

## A Nursing Case Report of a Patient with Herpes Zoster: Postprint

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### Abstract

**Objective:** To investigate the effect of adopting external traditional Chinese medicine therapies on the clinical efficacy of herpes zoster with neuralgia.

**Methods:** For one case of herpes zoster with neuralgia, treatments such as Chinese herbal compress and infrared irradiation were applied to improve the clinical efficacy of the patient's herpes zoster with neuralgia symptoms.

**Results:** By adopting external traditional Chinese medicine treatment methods, this case of herpes zoster with neuralgia showed substantial resolution of the herpes zoster rash and significant alleviation of neuralgia.

**Conclusion:** Chinese herbal compress and other treatments for herpes zoster with neuralgia demonstrate obvious efficacy and no side effects, representing a key adjunct to conventional treatment for symptom relief.

### Full Text

## A Nursing Case Report of a Patient with Herpes Zoster

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### Abstract

**Objective:** To investigate the clinical efficacy of external Chinese medicine therapy on herpes zoster complicated by neuralgia. **Methods:** We present a single case of herpes zoster with neuralgia treated with herbal compress therapy and infrared irradiation to improve clinical symptoms. **Results:** Through the application of external Chinese medicine methods, the patient's herpes zoster rash essentially resolved and neural pain was substantially alleviated. **Conclusion:** Herbal compress therapy for herpes zoster with neuralgia demonstrates

significant therapeutic effects without side effects and serves as a key adjunct to conventional treatment for symptom relief.

**Keywords:** Herpes zoster, neuralgia, herbal compress therapy, infrared irradiation

Herpes zoster is an acute mucocutaneous infectious disease caused by the varicella-zoster virus. Clinically, it is characterized by the sudden onset of densely clustered vesicles distributed in a unilateral, band-like pattern along nerve pathways, with prominent pain and extremely low recurrence rates after healing. Elderly patients often suffer from underlying diseases and have poor physical constitution with significantly compromised immune function. Once infected with the varicella-zoster virus, they are highly susceptible to developing the disease with severe clinical manifestations and intense pain, often complicated by various complications that make treatment relatively difficult and seriously impair quality of life [1]. External Chinese medicine therapy represents a characteristic treatment modality for herpes zoster. This article summarizes the nursing measures for one patient with herpes zoster, reported as follows.

### Patient Information

**General Data:** The patient, a 91-year-old female named Wang, was admitted on February 17, 2023, with a chief complaint of “pain in the left chest, back, and upper arm for half a month, worsening for one week.” Western medicine diagnosis: Herpes zoster. Traditional Chinese medicine (TCM) diagnosis: Serpentine sores (Shechuan Chuang), Liver Meridian damp-heat syndrome.

The patient experienced pain and discomfort in the left chest, back, and upper arm without obvious precipitating factors half a month prior, which she ignored. One week before admission, a rash appeared in the painful area with intensified pain, prompting her to visit our outpatient clinic, where she was diagnosed with “herpes zoster.” At admission, she presented with a rash on the left chest, back, and upper arm accompanied by pain, no dry mouth or bitter taste, normal appetite and sleep, dry stools approximately every two days, and normal urination. She denied any history of allergies.

**Physical Examination:** Extensive erythema was observed on the left chest, back, and upper arm, with clustered papulovesicular rashes and vesicles ranging from millet to mung bean size on the erythematous base, some coalescing into purulent lesions without obvious exudate. The rash exhibited a unilateral, band-like distribution. The tongue was red with a white coating, and the pulse was wiry and slippery.

### Assessment and Nursing Diagnoses

**Pain Assessment:** We evaluated pain characteristics, quality, severity, medication usage, and control status. Pain assessment typically employs the Visual

Analogue Scale (VAS) or Numerical Rating Scale (NRS), which represent patients' subjective evaluation of pain and are closely related to their educational level, expressive ability, and comprehension of the assessment method [2].

**Psychological Status:** We assessed for tension, anxiety, depression, and sleep quality. Patients experiencing prolonged pain suffer from progressively worsening pain intensity with disease duration, which severely impacts sleep quality and overall quality of life [3].

#### **Nursing Diagnoses and Interventions:**

**Pain:** Related to disease-induced neuralgia. Nursing interventions included administering analgesics as prescribed, maximizing psychological analgesia effects, maintaining a quiet patient room, and minimizing unnecessary stimuli.

**Constipation:** Related to dry stools. Nursing interventions involved guiding the patient toward a reasonable diet with increased water intake, avoiding spicy and irritating foods, establishing regular bowel habits, engaging in appropriate activity, and maintaining emotional stability.

**Risk of Infection:** Related to low immunity. Nursing interventions included strengthening nutrition to enhance resistance, promptly changing dressings for any local ulceration, protecting the wound surface from infection, and using prophylactic antibiotics as prescribed.

**Risk of Impaired Skin Integrity:** Related to skin lesions from herpes zoster. Nursing interventions involved strengthening skin care in the affected area, avoiding friction on the herpes lesions, and applying red light irradiation to scabbed areas.

#### **Expected Goals and Nursing Interventions**

**Expected Goals:** Based on the patient's condition, the expected outcomes were for vesicles to dry and crust over within approximately one week, leaving temporary faint erythema or hyperpigmentation, with pain significantly relieved or completely resolved.

**Dietary Care:** The patient was advised to consume a light, easily digestible, nutritious diet rich in vitamins and protein, primarily consisting of soft, non-irritating foods such as porridge, noodles, milk, eggs, fish, soy products, fresh vegetables, fruits, and soups. She was instructed to avoid spicy, irritating, and heat-inducing foods such as fried eggs, deep-fried spare ribs, and chili peppers, as well as "trigger" foods like goose meat and alcohol [4].

**Psychological Nursing:** We implemented a holistic responsibility-based nursing system where the primary nurse established a strong nurse-patient relationship built on mutual trust to help distract the patient. Psychological nursing serves as an adjunctive therapeutic service that helps patients manage negative emotions during treatment, gains their trust, and promotes active cooperation with treatment and nursing care through attention diversion and successful

case examples. This approach integrates the patient's personality traits, educational background, and family circumstances to implement targeted psychological counseling, effectively reducing stress responses from the disease [5].

### Treatment Approaches

**Western Medicine:** Conventional treatment included intravenous acyclovir sodium chloride injection 250ml once daily, oral acyclovir 2 tablets three times daily for antiviral therapy, and oral mecobalamin 1 tablet three times daily for nerve nutrition.

**Oral Chinese Herbal Medicine:** According to TCM theory, this disease results from emotional injury leading to liver qi stagnation that transforms into fire, causing excessive liver meridian fire, or from spleen dysfunction failing to transport dampness, which transforms into heat. The interplay of dampness and heat eventually causes qi stagnation and blood stasis that blocks the meridians. The liver meridian heat stagnation pattern is most common clinically, with treatment focusing on clearing heat, eliminating dampness, and activating blood to relieve pain as the fundamental principle [6]. We prescribed a self-formulated modified formula to clear heat and resolve toxins, comprising: Licorice 10g, Corydalis 15g, toasted Chuanlianzi 9g, Scutellaria 10g, vinegar-processed Bupleurum 10g, vinegar-processed Cyperus 10g, Plantago seed 15g, Sichuan Achyranthes 15g, Phellodendron 12g, coix seed 30g, toasted Atractylodes 10g, and Oldenlandia 15g.

**External Chinese Therapy:** The patient received daily local herbal compress therapy. This modality delivers medication through the skin via local microcirculation into systemic circulation to promote qi and blood flow, regulate yin-yang, and achieve therapeutic effects [7]. Specific procedures: (1) Preparation: The external formula granules were mixed with hot water to form a paste (using modified Shixiao San formula containing Portulaca 60g, Phellodendron 40g, Sophora flavescens 30g, Plantago 15g, Honeysuckle 20g, and Oldenlandia 15g). (2) The patient was assisted into a comfortable position. (3) The prepared herbal paste was evenly applied to the herpes area with a disposable tongue depressor, covered with gauze, and then irradiated locally with infrared light for 20 minutes. During the procedure, gentle technique was used to avoid touching painful areas. Infrared irradiation therapy is based on thermal effects that promote cellular molecular activity, generating local heat to dilate blood vessels, accumulate pain factors, and rapidly absorb and dissipate metabolic waste and inflammatory substances, thereby promoting local vesicle absorption and reducing exudation. The thermal effect of infrared light also reduces nerve ending excitability, restores nerve function, provides analgesic, sedative, and anti-inflammatory effects, improves circulation, supports local nutrition, enhances cellular phagocytic function, promotes tissue regeneration, repairs damaged nerves, accelerates scab formation, and facilitates wound healing [8]. (4) Frequency: Once daily, adjustable based on patient condition. (5) The modified Shixiao San formula cools blood, activates blood, disperses

stasis, unblocks collaterals, and moves qi to relieve pain, combined with local infrared irradiation for 20 minutes to promote local cellular metabolism, increase aerobic respiration, activate enzyme functions, regulate immune mechanisms, and balance systemic immune function.

### **Treatment Outcomes and Continuity of Care**

Five days after treatment initiation, ward rounds revealed reduced erythema in the herpes area, essentially dried vesicles about to detach, decreased pain, disappearance of local burning sensation, and no nocturnal exacerbation. The patient's sleep had improved. After one week of hospitalization, pain had significantly improved, and she was discharged as per medical orders. Follow-up revealed no pain recurrence and essentially complete detachment of herpes crusts, with instructions for regular re-examination.

**Continuity of Care:** Although this patient currently shows no postherpetic neuralgia, prevention remains crucial. The incidence of postherpetic neuralgia increases with age and causes severe pain that significantly impacts quality of life. Conventional treatments including narcotic analgesics, antidepressants, and nerve block therapy provide poor pain relief, have substantial adverse effects, and are prone to recurrence after discontinuation, resulting in poor patient compliance. Integrated Chinese and Western medicine treating both root and branch is a safe and effective approach with promising clinical application prospects [9]. Prevention can employ different methods based on patient conditions, with TCM primarily using blood-activating, stasis-dispelling, and qi-moving pain-relieving methods combined with acupuncture, cupping, and moxibustion, while local block and nerve blockade are also options. Physical and topical therapies have fewer side effects and are safer treatment modalities.

Herpes zoster is an infectious disease caused by varicella-zoster virus reactivation, with most patients seeking treatment for unbearable neuralgia. The most common complication is postherpetic neuralgia, which can persist for months to years, complicating disease management and severely affecting daily life [10]. Inadequate or ineffective treatment may increase risks of sequelae such as neuralgia, skin infection, and ear involvement, potentially becoming life-threatening in severe cases.

TCM pattern differentiation for herpes zoster identifies three types: (1) Liver Meridian heat stagnation, (2) Spleen deficiency with dampness retention, and (3) Qi stagnation and blood stasis [11]. This patient with herpes zoster and neuralgia belonged to type (1). In addition to conventional antiviral drugs, treatment based on pattern differentiation with a self-formulated oral herbal formula achieved more significant effects. Herbal compress therapy has been well-applied in herpes zoster treatment with good therapeutic outcomes. However, during herbal compress treatment, precautions must be taken to prevent burns and allergic reactions. If burns occur, immediate irrigation with normal saline and application of heat-clearing and toxin-resolving herbs is required.

If allergic reactions develop, medication should be stopped promptly and anti-allergic treatment administered [12].

As stated in *Li Yue Pian Wen*: “The principles of internal treatment are also the principles of external treatment; the medicinals for external treatment are the same as those for internal treatment.” Wu Shiji’s external treatment theory continues to play an important guiding role in clinical external therapy today. Therefore, on the basis of conventional internal antiviral and nerve-nourishing medications, Dr. Dai Hongyu also emphasized the application of herbal compress external therapy in herpes zoster treatment. Topical medication acts directly on the lesion site, allowing medicinal power to penetrate directly to the disease location while avoiding metabolism and consumption by the viscera. Modern research suggests that the therapeutic mechanism of topical herbal application may involve adjusting neuro-endocrine-immune network disorders through three pathways: “micro-action, micro-stimulation, and micro-absorption,” thereby achieving therapeutic goals [13].

This nursing case demonstrates that herbal compress combined with red light irradiation produces significant clinical curative effects on herpes zoster rash and neuralgia, markedly reducing pain duration and increasing patient comfort. This procedure is simple, easy to learn, non-invasive, and has no adverse reactions, making it emotionally acceptable to patients with good compliance. It embodies the TCM characteristics of being “simple, convenient, economical, and effective.” Integrated Chinese-Western medicine treatment of herpes zoster results in faster crust formation, stronger analgesic effects, shorter disease course, and fewer toxic side effects compared to Western medicine alone, warranting clinical promotion and application [14].

In summary, characteristic external therapies of TCM for herpes zoster differ from the non-specific antiviral and anti-inflammatory approaches of Western medicine. By simultaneously attacking pathogenic factors and supporting, as well as mobilizing and stimulating the body’s own righteous qi to expel pathogens, TCM demonstrates unique advantages over Western medicine. This approach not only relieves patients’ physical and mental suffering but also treats both root and branch, adjusts visceral function, and reduces the incidence of postherpetic neuralgia [15]. Therefore, integrated Chinese-Western medicine and combined internal-external TCM treatment yield superior outcomes.

**Conflict of Interest Statement:** The authors declare no conflict of interest in this article.

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