Dredging the liver and regulating qi, dispelling blood stasis and relieving pain

Jiang Zhaoyou [24] believes that postherpetic neuralgia is mostly due to the liver and gallbladder stagnation and heat caused by emotions, and most of the dialectics is qi stagnation and blood stasis, which is treated by dredging the liver and regulating the qi and eliminating the stasis of blood to relieve pain. In the past ten years, 64 patients have been cured with

the addition and subtraction of Hematopoietic and Blood Stasis Soup and Four Substances Soup, and the total effective rate of this formula is as high as more than 97%. In the formula, peach kernel and safflower break blood stasis and relieve pain; Rhizoma Ligustici Chuanxiong and Paeoniae Lactiflorae move Qi and blood; Knee draws blood downward to clear blood stasis; Chai Hu, Platycodon Grandiflorus and Citrus aurantium detoxify the liver and relieve stagnation and regulate qi; Angelica Sinensis and Radix Rehmanniae Praeparata clear heat and nourish Yin. The whole formula plays the role of dredging the liver and regulating Qi, eliminating blood stasis and relieving pain.

5.2.3 Nourishing deficiency and draining solidity, and treating qi and blood together

Zhang Hongya et al. [25] believe that this disease occurs in the middle-aged and elderly people, the patient is old and weak, unable to resist the evil, so the clinical situation is often seen in the positive deficiency of blood stasis and dampness. Treatment of qi and blood circulation to relieve pain as the standard, to replenish qi, spleen and collaterals as the basis, the standard and the root of the disease are treated together. Therefore, in the treatment, this disease follows the principle of "stopping pain", with the treatment of promoting qi and activating blood circulation, dredging the liver and relieving depression, strengthening the spleen and dispelling dampness, etc. The Four Gentlemen Soup in the "Taiping Huimin Hejian Bureaucrat Formula" is chosen, with the addition and subtraction of Jin Zhongzi San: Yan Huosuo, Chuan Neem, Chuanxiong, Mulberry Branches promote qi circulation; Coix Seed, Atractylodes Macrocephala dispels dampness; Codonopsis Pseudoginseng, Danshen promote qi circulation; Yujin relieves depression; Zhi Gan Cao harmonizes and helps the spleen to move and strengthen. The whole formula is equal to tonifying and cathartic, and the qi and blood are treated together, so the spleen is restored, and the positive qi of oneself is enriched, and the evil retreats and comes out.

5.2.4 Nourishing Yin and clearing the channels, tonifying deficiency and controlling dryness

Chang Zhiling [26] believes that the pathogenesis of posterior neuralgia is closely related to yin deficiency and blood dryness, so the clinical trial used Consistent Decoction combined with Six-flavored Digoxigenin Pill as the main formula, combined with the specific symptoms for addition and subtraction. Clinical studies have shown that the total effective rate can reach 85%. In the formula, Di Huang, Cornu Cervi Pantotrichum, Yam nourishes the liver and kidney; Angelica sinensis, Ophiopogon, Radix et Rhizoma Ginseng, Fructus Lycii nourishes Yin and nourishes Blood; Neem, Poria, Dampy, Zedoary regulate Qi and activate Blood; and Boswellia serrata, Myrrh soothes the tendons and collaterals and relieves pain. The whole formula nourishes Yin and opens the channels, nourishes deficiency and controls dryness, softening the meridians and relieving pain.

According to the analysis of the etiology and pathogenesis of postherpetic neuralgia in the previous article, this article believes that in the treatment of PHN, in addition to the aspects mentioned above, it should also strengthen the conditioning of the patient's heart and spirit. The heart hosts

the blood and veins and hides the god, the heart and the god are not nourished, it is difficult to nourish the positive qi, the qi is weak and the blood transportation is impeded, the blood does not run smoothly and stagnates in the channels, the stagnation for a long time will be depressed, the depression is heavier and the disease is heavier, and the pain attacks are more unbearable, which seriously affects the patients' quality of life. Therefore, treatment should focus on tranquilizing the spirit and nourishing the heart, and improving the sleep condition will be more conducive to the treatment and prognosis of the disease.

6. Conclusion

Combined with clinical research, Chinese medicine treatment of postherpetic neuralgia is simple and easy to implement, with outstanding clinical results and better prognosis [27], which is mainly manifested in the following ways:

1) Chinese medicine treats from the root. That is to say, by fully and effectively targeting the cause and mechanism of the patient's illness, thus helping the patient to enhance his own positive energy and drive out the evil spirits, so that the disease can be cured.

2) Treatment is varied. Western medical treatment is based on blocking the nerves and slowing down the pain sensation. Chinese medicine can choose a single or multiple combined treatments according to the severity of the patient's condition, tailored to the individual, evidence-based treatment [28].

3) The therapeutic effect is remarkable. According to some studies, Chinese medicine treatment of postherpetic neuralgia has a higher overall effective rate than Western medicine, and a lower recurrence rate after cure. The degree of individualization of Western medicine therapy is slightly lower, and some of the side effects of treatment and drugs are higher, and it is very easy to recur after healing.

Chinese medicine has obvious advantages over Western medicine in the treatment of postherpetic neuralgia [29], but according to the existing practical observation, the treatment of this disease by Chinese medicine is still in the stage of experience-guided clinic, and there is less scientific clinical trial research data. Therefore, we should continue to explore more characteristic and operable therapies on the basis of inheriting its excellent treatments and empirical formulas, and obtain guaranteed experimental data through scientific clinical research, so that the classical theories can be more closely combined with the clinic and the theory of TCM treatment of postherpetic neuralgia can be more perfected.

References

- [1] Expert group for the preparation of a consensus on the diagnosis and treatment of postherpetic neuralgia [J]. Chinese expert consensus on the diagnosis and treatment of postherpetic neuralgia [J]. Chinese Journal of Pain Medicine, 2016, 22(3):161-167.
- [2] Expert panel for the preparation of an expert consensus on the management of herpes zoster-associated pain throughout the course of herpes zoster. Expert consensus on the management of herpes zoster-associated pain [J]. Chinese Journal of Dermatology, 2021, 54(10):841-846.
- [3] QIU Tao, ZHONG Chao, JI Bing, LUO Rui, LAN Hua, ZHANG Huamei. Observation on the effect of local anesthesia of acupuncture compounded with local anesthesia for dorsal root ganglion destruction in postherpetic neuralgia [J]. Shanxi Traditional Chinese Medicine, 2022, 38(04):36-37+42.
- [4] WANG Qin, SONG Jianmin, LI Yan, LIU Shaozheng, et al. Study on analgesic effect and mechanism of pulsed radiofrequency thoracic dorsal root ganglion combined with medication in treating elderly patients with severe postherpetic neuralgia [J]. Practical Geriatrics, 2022, 36(03):261-264.
- [5] HUANG Ting, LI Jing. Effects of ultrasound-guided transversus abdominis plane block on pain, inflammatory factors and sleep quality in patients with postherpetic neuralgia of the abdominal wall [J]. Health Care Medicine Research and Practice, 2022, 19(03):19-23.
- [6] TAN Hui-Ying, YANG Qiao-Hong, LI Yao-Xia. Progress of pain care research in patients with postherpetic neuralgia [J]. Shanghai Nursing, 2022, 22(03):66-69.
- [7] ZHU Jian, LIAN Yajun. Clinical effect of pulsed radiofrequency stimulation combined with pregabalin in the treatment of postherpetic trigeminal neuralgia [J]. Clinical Medicine Research and Practice, 2022, 7(08):36-39.
- [8] Wang Yunlu. Notes on the reading of the "Source and Candidates of Various Diseases" [J]. Journal of Ancient Books Organization and Research, 1995(Z1):41-44. Wang Yuxi et al. Treatment experience of postherpetic neuralgia [J]. New Traditional Chinese Medicine, 2004, 36(12):34-35.
- [9] A collection of clinical experiences of Zhao Bingnan [M]. People's Health Publishing House, edited by Beijing Hospital of Traditional Chinese Medicine, 2006: 40-45.
- [10] Cui H, Zhang JJ. Treatment of 34 cases of postherpetic neuralgia with liver-sparing and pain-relieving soup [J]. Jilin Chinese Medicine, 2011, 31(02):153+172.
- [11] ZHAO Huijuan, SHI Xiaoxiao, WANG Lijuan. Observation on the efficacy of peribulbar stabbing combined with self-proposed nourishing and analgesic formula for anti-herpetic postherpetic neuralgia [J]. Contemporary Medicine, 2022, 28(07):1-4.
- [12] LI Junxiong, SHI Jiajun, FANG Ruxue, LIU Guizhen. Research progress of Chinese medicine in the treatment of postherpetic neuralgia [J]. Hunan Journal of Traditional Chinese Medicine, 2020, 36(01):154-156.
- [13] Liu Xiaohui. Effect of acupuncture combined with conventional western medicine in treating patients with herpes zoster [J]. Zhongguo Nankang Med, 2022, 34(01):95-97.
- [14] LISS, ZHOU Ping, HU Fengming. Research progress of stabbing and cupping for postherpetic neuralgia [J]. Primary Medical Forum, 2021, 25(27):3951-3952.
- [15] WANG Huan, SHEN Shuxian, YAN Zhangren. Clinical observation on the treatment of postherpetic neuralgia with Chinese medicine hot amphorae [J]. China Traditional Chinese Medicine Modern Distance Education, 2021, 19(16):105-107.

- [16] Zeng Fei. Clinical effect analysis of Chinese acupuncture for postherpetic neuralgia [J]. World Digest of Latest Medical Information, 2016, 16(05):134.
- [17] Liu Fancong. Analysis of the effect of traditional Chinese medicine acupuncture in the treatment of postherpetic neuralgia [J]. Electronic Journal of Cardiovascular Disease of Integrative Chinese and Western Medicine, 2018, 6(34):159+161.
- [18] SHI Yucai. Electroacupuncture treatment of postherpetic neuralgia in 31 cases [J]. Acupuncture and Moxibustion Clinical Journal, 2007(05):27-28.
- [19] Zhao Ruiqin. Treatment of herpes zoster postherpetic neuralgia in 60 cases with triple-pronged needle blood-stabbing therapy [J]. Shaanxi Traditional Chinese Medicine, 2011, 32(05):595-597.
- [20] Liu Daping. Clinical observation on 68 cases of herpes zoster postherpetic neuralgia treated with fire needle [J]. Zhongguancang Medicine, 2011, 23(03):351+355.
- [21] WEI Ling, LI Lei, GAO Shan, LIANG Xueling, YAO Aina, ZHANG Jie. Treatment of postherpetic neuralgia with buried thread therapy in 50 cases [J]. Shanxi Traditional Chinese Medicine, 2011, 27(08):34+39.
- [22] ZHANG Yun, LAN Yuying. Overview of research on external therapeutic treatment of postherpetic neuralgia [J]. Hunan Journal of Traditional Chinese Medicine, 2021, 37(05):190-192.
- [23] Jiao Laiwen. Treatment of postherpetic neuralgia by Xianfang Lifelong Drink [J]. Chinese Journal of Dermatology, 1994(05):310.
- [24] Jiang Zhaoyou. Treatment of 64 cases of postherpetic neuralgia with the addition and subtraction of hemifluidum and blood stasis soup [J]. Guangming Traditional Chinese Medicine, 2011, 26(06):1154.
- [25] ZHUO Yue, WANG Jianfeng, ZHANG Hongya. Experience of Zhang Hongya's Chinese medicine in treating postherpetic neuralgia [J]. Clinical Journal of Traditional Chinese Medicine, 2019, 31(10):1832-1834.
- [26] Chang Zhiling. Report on 40 cases of postherpetic neuralgia treated by adding flavor to consistent decoction [J]. Journal of Guiyang College of Traditional Chinese Medicine, 2007(05):33-34.
- [27] DEI Jun, HU Jiayuan, YANG Dingquan. Progress of Chinese medicine treatment for postherpetic neuralgia [J]. World Journal of Integrative Medicine, 2016, 11(07):1034-1036.
- [28] Zhao D. Clinical analysis of Chinese medicine treatment of postherpetic neuralgia [J]. Primary Medical Forum, 2020, 24(13):1886-1887.
- [29] SUN Yiming, LI Guiping. Research progress of acupuncture therapy for postherpetic neuralgia in the last 10 years [J]. Inner Mongolia Traditional Chinese Medicine, 2020, 39(02):158-161.