

Post-Print of a Nursing Case Report: Wrist-Ankle Acupuncture Combined with Acupoint Application for Patients with Palpitations and Anxiety State

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Abstract

This case study selected a patient with a Traditional Chinese Medicine (TCM) diagnosis of palpitations (qi-yin deficiency pattern) accompanied by an anxiety state, a psychosomatic comorbidity termed “double-heart disease” in TCM. Based on literature review and TCM clinical nursing experience, wrist-ankle acupuncture combined with acupoint plaster therapy was identified as appropriate for such patients. Following the “dual-heart simultaneous regulation” theory, herbal acupoint plaster therapy was administered to improve palpitations, chest tightness, and insomnia, while wrist-ankle acupuncture was applied to alleviate anxiety and related discomfort. Following TCM nursing assessment, the patient’s clinical TCM diagnosis was confirmed as qi-yin deficiency pattern palpitations. The patient received a 12-day nursing intervention of combined wrist-ankle acupuncture and acupoint plaster therapy. Following the intervention, the patient reported subjective relief from palpitations and chest tightness, with the self-perceived frequency of palpitations within 24 hours decreasing from 16 episodes to 6 episodes. The Self-Rating Anxiety Scale score decreased from 62.5 to 45, and the Pittsburgh Sleep Quality Index decreased from 19 to 12, effectively improving the patient’s symptoms of palpitations, chest tightness, insomnia, and anxiety.

Full Text

A Nursing Case of Wrist-Ankle Acupuncture Combined with Acupoint Application for Palpitation with Anxiety State

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Abstract

This nursing case report presents a patient diagnosed with palpitation (deficiency of both qi and yin type) accompanied by anxiety state, a condition termed “bicardial disease” in traditional Chinese medicine (TCM). Based on literature review and clinical nursing experience, wrist-ankle acupuncture combined with acupoint application was identified as an appropriate intervention for such patients. Following the principle of “dual-heart synchronous regulation,” herbal acupoint application was employed to alleviate palpitation, chest tightness, and insomnia, while wrist-ankle acupuncture therapy was used to improve anxiety and other discomfort symptoms. Through TCM nursing assessment, the patient was clinically diagnosed with palpitation of deficiency of both qi and yin type. The patient received days of nursing care combining wrist-ankle acupuncture with acupoint application. Following the intervention, the patient reported relief from palpitation and chest tightness symptoms, with the number of self-perceived palpitations in hours decreasing from times, Self-Rating Anxiety Scale (SAS) score decreasing from points, and Pittsburgh Sleep Quality Index improving from points. The intervention effectively ameliorated the patient’s uncomfortable symptoms of palpitation, chest tightness, insomnia, and anxiety.

Keywords: Palpitation; Anxiety state; Wrist-ankle acupuncture; Acupoint application

Introduction

Palpitation, as a TCM diagnosis, refers to a condition characterized by a patient’s subjective sensation of heart throbbing, fright, and restlessness that cannot be controlled. Clinical diagnosis of anxiety can be divided into “state” and “disorder.” Although “anxiety state” does not meet diagnostic criteria for a disorder, it affects patients’ lives and social functioning because they cannot self-regulate or improve symptoms, thus requiring medical management []. In TCM theory, the heart governs blood and vessels. When heart qi is deficient, qi and blood lack propulsive force, cardiac pulsation loses regulation, and blood vessels cannot be nourished, resulting in palpitation and chest tightness []. Modern individuals experiencing high life stress, irregular schedules, staying up late, and excessive contemplation further damage yin blood, leading to heart yin deficiency and hyperactive heart yang, which manifests as irritability and anxiety []. Simultaneously, the heart governs the spirit and mind, and restlessness of heart spirit can also produce anxiety []. Thus, both palpitation and anxiety state involve the “heart.” Research indicates that the incidence of palpitation in anxiety patients reaches as high as []. Conversely, persistent palpitation can also induce anxiety and other negative emotions []. In summary, palpitation accompanied by anxiety state requires “dual-heart synchronous regulation.”

Based on the advantages of TCM nursing techniques—namely simple operation and minimal side effects—effective TCM nursing methods should be actively

explored to assist clinical treatment and promote early patient recovery. Wrist-ankle acupuncture therapy, supported by TCM meridian theory and modern medical neural reflex principles, can activate defensive qi, unblock meridians, and regulate autonomic nervous system balance, demonstrating excellent intervention effects for neuropsychiatric diseases. Acupoint application embodies the characteristic of TCM external treatment for internal diseases. Under the guidance of TCM meridian and acupoint syndrome differentiation and treatment theory, stimulating acupoints allows medicinal substances to directly penetrate through pores and interstitial spaces into subcutaneous tissue and the body, accelerating therapeutic effects. Therefore, this nursing case combined two TCM nursing techniques to intervene in a patient with palpitation and anxiety state, employing wrist-ankle acupuncture to regulate neurological symptoms while utilizing the transdermal absorption advantage of acupoint application to improve cardiovascular symptoms.

1. Case Information

The patient was a -year-old female who presented with “paroxysmal palpitation with chest tightness for half a year” and was admitted to our hospital for integrated Chinese and Western medicine treatment. The symptoms had worsened over the past week.

Present Illness: Six months prior, the patient developed paroxysmal palpitations without apparent cause, accompanied by chest tightness, sweating on the chest and back that significantly worsened with activity, lasting minutes each episode. Over the past week, these symptoms had intensified.

Past Medical History: Generally healthy with no history of infectious diseases or chronic conditions. Vaccination history was complete. No surgical, trauma, or blood transfusion history. No known drug or food allergies.

Vital Signs: T: ; P: times/min; R: ; BP: mmHg.

Physical Examination: General condition (development, nutrition, facial appearance, complexion, mental status, posture, voice, etc.), skin, lymph nodes, head and organs, neck, chest, lungs, heart, blood vessels, and abdomen were all normal.

Laboratory Tests: Small dense low-density lipoprotein (sdLDL-C) mmol/L; triglycerides mmol/L; low-density lipoprotein mmol/L; prothrombin time (PT) seconds; PT% activity . Carotid ultrasound showed no abnormalities.

Diagnosis: - **TCM Diagnosis:** Palpitation (deficiency of both qi and yin type) - **Western Medicine Diagnosis:** 1. Arrhythmia, sinus tachycardia; 2. Coronary atherosclerotic heart disease, stable angina; 3. Anxiety state

Treatment: Following admission, the patient received routine treatment including Trichosanthes injection and adenosine cyclophosphate intravenous infusion, oral bisoprolol fumarate, aspirin, and atorvastatin, and daily ml of herbal

decoction (see treatment plan in [Figure 1: see original paper]).

2. Nursing Care

Following admission, the patient underwent comprehensive assessment using TCM nursing evaluation methods.

2.1 Assessment

Assessment Results: The patient frequently experienced palpitation, chest tightness, dizziness, fatigue, lack of energy, reluctance to speak, pale complexion without luster, thin yellow tongue coating, and deep pulse, consistent with the pattern of palpitation due to deficiency of both qi and yin. The Self-Rating Anxiety Scale (SAS) score was points, Pittsburgh Sleep Quality Index was points, and self-perceived palpitation frequency was times per hour. (Detailed assessment items are shown in).

2.2 Nursing Diagnoses

Based on the TCM nursing assessment, the following nursing diagnoses were proposed (see):

1. **Palpitation:** Related to qi deficiency failing to move blood, yin deficiency causing poor vessel patency, blood stasis, and qi-blood stagnation.
2. **Chest Tightness:** Related to qi deficiency and blood stasis obstructing collaterals.
3. **Anxiety:** Related to qi stagnation and prolonged illness.
4. **Insomnia:** Related to yin fire ascending, heart-mind stagnation, and emotional unrest.

2.3 Interventions

A personalized nursing plan was developed combining TCM nursing techniques. TCM nursing interventions were implemented from the second day of admission (Date) until days before discharge.

For Palpitation: Related to patient's qi deficiency causing failure to move blood, yin deficiency leading to poor vessel patency, blood stasis, and qi-blood stagnation.

- Maintain a quiet room with fresh air and appropriate temperature/humidity during frequent palpitation episodes. Limit visitors. Bed rest for severe cases; light activity for mild cases.
- Observe palpitation severity, duration, heart rate, and rhythm changes, and document findings.
- Implement wrist-ankle acupuncture therapy with needle insertion points selected bilaterally at .

- Apply Ningxin paste to Danzhong (CV17), Guanyuan (CV4), Neiguan (PC6), and Xinshu (BL15) acupoints once daily for hours.

Rationale: Wrist-ankle acupuncture uses superficial subcutaneous needling. The needle points align with the Hand Shaoyin Heart Meridian and Hand Jueyin Pericardium Meridian pathways. This needling method can activate defensive qi, unblock meridians, and improve palpitation caused by insufficient defensive qi, loss of nutrient yin nourishment, and internal disturbance of deficiency fire []. The herbs in Ningxin paste (Codonopsis, Panax notoginseng, Salvia miltiorrhiza, Santalum album) have qi-regulating, blood-activating, and stasis-resolving effects that can relieve chest tightness caused by blood stasis obstructing collaterals.

For Chest Tightness: Related to qi deficiency and blood stasis obstructing collaterals.

- Ensure quiet environment with fresh air and appropriate temperature/humidity during chest tightness episodes.
- Closely observe onset time and accompanying symptoms of chest tightness. Report any changes promptly to physicians.
- Apply Ningxin paste to Danzhong, Guanyuan, Neiguan, and Xinshu acupoints once daily for hours.

Rationale: The herbs in Ningxin paste have qi-regulating and blood-activating effects that can relieve chest tightness caused by blood stasis obstructing collaterals.

For Anxiety: Related to qi stagnation and prolonged illness.

- Provide emotional care: Establish good nurse-patient relationship, communicate promptly to answer questions. Encourage positive mindset and appropriate emotional expression. Help patients find hobbies for psychological relaxation and reduce self-expectations. Encourage family support and reduce external stimuli.
- Implement wrist-ankle acupuncture therapy with needle insertion points selected bilaterally at .

Rationale: Wrist-ankle acupuncture's efficacy for mental disorders may be related to its influence on serum -hydroxytryptamine levels [].

For Insomnia: Related to yin fire ascending, heart-mind stagnation, and emotional unrest.

- Guide patients to develop good sleep habits: avoid vigorous activity and overexcitement before bedtime.
- Advise against strong tea consumption (the patient had a habit of drinking strong tea).
- Dinner should not be too heavy; avoid eating before sleep.
- Soak feet in warm water before bed and apply Evodia rutaecarpa herbal paste to Yongquan (KI1) acupoint.

Rationale: Evodia rutaecarpa applied to Yongquan acupoint can guide fire downward and treat insomnia caused by deficiency fire ascending [].

2.4 Evaluation

After days of strict implementation of the nursing plan, the patient was reassessed including hourly palpitation frequency, SAS score, Pittsburgh Sleep Quality Index, and subjective feelings post-intervention (evaluation results shown in):

- **Palpitation:** On Date, hourly palpitation frequency was times; on Date, it decreased to times with reported symptom relief.
- **Chest Tightness:** Patient reported reduced frequency and relief of chest tightness.
- **Anxiety:** SAS score decreased from points on Date to points on Date, with reported anxiety relief and more stable emotions compared to admission.
- **Insomnia:** Pittsburgh Sleep Quality Index improved from points to points, with reported improved sleep quality.

3. Results

Since admission on Date, the patient received routine nursing care plus two characteristic TCM nursing modalities: wrist-ankle acupuncture therapy and acupoint application. Before discharge, evaluation of objective indicators (hourly palpitation frequency, SAS score, Pittsburgh Sleep Quality Index) and subjective symptom reports (palpitation, chest tightness, insomnia, anxiety) showed good nursing outcomes with high patient acceptance. No adverse or unexpected events occurred during the intervention period.

4. Discussion

Palpitation and anxiety state mutually influence each other, impeding disease recovery. Since anxiety state does not reach the severity of anxiety disorder, and traditional consultation methods in general hospitals often fail to address this mental health concern, exploring TCM nursing methods for patients with palpitation accompanied by anxiety state is particularly important. The Huangdi Neijing's concept of body-mind integration considers the relationship between physical form and spirit inseparable, making TCM treatment more convincing for this psychosomatic comorbidity.

Wrist-ankle acupuncture selected the upper zone, which coincides with the Hand Shaoyin Heart Meridian and Hand Jueyin Pericardium Meridian. The upper zone needle point overlaps with Neiguan (PC6) acupoint. Liang Yupeng's [] research on acupuncture treatment for palpitation found that the Hand Shaoyin Heart Meridian and Hand Jueyin Pericardium Meridian ranked first and second in meridian frequency, while Neiguan and Shenmen (HT7) ranked first and

second in acupoint frequency. Meng Hongmei [] used long needle insertion at Neiguan combined with herbal preparations to treat ventricular arrhythmia with good results. Wrist-ankle acupuncture can improve palpitation by dredging meridians, regulating yin-yang, and thereby regulating organ function []. In improving sleep, Li Ran [] applied wrist-ankle acupuncture at bilateral upper zones and found superior results compared to Western medication in Pittsburgh Sleep Quality Index (PSQI) scores and clinical efficacy, consistent with this case study. Modern medicine confirms that wrist-ankle acupuncture can improve psychoneurological disorders through neural reflex regulation mechanisms. Zhan Mei [] used wrist-ankle acupuncture at bilateral upper zones to relieve pre-competition tension syndrome with excellent results, proposing that the acupuncture-generated potential difference impulses from skin receptors travel along nerve fibers to the cerebral cortex, adjusting neural centers at all levels to balance neural function excitation and inhibition.

Acupoint application also demonstrates good efficacy in improving cardiovascular disease symptoms. Lin Qiushao [] applied acupoint application intervention in patients with chest bi syndrome and heart pain, finding superior effects in relieving chest tightness, palpitation, and precordial pain compared to control groups. Although this case achieved satisfactory nursing outcomes by combining wrist-ankle acupuncture with acupoint application, definitive efficacy requires further clinical trials with expanded sample sizes. Specific parameters including wrist-ankle acupuncture needle points, needle retention time, acupoint selection for application, and application duration all require support from clinical trial data. Additionally, no continuous nursing care or follow-up observation was conducted after patient discharge.

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