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Postprint of a Nursing Report on a Lung Cancer Patient with Insomnia Treated with Warm Moxibustion and Gua Sha Therapy

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Insomnia is one of the common complications in lung cancer patients. This article summarizes the nursing experience of treating one lung cancer patient with insomnia using warm moxibustion and gua sha therapy. According to the 'Green Nursing and Regulation Techniques for Tumors', warm moxibustion and gua sha were performed on the patient's Governor Vessel and Bladder Meridian (Xinshu, Pishu, and Shenshu acupoints), thereby reducing the patient's Traditional Chinese Medicine constitution, PSQI, and HADS scores, effectively improving the patient's insomnia symptoms, enhancing the patient's compliance with treatment and nursing care, and demonstrating its value for clinical application.

Full Text

Preamble

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A Nursing Report on Warm Moxibustion and Gua Sha Therapy for a Lung Cancer Patient with Insomnia

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Abstract

Insomnia is a common complication in lung cancer patients. This article summarizes the nursing experience of treating one lung cancer patient with insomnia

using warm moxibustion and gua sha therapy. Based on the *Green Nursing Techniques for Cancer*, warm moxibustion and gua sha were applied to the Governor Vessel and Bladder Meridian (with focus on Xinshu, Pishu, and Shen-shu acupoints). This intervention reduced the patient's Traditional Chinese Medicine (TCM) constitution score, PSQI score, and HADS score, effectively improving insomnia symptoms and enhancing patient compliance with treatment and nursing care. This approach merits clinical application.

Keywords: lung cancer; insomnia; warm moxibustion and gua sha therapy; nursing care

Lung cancer is one of the most common malignant tumors in China, seriously affecting physical and mental health. China sees 10,000 new lung cancer patients annually, with mortality ranking highest among all cancers [1]. Lung cancer patients often develop insomnia due to pain, dyspnea, cough, and other irritations caused by tumor invasion of the lungs, as well as from anxiety and depression [2]. The incidence of insomnia is high among patients with lung cancer, breast cancer, and head and neck tumors [3], with approximately [4] lung cancer patients experiencing insomnia. In a study of [5] lung cancer patients, the insomnia rate was [6]. However, insomnia exacerbates symptoms of fatigue, appetite loss, nausea, depression, and shortness of breath in lung cancer patients, creating a vicious cycle that significantly impacts prognosis and quality of life. A Turkish study reported an insomnia incidence of [7] over [8] years.

Current Western medical treatment for insomnia relies on sedative-hypnotic drugs, which create significant dependency with long-term use. Abrupt discontinuation can cause tension, depression, anxiety, cognitive dysfunction, and withdrawal syndrome with insomnia rebound [9]. Traditional Chinese medicine is widely accepted by patients for treating lung cancer-related insomnia due to its minimal side effects, simple operation, and low cost, achieving favorable therapeutic effects. The total effective rate reaches [10]; Zhang Hui reported that ginger-partitioned moxibustion combined with auricular point pressing achieved [11] in lung cancer insomnia patients; He Yan applied acupoint plaster therapy for cancer-related insomnia in chemotherapy patients with a total effective rate of [12]. Our department has achieved good results using warm moxibustion and gua sha therapy for lung cancer patients with insomnia, which we report as follows:

1 Clinical Data

Patient Lu, female, [age] years old. During a physical examination in [month] [year], a nodule in the right upper lung was discovered, prompting a visit to a hospital. PET-CT results showed: a nodule in the apical segment of the right upper lobe with increased metabolic uptake, considered malignant; bilateral lung multiple linear, reticular, and patchy shadows, mainly distributed along the pleura, with mild increased uptake. Lung biopsy diagnosis: lung adenocarcinoma. Genetic testing showed: epidermal growth factor receptor (EGFR) (-),

anaplastic lymphoma kinase (ALK) (-).

In [month] [year], the patient received radiotherapy for the right lung lesion. Post-radiotherapy evaluation showed effective response, with regular follow-up thereafter. In [month] [year], follow-up examination revealed enlarged lung lesions. The patient received 4 cycles of pemetrexed + bevacizumab chemotherapy, after which she experienced finger numbness and cold lower limbs without special treatment.

The patient visited our hospital's Cancer Green Nursing Clinic due to difficulty falling asleep and dizziness. Chief complaints at visit: fatigue, difficulty falling asleep, waking shortly after getting in bed, cold hands and feet (especially below knee joints), palpitations, shortness of breath, dizziness, pale tongue with thin coating, thin and weak pulse. Auxiliary examinations: ECG: sinus rhythm; blood routine: normal. Past history: mild fatty liver. TCM diagnosis: Lung cancer (phlegm-stasis intermingling); Insomnia (heart-spleen deficiency). Western medicine diagnosis: Lung adenocarcinoma; Insomnia.

Treatment principle: Strengthen spleen and calm spirit, tonify heart and spleen. Warm moxibustion and gua sha therapy was applied to the Governor Vessel and Bladder Meridian (focusing on Xinshu, Pishu, and Shenshu acupoints).

2 Nursing Care

2.1 Daily Living Nursing

Maintain a quiet, clean indoor environment with appropriate temperature and humidity. Instruct the patient to develop good living and sleep habits, keep warm, and avoid wind-cold exposure.

2.2 Dietary Nursing

The patient should select foods that are neutral to warm in nature and strengthen spleen and boost qi, such as rice, millet, pumpkin, carrot, and Chinese yam. Avoid raw, cold, bitter, cold, spicy, and dry-heat foods. Eat small, frequent meals. Inform the patient to avoid overeating or going to bed hungry, avoid coffee, strong tea, etc., and quit smoking.

2.3 Exercise Nursing

Appropriately engage in physical labor and exercise within capacity, avoiding strenuous activities. Options include Baduanjin, Tai Chi, and Wuqinxi exercises.

2.4 Emotional Nursing

Communicate frequently with the patient, advise maintaining optimistic emotions and avoiding excessive emotional reactions.

2.5 TCM Characteristic Nursing: Warm Moxibustion and Gua Sha Therapy

Operation method: Based on conventional treatment, warm moxibustion and gua sha therapy was added, 30 minutes per session, twice weekly for 4 weeks.

Environmental preparation: Adjust indoor temperature to 24-26°C, close doors and windows, draw curtains to protect patient privacy, play seasonal five-element music to promote physical relaxation and mental calmness, and turn on the exhaust fan to promote smoke removal.

Materials preparation: Treatment tray, gua sha moxibustion cup, moxa sticks (Beijing Tongrentang), gua sha oil (Beijing Jinlong Kang' erfu Traditional Chinese Medicine Gua Sha and Cupping Research Institute), lighter, fire-extinguishing jar, exhaust fan (model: by168), gauze, treatment bowl, warm water, thermometer.

Operation procedure: Prepare all materials, bring treatment cart to bedside, instruct patient to take prone position, fully expose back and waist skin, insert moxa stick into gua sha cup and ignite. Pour 50-60°C warm water into treatment bowl and place gua sha oil bottle in bowl to warm the oil and promote patient comfort.

Opening acupoints: First, use sterile gauze dipped in 50-60°C warm water (moist but not dripping) to clean back and waist skin. Evenly apply gua sha oil to back and waist. Use thumb to press Xinshu acupoint, then Pishu acupoint, then Shenshu acupoint. Finally, use thumb to push along Governor Vessel and Bladder Meridian from top to bottom until skin is slightly red, total time 3-5 minutes.

Warm moxibustion: Place the ignited gua sha cup vertically on Xinshu acupoint for warm moxibustion for 3-5 minutes. Then vertically move cup to Pishu acupoints (bilateral) for warm moxibustion for 3-5 minutes each. Finally, vertically move cup to Shenshu acupoints (bilateral) for warm moxibustion for 3-5 minutes each, total time 15-20 minutes.

Warm gua sha: Use balanced tonifying and reducing technique. First use unilateral scraping method (using cup edge, cup body at 45° angle to skin) to warm-scrape Governor Vessel and Bladder Meridian. Then use flat pushing method (using cup edge, cup body angle <15° to skin) to warm-scrape along Governor Vessel and Bladder Meridian from top to bottom, inside to outside, gradually increasing pressure until skin is red or sha appears. Use kneading-scraping method (using cup edge for gentle rotating scraping, cup body at 60° angle) for nodules or blocked areas.

Rolling/fomenting meridians and acupoints: First use warm gua sha cup body to foment Xinshu, Pishu, and Shenshu acupoints individually. Then roll-foment Governor Vessel and Bladder Meridian from top to bottom to promote blood circulation, total time 5-8 minutes.

Closing acupoints: Apply gua sha oil, first knead Xinshu acupoint, then Pishu acupoint, finally Shenshu acupoint, total time 3-5 minutes to achieve acupoint sealing effect.

Precautions: During warm gua sha, observe patient response, inquire about pain, heat sensation, etc., and adjust technique and pressure according to patient feedback. During rolling, speed should not be too fast to prevent moxa ash from falling and causing burns. After treatment, advise patient to drink warm water, keep warm, and avoid going out or bathing for 4-6 hours.

3 Effect Evaluation

Wang Qi' s “Nine Constitution Evaluation Criteria”: TCM constitution transformation score [value]%, judged as positive.

Pittsburgh Sleep Quality Index (PSQI): Reference range 0-21 points, higher scores indicate worse sleep quality, total score >7 points indicates sleep disorder.

Hospital Anxiety and Depression Scale (HADS): Reference range: 0-7 points indicates no symptoms; 8-10 points indicates suspicious presence; 11-21 points indicates definite presence.

Sleep onset time and duration: [data]

Insomnia belongs to the category of “sleeplessness” in TCM. In the *Inner Canon*, it is also called “no sleep at night,” “eyes not closed,” “cannot sleep,” [13], with heart-spleen deficiency being the most common pattern [14]. Due to excessive worry and anxiety damaging the spleen, this patient' s spleen qi was impaired, insufficient qi and blood were generated, blood could not nourish the heart vessels, and the heart spirit lost its nourishment, resulting in insomnia. As stated in *Jingyue' s Complete Works: Insomnia*: “When there is no pathogen but insomnia, it must be due to insufficient nutrient blood. Nutrient governs blood; when blood is deficient, it cannot nourish the heart; when heart is deficient, sleep cannot occur” [15]. Therefore, this patient was treated mainly by strengthening spleen, calming spirit, and nourishing heart. Clinical manifestations include: insomnia with frequent dreams, palpitations and forgetfulness, abdominal distension, dull complexion, loose stools, fatigue, poor appetite, pale tongue with plump body, thin white coating, thin and weak pulse [16].

This patient belongs to the heart-spleen deficiency pattern, with disease location mainly in heart and spleen. Therefore, back-shu points Xinshu, Pishu, and Shenshu were selected as main acupoints. Xinshu acupoint functions to unblock heart vessels, calm heart spirit, and regulate qi-blood. Warm moxibustion and gua sha on Xinshu acupoint can warm and nourish heart spirit and regulate qi-blood. Selecting Pishu and Shenshu acupoints demonstrates emphasis on cultivating both congenital and acquired foundations. The spleen is the source of qi-blood generation; when spleen qi is healthy, the five zang-organs, six fu-organs, four limbs and skeleton can be nourished. The kidney is where

congenital essence transforms; when kidney qi is sufficient, essence-qi-spirit is abundant. Through cultivation of spleen and kidney, five-zang qi can be harmonized to balance yin-yang and qi-blood of the body, promote recovery of organ function, and achieve spleen-strengthening, kidney-tonifying, and mind-calming effects [17]. *Suwen: Yin-Yang Correspondence in Phenomena* states “treat yin disease through yang” [18], therefore back-shu points can treat five-zang diseases. They belong to the Foot-Taiyang Bladder Meridian, intersecting with the Governor Vessel. Meridian selection focuses on Foot-Taiyang Bladder Meridian and Governor Vessel. The Governor Vessel is the sea of yang vessels, governing all yang qi of the body. The Foot-Taiyang Bladder Meridian is related to yin-yang qiao vessels, coordinating overall balance to achieve yin-yang harmony and improve sleep [19].

This patient had yang deficiency pattern according to Wang Qi’ s “Nine Constitution Evaluation Criteria” with [value]% transformation score, showing yang deficiency symptoms. Therefore, the “tonifying method” of warm moxibustion and gua sha therapy was used to relieve insomnia. This approach mainly applies the theory of “using warmth as tonification” combined with “using unblocking as tonification” based on TCM theory. Research confirms that moxibustion’ s “warmth as tonification” can warm meridians, promote qi-blood circulation, cultivate foundation, and achieve yin-supporting and yang-assisting purposes [20]. The cup body’ s hot fomentation can transmit heat to various meridians, exerting effects of warming meridians, tonifying middle and boosting qi, and dissipating stasis and nodules, thereby enhancing the effect of supporting healthy qi and dispelling pathogenic factors. This therapy’ s “unblocking as tonification” mainly uses warm scraping and massage techniques to unblock and dissipate nodules, allowing stagnant meridian qi-blood to flow smoothly, achieving pathogen-dispelling, healthy qi-supporting, meridian-warming, qi-moving, and blood-activating effects [21].

This therapy is an innovative approach integrating advantages of moxibustion, gua sha, hot fomentation, and massage under TCM theory guidance. Compared with ordinary gua sha, it avoids the disadvantages of traditional cold gua sha tools causing discomfort and meridian closure, as well as the drawbacks of obvious pain and poor tolerance. The operation includes multiple techniques such as warm scraping, rolling, kneading, etc., with high comfort level, improving patient acceptance of gua sha and increasing compliance and therapeutic effect. However, this therapy lacks large sample size for treating heart-spleen deficiency insomnia and requires further data collection.

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

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