

Nursing Care of a Patient with Cancer-Related Pain Treated with Acupoint Application: A Case Report

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Abstract

This study observes and summarizes the application effects of Chinese herbal medicine acupoint plaster therapy in alleviating pain associated with pulmonary tumors in one patient, and summarizes nursing experience. Under the guidance of Traditional Chinese Medicine syndrome differentiation and nursing theory, nursing personnel employed Chinese herbal granules for acupoint plastering at Ashi points, while concurrently optimizing dietary nursing, emotional nursing, lifestyle nursing, and other aspects. Acupoint plaster therapy demonstrated a positive role in pain management, safely and effectively ameliorating the patient's pain symptoms and improving their quality of life.

Full Text

Nursing Report on a Patient with Tumor-Related Pain Relieved by Acupoint Application

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Abstract

This article observes and summarizes the clinical application and nursing experience of traditional Chinese medicine (TCM) acupoint application in relieving tumor-related pain in a patient with pulmonary malignancy. Guided by TCM syndrome differentiation and nursing theory, nursing staff applied TCM granules to Ashi acupoints while providing comprehensive care including dietary management, emotional support, and daily living assistance. Acupoint application therapy demonstrated positive effects in pain management, safety and

effectively improving the patient' s pain symptoms and enhancing quality of life.

Keywords: Pain; Cancer pain; Lung cancer; Acupoint application; Traditional Chinese Medicine nursing

Introduction

Lung cancer represents a major malignant tumor affecting public health in China, with incidence and mortality rates rising annually. Approximately 70-80% of advanced lung cancer patients experience varying degrees of pain, which not only exacerbates physical discomfort but also creates significant psychological burden [1]. Pain is defined as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, representing the body' s important signaling response to harmful or potentially harmful stimuli [2]. In the 11th revision of the International Classification of Diseases (ICD-11) implemented nationally in 2019, chronic cancer pain was added as a new independent disease category [3].

Cancer pain constitutes one of the most common symptoms associated with malignant tumors. Among cancer patients, approximately 25% of newly diagnosed patients, 55% of those undergoing treatment, and 66% of advanced-stage patients suffer from cancer pain [4]. If not promptly and effectively managed during treatment, cancer pain can severely impact patients' quality of life and may cause or worsen anxiety, depression, cancer-related fatigue, sleep disturbances, and appetite loss, significantly affecting social functioning and overall well-being [5]. Consequently, analgesia-based pain management plays a crucial role throughout the entire cancer care continuum. The most widely applied approach for cancer pain remains the World Health Organization' s (WHO) "three-step analgesic ladder" [6].

While Western medicine' s pharmacological pain management demonstrates significant efficacy, it inevitably presents challenges including drug tolerance and various adverse effects such as constipation, respiratory depression, and addiction, which increasingly compromise patients' cancer treatment and health. In contrast, pain management based on TCM characteristic nursing demonstrates distinct advantages by addressing the etiology and pathogenesis of cancer pain through syndrome differentiation and treatment. When tumors obstruct qi and blood flow, pain arises from blockage; treatment aims to detoxify, reduce swelling, and promote qi and blood circulation to alleviate pain. In this context, we selected a case of pulmonary malignant tumor admitted to our hospital on November 30, 2023, who received pain management based on TCM special nursing for cancer pain symptoms. This case analysis and summary aims to provide reference for clinical nursing practice.

1. Clinical Data

1.1 General Information

The patient, Liu, was a middle-aged female with an acute disease course who presented to our hospital with “intermittent cough for over one week and dull pain in the right chest.” On November 19, 2023, the patient suddenly developed cough, sputum production, and fever (maximum temperature 38.5°C) without obvious precipitating factors and received anti-infective treatment at a local hospital. After treatment, her temperature decreased significantly, but cough and sputum persisted. Chest CT revealed: (1) a space-occupying lesion in the apical segment of the right upper lobe, highly suggestive of a neurogenic tumor; (2) multiple inflammatory lesions in the right lung; and (3) enlarged mediastinal lymph nodes. The patient was admitted to our department for further treatment. Past medical history included thyroid nodules for over two years and left breast nodules for over two years, with a paternal history of lung cancer. Regarding allergies, the patient was allergic to trimethoprim-sulfamethoxazole; no other allergies were reported.

1.2 Physical Examination

Vital signs were as follows: temperature 36.6°C, pulse 70 beats/min, respiration 17 breaths/min, blood pressure 120/70 mmHg. Height was 160 cm and weight 70 kg. TCM four examinations revealed bright eyes, normal complexion, moderate build, and free mobility. The tongue was dark red with a slightly white greasy coating. Voice was normal and speech clear, with no abnormal odors detected. The pulse was deep and slippery.

1.3 Admission Assessment

Activities of Daily Living (ADL) score: 80 points; Karnofsky Performance Status (KPS): 90 points; Numeric Rating Scale (NRS) pain score: 3 points, indicating mild pain; Self-Rating Anxiety Scale (SAS) score: 55 points, indicating mild anxiety.

1.4 Diagnosis

TCM Diagnosis: The middle-aged female patient, with chronic work-related fatigue, experienced gradual deficiency of zang-fu organs leading to lung and spleen qi deficiency. Lung deficiency caused impaired qi transformation and inability to transport fluids, leading to fluid accumulation and phlegm formation. Spleen deficiency impaired water metabolism, causing internal water retention and phlegm accumulation. Phlegm and blood stasis intermingled in the lung, resulting in mass formation. Phlegm and stasis obstructing lung collaterals caused impaired qi flow, manifesting as cough. Consolidation in the neck region resulted in local mass formation. The dark red tongue with white greasy coating and deep slippery pulse indicated spleen-lung qi deficiency with phlegm-stasis

obstruction. Based on comprehensive analysis of tongue, pulse, and symptoms, this represented a mixed excess-deficiency pattern with disease location in the lung, pattern identified as lung-spleen deficiency with internal phlegm-stasis obstruction, specifically lung-spleen deficiency pattern and phlegm-stasis intermingling pattern.

Western Medicine Diagnosis: (1) Space-occupying lesion in the apical segment of the right upper lobe; (2) Mediastinal lymph node enlargement; (3) Multiple inflammatory lesions in the right lung; (4) Left breast nodules.

1.5 Treatment Intervention

The treatment approach integrated Western and Chinese medicine. Western medicine focused on completing relevant examinations, while TCM treatment emphasized strengthening the spleen, tonifying the lung, resolving phlegm, and dispersing stasis. TCM external treatments included intradermal needling and auricular point pressing primarily for pain relief and cough suppression. Body acupoints selected were: Lieque (LU7), Fenglong (ST40), Yunmen (LU2), and Quchi (LI11). Auricular points selected (bilateral) included: lung, trachea, large intestine, kidney, Shenmen, sympathetic, and subcortex, applied three times weekly. Patients were instructed to self-massage these points three times daily for at least 10 minutes each session. Ashi acupoint application was administered twice daily for four hours per application. On December 1, the patient experienced intermittent cough with yellow, sticky sputum and dull right chest pain, which improved after intervention. On December 3, the patient had occasional cough with light yellow, thick sputum but no chest pain. On December 5, the patient underwent CT-guided puncture biopsy under local anesthesia and returned to the ward safely. On December 6, the patient was discharged per her request.

2. Nursing Diagnosis

2.1 Pain: Related to Malignant Tumor

- 1) **Assessment:** Upon admission, the NRS pain scale was administered, yielding a score of 3 points, indicating mild pain (pain quality: dull, intermittent).
- 2) **Nursing Goal:** Reduce pain score to below 2 points.

2.2 Cough: Related to Pulmonary Infection, Phlegm-Stasis Obstructing Lung Collaterals, and Impeded Qi Flow

- 1) **Assessment:** Chest CT from Chicheng County Hospital of Traditional Chinese Medicine (November 28, 2023) showed: (1) space-occupying lesion in the apical segment of the right upper lobe; (2) multiple inflammatory lesions in the right lung; (3) enlarged mediastinal lymph nodes.

The patient reported cough with sputum production.

- 2) **Nursing Goal:** Alleviate and eliminate cough symptoms and cure pulmonary inflammation.

3. Nursing Interventions

3.1 Tumor Green Nursing Technology—Acupoint Application Therapy

3.1.1 Application Formula The acupoint application formula consisted of: Cinnamon 20g, Fried mustard seed 9g, Angelica dahurica 15g, Fried Aurantium fruit 15g, Allium macrostemon 18g, Clove 20g, Processed Pinellia 15g, Polygonum multiflorum 20g, Vinegar-processed Cyperus 15g. Regarding specific herbs, Allium macrostemon is classified as a medium-grade herb in the *Shennong's Classic of Materia Medica*, which states: “Allium macrostemon, pungent flavor, warm nature, treats metal wounds and wound decay, lightens the body, prevents hunger, and promotes longevity; grows in marshlands.” Allium macrostemon enters the heart, lung, stomach, and large intestine channels and can be used for chest bi syndrome with heart pain, epigastric fullness and distending pain, and dysentery with tenesmus. Modern pharmacological research indicates it contains various bioactive components including steroidal saponins, volatile oils, nitrogenous compounds, polysaccharides, and fatty acid compounds, demonstrating favorable pharmacological effects such as lipid-lowering, anti-asthmatic, anti-tumor, and anti-atherosclerotic properties [7]. Clove is pungent and warm, entering the spleen, stomach, lung, and kidney channels, with functions of warming the middle, descending counterflow, and tonifying kidney yang. Traditional Chinese medicine primarily uses it to treat spleen-stomach deficiency cold, hiccup and vomiting, reduced appetite with diarrhea, epigastric cold pain, and kidney deficiency impotence. Modern pharmacological research demonstrates strong anti-inflammatory and analgesic effects [8]. Pinellia is warm and acrid, toxic, entering the spleen, stomach, and lung channels, with functions of drying dampness, resolving phlegm, descending counterflow, stopping vomiting, and dispersing masses. Clinically, it is commonly used to treat cough with abundant phlegm, vomiting, nausea, chest and epigastric fullness, and scrofulous phlegm nodules. Polygonum multiflorum is bitter and astringent, warm in nature, entering the liver, heart, and kidney channels; when used raw, it detoxifies, eliminates abscesses, and moistens intestines to promote bowel movements [9]. Vinegar-processing is the most common preparation method for Cyperus throughout history, demonstrating superior effects in relieving spasms and pain compared to other processing methods [10].

3.1.2 Acupoint Selection Acupoint application is a TCM method that achieves therapeutic goals by selecting specific acupoints, applying appropriate medicinals, allowing medicinal power to penetrate meridians and acupoints, reaching the internal organs and directly targeting the disease location [11]. For this patient, we selected Ashi acupoints [12] as the primary intervention points.

Ashi acupoints, also known as “non-fixed acupoints” or “tianying points” in the *Compendium of Medicine*, have no fixed name or location; point selection is determined by pain location— “regardless of established acupoints, where relief is obtained...both moxibustion and needling are effective.” In clinical practice, Ashi points serve as pain reaction points and external manifestations of disease [13]. Applying treatment to these points can regulate local qi and blood, activate collaterals to stop pain, and regulate related zang-fu organ qi movement and blood circulation [14].

3.1.3 Operation Essentials Combine the medicinal substances with excipients (water, yellow rice wine {19}) in an ointment jar, stir, and let stand at room temperature for 2 hours. Fold gauze in a cross pattern, pour the medicinal paste into the center, form into a cake shape, place on dressing material to create the acupoint patch, heat to 43°C, and apply to selected acupoints while observing for allergic reactions. Apply once daily [15]. Before application, massage the acupoints to achieve the effect of “opening the points” [18].

3.2 Emotional and Exercise Nursing

3.2.1 Emotional Nursing Traditional Chinese medicine emphasizes “unity of body and mind.” This patient exhibited adverse emotional responses including anxiety, worry, and irritability. We therefore conducted comprehensive assessment from multiple perspectives, employing methods such as following emotions and desires, guidance and clarification, music therapy, and suggestive induction [16] to help establish positive emotional states. Specific methods included using induction techniques to guide the patient into a tranquil state, overcoming fearful psychological symptoms, guiding relaxation, avoiding excessive contemplation, and listening to light music [17].

3.2.2 TCM Characteristic Exercise—Baduanjin Baduanjin, a traditional qigong practice, possesses effects of regulating the body, mind, and breath, demonstrating excellent efficacy in both early treatment and later recovery. Considering this patient’s self-care ability was not limited, Baduanjin instruction began on the second day of admission. We explained the movements to the patient and corrected improper or non-standard actions. If adverse symptoms such as chest tightness occurred during practice, rest was promptly advised. This exercise consists of eight different movements: (1) Hands holding up the heavens to regulate the triple burner; (2) Drawing the bow left and right like shooting an eagle; (3) Regulating the spleen and stomach by raising one hand; (4) Looking backward to treat five-taxations and seven injuries; (5) Shaking the head and wagging the tail to eliminate heart fire; (6) Hands grasping feet to strengthen kidney and waist; (7) Clenching fists with angry eyes to increase strength; (8) Seven dorsal vibrations to eliminate all diseases. Practice essentials include: gentle and slow movements, round and continuous flow; combined relaxation and tension, simultaneous movement and stillness; spirit and form

unified, qi contained within. Practice duration was 20 minutes per session, once daily.

3.3 Dietary Nursing

Given the patient's frequent cough and sputum production, we appropriately added phlegm-resolving substances to eliminate old phlegm and prevent new phlegm formation, including Chenpi (tangerine peel) and Jiegeng (Platycodon). Platycodon is pungent, neutral, and bitter, with functions of moistening the lung, dispelling phlegm, benefiting the throat, dispersing nodules, and detoxifying to discharge pus. Fresh Platycodon decoction is suitable for cough with abundant phlegm, typically 15-20g being appropriate. Due to chronic disease entering collaterals with multiple stasis patterns, we appropriately added blood-activating and stasis-resolving substances including Danggui (Angelica sinensis), Danshen (Salvia), and Tianqi (Notoginseng). Danggui is sweet and pungent, warm in nature, entering the liver, heart, and spleen channels; whole Danggui functions to tonify blood, activate blood, nourish blood, and moisten intestines to promote bowel movements. The patient experienced difficult bowel movements, and Danggui's blood-nourishing and intestine-moistening effects could assist bowel movements, unblock qi mechanism, and indirectly improve lung diffusion and purification functions. The patient exhibited shortness of breath, reluctance to speak, spontaneous sweating, hoarse voice, cough with sticky sputum, poor appetite, abdominal distension, and constipation, indicating lung-spleen deficiency. We therefore provided dietary therapy including chestnut and lean meat soup (chestnut meat 250g, pork lean meat 200g), ginseng soup (American ginseng 10g, orange peel and tea leaves 6g each, sugar 15g), and Schisandra soup.

4. Nursing Evaluation

The patient's cough and sputum symptoms improved, chest pain disappeared, and NRS pain score reached 0 points. During hospitalization, the patient actively cooperated with diagnosis and treatment, and was discharged home for convalescence on December 6.

5. Discussion

Integrated Chinese and Western medicine nursing holds multiple professional significances in cancer pain management. First, through comprehensive application of Western pharmacological treatment and TCM non-pharmacological methods, multi-level comprehensive treatment is achieved, providing more holistic therapeutic approaches. Second, integrated nursing emphasizes individualized treatment, adjusting therapeutic plans according to patients' physical condition, disease course, and pain severity to better meet unique patient needs. Additionally, comprehensive treatment can reduce side effects potentially caused by Western medication, improving treatment safety and sustainability. Fur-

thermore, combining TCM psychological guidance with Western psychotherapy helps alleviate patients' psychological issues and enhance mental health levels. Moreover, integrated nursing enables more comprehensive pain assessment and management, addressing both physiological causes of pain and patients' subjective experiences, thereby improving pain management effectiveness.

Regarding immune regulation, TCM experience in adjusting patients' lifestyle habits and dietary structure helps improve immunity and enhance anti-cancer capacity. Ultimately, integrated Chinese and Western medicine nursing aims to maintain patients' quality of life, helping them better adapt to disease, promote recovery, and improve life quality through comprehensive treatment. This integrated treatment model requires implementation under professional medical guidance to ensure scientific validity. The TCM external treatment approach of acupoint application achieves the effect of treating internal disease externally, changing traditional drug administration routes, avoiding discomfort symptoms caused by oral medication, while delivering excellent clinical efficacy. Acupoint application therapy is safe and effective for tumor patients, guided by fundamental TCM and meridian theories, stimulating relevant local acupoints to achieve internal disease external treatment effects. It offers advantages of simplicity, convenience, efficacy, and affordability, warranting reference and adoption.

However, although this case achieved favorable outcomes, it remains a single case without broad significance under large sample conditions. Future research should expand sample size, standardize the process developed from this case experience, and conduct large-sample randomized controlled trials to verify universal applicability. Additionally, due to time constraints, this case cannot reflect the long-term effectiveness of this experience over several years in patients' daily lives. Future research should incorporate long-term follow-up and continuous care into this nursing experience system for tracking studies to further deepen nursing research.

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