Acupuncture Combined with Traditional Chinese Medicine Nursing for Postherpetic Neuralgia: A Postprint

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Abstract

Objective To investigate the application effects of acupuncture therapy combined with traditional Chinese medicine nursing in patients with postherpetic neuralgia (PHN). Methods 124 PHN patients were randomly divided into an observation group and a control group, with 62 cases in each group. The control group received conventional nursing and acupuncture treatment, while the observation group received traditional Chinese medicine nursing in addition to the control group' s interventions. Pain symptoms, comprehensive therapeutic efficacy, anxiety status, and sleep quality were observed before and after intervention in both groups. Results After 1 week and 2 weeks of intervention, the Visual Analogue Scale (VAS) scores for pain decreased in both groups, and the scores in the observation group were lower than those in the control group, with statistically significant differences ($P<0.05$). The total effective rate of comprehensive therapeutic efficacy in the observation group (95.16%) was higher than that in the control group (79.03%), with a statistically significant difference ($P<0.05$). After intervention, the Self-Rating Anxiety Scale (SAS) and Pittsburgh Sleep Quality Index (PSQI) scores decreased in both groups, and the scores in the observation group were lower than those in the control group, with statistically significant differences ($P<0.05$). Conclusion Acupuncture therapy combined with traditional Chinese medicine nursing helps to continuously and effectively alleviate pain, relieve anxiety symptoms, and improve sleep in PHN patients.

Full Text

Application of Acupuncture Therapy Combined with Traditional Chinese Medicine Nursing for Patients with Postherpetic Neuralgia

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Abstract

Objective: To explore the application effect of acupuncture combined with Traditional Chinese Medicine (TCM) nursing for patients with postherpetic neuralgia (PHN).

Methods: A total of PHN patients were randomly divided into an observation group and a control group, with cases in each group. The control group received conventional treatment, acupuncture therapy, and conventional nursing care, while the observation group received acupuncture therapy combined with TCM nursing on the basis of conventional treatment. Pain symptoms, comprehensive therapeutic efficacy, anxiety status, and sleep quality were observed and compared between the two groups before and after intervention.

Results: After weeks of intervention, the Visual Analogue Scale (VAS) scores for pain decreased in both groups, with the observation group' s scores significantly lower than those of the control group (P<). The total effective rate in the observation group (%) was higher than that in the control group (%), with a statistically significant difference (P<). After intervention, both groups showed decreased scores on the Self-Rating Anxiety Scale (SAS) and Pittsburgh Sleep Quality Index (PSQI), with the observation group' s scores significantly lower than the control group' s (P<).

Conclusion: Acupuncture combined with TCM nursing can effectively and sustainably relieve pain, alleviate anxiety symptoms, and improve sleep quality in PHN patients.

Keywords: postherpetic neuralgia; acupuncture; Traditional Chinese Medicine nursing; pain; anxiety; sleep disorder

Introduction

Herpes zoster is a common dermatological condition caused by varicella-zoster virus infection, characterized by clustered vesicles and erythema distributed along unilateral peripheral nerves, accompanied by a series of complications.

Postherpetic neuralgia (PHN) is one of the most common complications of herpes zoster, occurring in approximately % of patients, particularly among the elderly. PHN manifests as persistent spontaneous deep pain or burning pain, paroxysmal tearing or cutting pain, paresthesia, or allodynia in the original skin lesion area after herpes healing, with a minority of patients experiencing pruritus. This condition significantly impacts patients' physical and mental health, causing insomnia, anxiety, and other symptoms. The pathogenesis of PHN remains unclear, and current clinical treatments—including medication, nerve block, physical therapy, and surgical approaches—vary in efficacy and often provide insufficient sustained relief while carrying adverse effects and economic burdens.

Acupuncture therapy has demonstrated effectiveness in relieving pain and anxiety in PHN patients while reducing recurrence rates and adverse reactions. Common treatment protocols include fire needling and acupuncture combined with medication. However, research on nursing protocols for PHN patients remains scarce domestically and internationally, with daily implementation primarily comprising psychological care, medication guidance, and basic nursing measures. This study investigates the application effect of acupuncture combined with TCM nursing in PHN patients.

Methods

Study Design and Participants

This study enrolled PHN patients admitted to Shanghai Municipal Hospital of Traditional Chinese Medicine between month and month. All patients met the diagnostic criteria for PHN, with a clear history of herpes zoster, pain persisting for more than month after lesion healing, pain distribution conforming to neuroanatomical characteristics, and continuous or recurrent itching, burning, needle-like, cutting, electric shock-like, or pulsating pain. Patients exhibited symptoms such as hyperesthesia and hyperalgesia in affected skin areas, including formication and tightness sensations, which impacted their quality of life, sleep quality, and emotional status. Inclusion criteria comprised: understanding of research content and provision of informed consent. Exclusion criteria included: psychiatric illness, malignant tumors, important organ dysfunction or disease preventing cooperation, and other skin diseases.

A total of patients were randomly divided into an observation group and a control group, with cases in each group. The control group consisted of males and females, with a mean age of () years and mean disease course of () months. The observation group comprised males and females, with a mean age of () years and mean disease course of () months. There were no statistically significant differences between the two groups in terms of gender, age, disease course, or other general characteristics (P>).

Interventions

Control Group: Received conventional treatment and nursing care. Conventional treatment included symptomatic care for nerve nutrition and resistance enhancement, with oral pregabalin capsules mg once nightly; cobamamide tablets times daily; and intravenous infusion of % sodium chloride injection mL + neurotropin injection IU. Acupuncture treatment involved ordinary needling, elongated needling, and micro-needling based on patient syndrome differentiation, with common acupoint selection including Mingmen (DU4), Yaoshu (DU2), Yaoyangguan (DU3), bilateral Hegu (LI4), Taichong (LR3), Quchi (LI11), Zusanli (ST36), Dachangshu (BL25), Xuanzhong (GB39), and Sanyinjiao (SP6). Conventional nursing included psychological care, medication guidance, and basic nursing measures.

Observation Group: Implemented TCM nursing protocols based on the control group' s interventions, utilizing TCM syndrome differentiation and constitution theory to develop nursing plans.

Syndrome Differentiation and Nursing: Syndrome differentiation forms the primary basis of TCM nursing. The "four diagnostic methods" (inspection, auscultation and olfaction, inquiry, and palpation) were employed to analyze disease characteristics in PHN patients. Materials obtained through the four diagnostics were comprehensively analyzed using etiological differentiation and eight-principle differentiation to identify disease causes and stages. Nursing measures were then formulated based on these differentiations.

Dietary Nursing: Diet constitutes an essential condition for human survival and health maintenance. Patients were educated on the importance of diet, through which the body absorbs nutrients to generate essence, qi, blood, and body fluids necessary for normal life activities. TCM theory holds that foods possess cold, hot, warm, and cool properties, as well as pungent, sweet, sour, bitter, and salty flavors, while diseases exhibit cold-heat and deficiency-excess patterns and yin-yang characteristics. Food properties should correspond to disease attributes to promote recovery. Based on patients' etiology and pathogenesis, research team members developed individualized dietary plans, instructing patients to eat regularly and moderately with reasonable food combinations. Dietary plans were formulated according to TCM syndrome types: patients with liver channel stagnation and heat should avoid spicy, stimulating, meaty, and greasy foods, focusing on clearing heat and purging fire; those with spleen deficiency and dampness accumulation should avoid raw, cold, and greasy foods, favoring heat-clearing, spleen-strengthening, and dampness-resolving foods such as lentils, winter melon, and coix seed green bean soup; patients with qi stagnation and blood stasis should consume more qi-moving and collateral-dredging foods like loofah soup, tangerine peel, radish, and citrus.

Emotional Nursing: Nursing care focused on patients' mental status to eliminate fear, anxiety, tension, and other negative emotions. First, reasonable patient requests were accommodated to help maintain a comfortable mood. Sec-

ond, different nursing measures were adopted according to individual differences in constitution, personality, and age. For example, "Taiyin constitution" individuals prone to depression received more counseling to achieve emotional comfort, while "Taiyang constitution" individuals with explosive emotions received emotional soothing. The TCM method of "treating excessive emotions with their overcoming emotions" was employed, explaining the "seven emotions causing disease" theory in health guidance to promote optimism and peace of mind.

Exercise Encouragement: Based on TCM fundamental theory, patients were guided to learn Baduanjin (Eight-section Brocade). Baduanjin comprises eight movements: (1) Hands Holding Heaven to Regulate the Triple Burner; (2) Drawing the Bow to Shoot the Eagle; (3) Regulating the Spleen and Stomach by Raising One Hand; (4) Looking Backwards to Cure the Five Exhaustions and Seven Injuries; (5) Shaking the Head and Waving the Tail to Remove Heart Fire; (6) Hands Grasping Feet to Strengthen Kidneys and Waist; (7) Clenching Fists and Glaring to Increase Strength; and (8) Seven Bounces on Toes to Cure All Diseases.

Outcome Measures

Pain Assessment: Pain was assessed using the Visual Analogue Scale (VAS) before intervention and after weeks of intervention. The VAS scores range from (no pain) to (severe pain), with higher scores indicating more severe pain.

Therapeutic Efficacy: After weeks of intervention, the comprehensive therapeutic efficacy was compared between groups based on VAS scores, categorized into four levels: cured (VAS score after treatment), markedly effective (VAS decrease $>$ points), effective (VAS decrease of - points), and ineffective (VAS decrease $<$ points). Total effective rate = (cured + markedly effective + effective cases)/total cases $\times$ %.

Anxiety Assessment: Anxiety was evaluated using the Self-Rating Anxiety Scale (SAS) before and after weeks of intervention. The SAS uses a 4-point rating scale with items, of which are negatively worded and positively worded. The standard score is the integer portion of the total raw score multiplied by . A standard score $\geq$ indicates anxiety, with higher scores representing more severe anxiety.

Sleep Quality Assessment: Sleep quality was compared between groups before and after weeks of intervention using the Pittsburgh Sleep Quality Index (PSQI). The PSQI is the most commonly used sleep disorder assessment scale in clinical practice, applicable to most sleep disorder patients, psychiatric patients, and general population sleep quality assessment. It consists of self-rated items and other items, with the final self-rated item and other items not participating in scoring and used only for reference. The total score ranges from to , with PSQI $>$ indicating sleep disturbance; higher scores represent worse sleep quality, while lower scores indicate better sleep quality.

Statistical Analysis

SPSS software was used for statistical analysis. Measurement data were expressed as mean ± standard deviation (x ± s) and compared between groups using t-tests. Count data were expressed as rates (%) and compared using ^{2} tests. The test level was $\alpha =$, with P < considered statistically significant.

Results

Comparison of Pain Severity Between Groups

Before intervention, there was no statistically significant difference in VAS scores between the two groups (P >). After weeks of intervention, VAS scores decreased in both groups, with the observation group' s scores significantly lower than those of the control group at the same time point (P <) .

Comparison of Comprehensive Therapeutic Efficacy Between Groups

After weeks of intervention, the observation group achieved cured cases with a total effective rate of %, while the control group had cured cases with a total effective rate of %. The observation group' s total effective rate was significantly higher than that of the control group (P <).

Comparison of Anxiety and Sleep Quality Between Groups

Before intervention, there were no statistically significant differences in SAS and PSQI scores between the two groups (P >). After intervention, both groups showed decreased SAS and PSQI scores, with the observation group' s scores significantly lower than those of the control group (P <) .

Discussion

PHN is the most common complication of herpes zoster and represents a complex neuropathic pain condition, occurring in % of patients over years old and severely impacting quality of life. In TCM, PHN belongs to the category of "snake 串疮" (she chuan chuang), with treatment principles focusing on supplementing qi, activating blood, and unblocking collaterals to relieve pain. Acupuncture achieves these goals by dredging meridians, regulating deficiency and excess, and harmonizing qi and blood. Recent research has demonstrated that acupuncture can promote neurotransmitter release, increase pain thresholds, improve peripheral microcirculation, and help restore tissue function, thereby stimulating immune function.

Currently, nursing protocols for PHN patients receiving conventional medication and acupuncture have not been standardized, making the selection of appropri-

ate nursing approaches to enhance therapeutic effects an important clinical challenge. This study investigated the application effect of TCM nursing protocols in PHN patients. Results showed that after weeks and weeks of intervention, the observation group's VAS scores were lower than those of the control group at the same time points, indicating that acupuncture combined with TCM nursing can continuously and effectively relieve patient pain. Furthermore, the observation group' s total effective rate was higher than the control group' s, with superior improvements in negative emotions and sleep quality, demonstrating that acupuncture combined with TCM nursing can effectively enhance therapeutic outcomes, alleviate anxiety symptoms, and improve patient sleep.

TCM nursing is guided by "syndrome differentiation and nursing,"with principles of following natural laws, cultivating temperament and spirit, physical exercise, dietary regulation, and preserving healthy qi. Nursing methods include regulating emotions, careful daily living, adapting to cold and warmth, and harmonizing the five flavors. TCM nursing employs the four diagnostic methods—inspection, auscultation and olfaction, inquiry, and palpation—to understand diseases, differentiate syndromes based on these results, clarify disease location, nature, and etiology, and formulate nursing measures accordingly. This comprehensive analytical process constitutes "syndrome differentiation." As an important component of the TCM system, TCM nursing has formed a complete differentiation system including eight-principle differentiation, zang-fu differentiation, etiological differentiation, six-channel differentiation, and triple burner differentiation through long-term clinical practice. Research has shown that using TCM four diagnostics to collect patient histories enables more comprehensive data collection, and TCM syndrome differentiation analysis can promptly identify existing and potential nursing problems. Therefore, TCM nursing develops individualized nursing plans based on patients' etiology and constitution. This study employed TCM nursing syndrome differentiation to clarify the etiology and development stage of PHN, thereby identifying nursing problems aligned with individual health needs and implementing different nursing measures accordingly.

TCM nursing integrates pre-Qin Daoist, Confucian, and eclectic health preservation thoughts, advocating the "three prevention concepts" of "preventing disease before onset, preventing changes after disease onset, and preventing recurrence after recovery." Since its formation, TCM nursing has emphasized life health care and disease prevention. TCM dietary nursing, emotional nursing, and exercise nursing belong to TCM health preservation science and are significant for promoting patient recovery and preventing disease recurrence.

First, TCM dietary nursing has a long history, based on the concept that medicine and food share the same origin, and that diet can provide protective care. The *Jin Gui Yao Lue* states: "The taste of food may be suitable or harmful to the body; if suitable, it nourishes the body; if harmful, it causes disease." TCM dietary guidance selects foods with different properties according to patients' constitution and disease to achieve the goals of "nourishing

deficiency," "purging excess," "warming cold," and "cooling heat." This study adjusted patients' diets based on TCM syndrome differentiation, not only paying attention to food combination and diversity from a nutritional perspective but also emphasizing dietary contraindications to enhance medication and treatment effects.

Second, TCM nursing emphasizes human mental activities and emotional changes. TCM theory holds that mental-emotional states relate to health, with different emotional changes causing different diseases, forming the "seven emotions causing disease" theory. The *Nei Jing* records: "Anger harms the liver," "Joy harms the heart," "Worry harms the lung," "Pensiveness harms the spleen," and "Fear harms the kidney," developing targeted emotion-regulation methods based on human-centered, constitution-based, and age-based differences. Research has shown that liver qi stagnation, emotional internal injury, and excessive diet can induce PHN. Additionally, the relationship between pain and anxiety is complex and mutually causal. Therefore, emotional nursing that guides patients to express emotions and achieve emotional smoothness not only reduces anxiety but also helps relieve pain. This study' s TCM nursing protocol employed emotional nursing to improve patients' pain and anxiety symptoms.

Finally, TCM holds that moderate exercise aids recovery. The Northern Song philosopher Zhou Dunyi proposed: "Movement generates yang, stillness generates yin." Traditional TCM exercise health preservation methods are diverse and numerous, with functions of dredging interstitial spaces, activating blood and resolving stasis, and regulating yin-yang, including qigong, Wuqinxi, Taijiquan, and Baduanjin. Baduanjin is easy to learn and practice, gentle and continuous, combining movement and stillness. This study guided patients to practice Baduanjin to help improve resistance and promote recovery.

This study had a short observation period without long-term follow-up. Future research will expand the sample size, conduct long-term follow-up for years on patients receiving different nursing interventions, and attempt to apply TCM dietary therapy and health rehabilitation knowledge to post-discharge continuing care, thereby exploring a complete TCM nursing pathway including admission, hospitalization, and post-discharge phases.

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

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Note: Figure translations are in progress. See original paper for figures.