Nursing Experience on Treating a Patient with Cold-Dampness Obstruction Type Rheumatoid Arthritis Using Medicinal Cake-Separated Moxibustion Combined with Herbal Bamboo Cupping

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Abstract

This study selected one case of cold-dampness bi obstruction pattern rheumatoid arthritis, treating the patient with medicinal moxibustion combined with traditional Chinese medicine bamboo cupping therapy in conjunction with routine nursing measures including dietary guidance, emotional nursing care, daily living care, health education, and functional exercise, which effectively improved the patient' s clinical symptoms of pain, anxiety, and insomnia.

Full Text

Nursing Experience of One Case of Rheumatoid Arthritis with Cold-Dampness Obstruction Pattern Treated by Medicine-Separated Moxibustion Combined with Herbal Bamboo Cupping

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Abstract

This paper presents a case report of a patient with rheumatoid arthritis (RA) of cold-dampness obstruction pattern who was treated with medicine-separated moxibustion combined with herbal bamboo cupping. Integrated with conventional nursing measures including dietary guidance, emotional care, daily living support, health education, and functional exercise, this approach effectively alleviated the patient' s clinical symptoms such as pain, anxiety, and insomnia.

Keywords: Rheumatoid arthritis; Medicine-separated moxibustion; Herbal bamboo cupping; Traditional Chinese medicine nursing

Introduction

Rheumatoid arthritis (RA), known as "Wangbi" in traditional Chinese medicine (TCM), is a common chronic autoimmune disease with high disability potential [**?**]. Its primary pathological feature is chronic synovial inflammation of the joints, which can ultimately lead to cartilage and bone damage, resulting in joint deformities and severe complications [**?**]. Epidemiological data indicate that the prevalence of RA is approximately 0.5% to 1% [**?**], with a higher incidence in women than in men [**?**]. The etiology of this disease is closely associated with multiple factors, including genetic predisposition, immune system dysregulation, infection, and environmental stimuli [**?**]. Furthermore, the disease is characterized by recurrent flare-ups that significantly impact patients' quality of life and psychological well-being, imposing substantial economic and social burdens [**?**].

Current conventional pharmacological treatments for RA include biologics, targeted small-molecule drugs, nonsteroidal anti-inflammatory drugs (NSAIDs), and glucocorticoids [**?**]. While these medications can delay disease progression and improve joint symptoms, long-term use may lead to adverse effects such as gastrointestinal ulcers, osteoporosis, and compromised immunity, resulting in poor patient compliance [**?**].

Research has demonstrated that medicine-separated moxibustion can deliver therapeutic heat and medicinal effects directly to lesion sites, alleviating inflammatory responses in RA patients, promoting soft tissue repair, enhancing joint mobility, and improving quality of life [**?**]. Herbal bamboo cupping therapy combines the dual stimulation of medicinal steam and warmth, effectively promoting metabolism, enhancing phagocytic cell function, and thereby strengthening the body' s disease resistance and immunity [**?**]. The combined application of these two modalities produces synergistic effects that improve joint swelling and pain symptoms, achieving therapeutic actions of warming the meridians, dispelling cold, and unblocking collaterals to relieve pain. This paper summarizes the nursing experience of one case of cold-dampness obstruction pattern RA and reports as follows.

Case Report

Patient Information

The patient was a 50-year-old female who presented to our Department of Rheumatology and Immunology on February 10, 2025, with a chief complaint of "recurrent polyarthralgia for over 10 years, exacerbated for over 6 months." Admission symptoms included: right knee joint pain with limited mobility, symp-

tom aggravation after exertion or exposure to cold, limited activity, poor appetite and sleep, normal bowel movements and urination, pale red tongue with thin white coating, and a wiry, thready pulse. Past medical history included fatty liver disease.

Physical Examination

Specialized examination revealed swelling and pain in the right knee joint, no edema in both lower limbs, difficulty with squatting and rising, and positive patellar floating test on the right knee. TCM four diagnostic methods: Observation—clear consciousness, normal mental status and facial expression, ruddy complexion, normal development and body type, active positioning, and normal mobility; pale red tongue with white coating. Auscultation and olfaction—normal voice, clear speech, shortness of breath without panting, mild cough, no vomiting, sighing, groaning, or abdominal sounds; no abnormal odors detected. Inquiry—right knee pain with limited mobility, symptom aggravation after exertion or cold exposure, limited activity, poor appetite and sleep, normal bowel movements and urination. Palpation—wiry, thready pulse.

Ancillary Investigations

Laboratory findings: Rheumatoid factor 83.10 IU/ml↑; C-reactive protein 50.97 mg/L↑; erythrocyte sedimentation rate 51.00 mm/h↑; anti-cyclic citrullinated peptide antibody 184.6 Ru/ml↑; antinuclear antibody (1:80) weakly positive (speckled pattern)↑; autoimmune antibody panel otherwise unremarkable. Right knee ultrasound: (1) right knee suprapatellar bursitis with effusion; (2) right knee synovitis; (3) right knee degenerative changes; (4) posterior knee mass, likely Baker' s cyst.

Diagnosis

1. **TCM diagnosis:** Wangbi; Pattern differentiation: Cold-dampness obstruction pattern.

2. **Western medicine diagnosis:** Rheumatoid arthritis.

Treatment

Western medicine: Methotrexate combined with iguratimod for disease-modifying antirheumatic therapy, celecoxib for anti-inflammatory analgesia, and technetium [99Tc] methylene diphosphonate injection for bone repair. **TCM treatment:** Oral herbal medicine to tonify qi and nourish blood, dispel cold and eliminate dampness, prescribed as a modified Danggui Sini Decoction. **Nursing interventions:** Medicine-separated moxibustion combined with herbal bamboo cupping to unblock meridians, activate collaterals, relieve spasms, and alleviate pain. The treatment course was 7 days per cycle, with

two cycles administered before discharge. The patient' s right knee pain and swelling symptoms were significantly reduced.

Nursing Assessment and Intervention

Assessment Tools

Pain assessment: The Visual Analogue Scale (VAS) for joint pain [**?**] was used to evaluate pain severity, where 0 indicates no pain, 1-3 indicates mild pain, 4-6 indicates moderate pain, and 7-10 indicates severe pain.

Anxiety assessment: The Self-Rating Anxiety Scale (SAS) [**?**] was employed to assess anxiety levels. SAS total scores <50 are considered normal; 50-59 indicate mild anxiety; 60-69 indicate moderate anxiety; and >70 indicate severe anxiety. Due to pain-induced tension and anxiety, the patient was introduced to the SAS scale, yielding a total score of 70, indicating moderate anxiety.

Quality of life assessment: The Health Assessment Questionnaire (HAQ) [**?**] was administered, where higher scores represent lower quality of life and greater disability.

Disease activity assessment: The 28-joint Disease Activity Score (DAS28) [**?**] was used to evaluate RA disease activity. DAS28 >5.1 indicates high disease activity; 3.2 < DAS28 $ $5.1 indicates moderate activity; 2.6 < DAS28 $ $3.2 indicates low activity; and DAS28 $ $2.6 indicates clinical remission.

Nursing Diagnoses

Based on the patient' s pattern differentiation and main symptomatic features, nursing diagnoses included: (1) Chronic pain, related to external pathogenic obstruction of meridians causing impaired qi and blood circulation; (2) Impaired physical mobility, related to external pathogenic obstruction of meridians causing impaired qi and blood circulation; (3) Anxiety, related to recurrent pain and protracted disease course; (4) Disturbed sleep pattern with restless nights, related to persistent joint pain; (5) Risk for falls, related to joint pain limiting flexion and extension.

Nursing Plan

In response to identified contributing factors, the following nursing plan was developed: (1) Leverage the advantages of TCM characteristic techniques including medicine-separated moxibustion and herbal bamboo cupping to alleviate pain; (2) Provide comprehensive daily living care and a comfortable ward environment to improve insomnia symptoms; (3) Strengthen emotional care through increased communication frequency to improve anxiety symptoms.

Nursing Interventions

Medicine-Separated Moxibustion Following medical orders, medicine-separated moxibustion was administered to the patient at acupoints including Pishu (BL20), Yanglingquan (GB34), Yaoyangguan (GV3), and Mingmen (GV4) to harness the synergistic effects of moxibustion, meridians, and acupoints. The medicinal formula comprised turmeric, sparganium, sinomenium, asarum, and ginger juice to dispel cold and dampness, warm kidney yang, warm meridians and unblock collaterals, promote qi flow and break blood stasis, draw out toxins and reduce masses, and unblock the governor vessel to relieve pain.

Procedure: Equal proportions of turmeric, sparganium, sinomenium, and asarum were ground into fine powder and thoroughly mixed, then blended with ginger juice to form a paste. An appropriate amount was evenly applied to sterile adhesive patches. Before application, each acupoint was massaged for 5-10 minutes, after which the patches were firmly secured. Moxa sticks were ignited and placed in a single-hole moxibustion box; once fully burning, the box was positioned over the acupoints. Towels were used as insulation to prevent burns. Each moxibustion session lasted approximately 30 minutes, ideally until the skin showed a mild erythematous response. Treatment was administered once daily for 7 days per course, with two complete courses delivered [**?**].

Herbal Bamboo Cupping Therapy Herbal bamboo cupping is a traditional TCM therapy that applies bamboo cups to body surface acupoints, utilizing negative pressure within the cups to promote qi and blood circulation, relax tendons and activate collaterals, and clear heat and toxins [**?**]. **Acupoint selection:** Based on the principle of selecting points according to painful joint locations, Ashi points on the right lower extremity were chosen for this cold-dampness obstruction pattern RA patient. These points facilitate joint patency, dispel wind-dampness, and activate collaterals to relieve pain, thereby effectively alleviating joint swelling, pain, and stiffness.

Procedure: Chinese herbs including clematis, spatholobus, saposhnikovia, safflower, peach kernel, cinnamon twig, notopterygium, and mugwort leaf were decocted into a topical herbal solution pack. The solution was heated for 10 minutes, followed by heating the bamboo cups for 5 minutes. The appropriately sized cups were then boiled together with the herbal solution for 10 minutes before application. Cups were retained for 8-10 minutes and could be removed immediately if too tight. Treatment frequency was once daily for 7 days per course, with two courses administered [**?**].

Daily Living Care Patients were advised to maintain a regular lifestyle with proper daily rhythm. During remission periods, patients were encouraged to participate in suitable activities and guided through targeted systematic training, gradually increasing activity volume while ensuring intensity remained within the patient' s tolerance.

Health Education Health education was delivered through distribution of health manuals, establishment of educational bulletin boards, and organization of group discussions. The education emphasized key aspects of daily life, including medication guidance, daily care techniques, and the importance of psychological adjustment. The education team actively listened to and patiently answered patient questions to eliminate doubts and enhance disease understanding.

Dietary Care Dietary recommendations for RA patients emphasized light, non-greasy foods while avoiding spicy, irritating substances such as fried foods, chili peppers, seafood, and raw garlic, which may exacerbate joint pain. High-sugar foods including sugary beverages and candies were also restricted to prevent aggravation of inflammation. Patients were advised to follow regular meal schedules with fixed portions, avoid overeating, and abstain from smoking and alcohol.

Emotional Care Establishing good relationships with patients and their families was considered essential in nursing practice. Through effective communication, nurses gained insight into patients' psychological status and developed targeted interventions. Family members and relatives were guided to provide necessary support and encouragement, as familial care helps stabilize patient emotions and strengthens confidence in overcoming the disease. Patients were encouraged to maintain positive attitudes, avoid excessive psychological tension, and actively participate in self-care and group activities to improve psychological well-being and overall health.

Functional Exercise Patients were encouraged to engage in appropriate moderate-intensity exercises such as Tai Chi and calisthenics, which demonstrate significant benefits for joint health. Regular, systematic, individualized functional exercise can effectively relieve joint pain, improve joint function, and positively enhance patients' daily quality of life. Through scientific exercise guidance, patients can improve both physical condition and psychological health, thereby better managing their disease and improving overall quality of life.

Nursing Evaluation

Following integrated Chinese and Western nursing interventions, the patient' s clinical symptoms showed marked improvement. After 14 days of treatment, VAS scores decreased from 7 to 2, SAS scores from 70 to 47, HAQ scores from 38 to 32, and DAS28 from 4.9 to 1.9, demonstrating significant efficacy (Table 1).

Results and Follow-up

After two weeks of treatment, the patient' s condition improved and she was discharged. A telephone follow-up conducted six months post-discharge revealed

no deterioration in joint swelling or pain. The patient was advised to maintain appropriate activity levels and regular dietary habits, demonstrating good compliance with no adverse events occurring.

Discussion

In TCM, Wangbi belongs to the category of "bi syndrome." The term first appeared in the *Huangdi Neijing*, where the *Suwen · Bi Lun* states: "When wind, cold, and dampness three qi arrive together, they combine to form bi" [**?**]. The *Gujin Yijian* records: "It arises from internal deficiency of original essence, allowing invasion by wind, cold, and dampness three qi, which cannot be dispelled in time and flow into the meridians, entering to become bi." The pathogenic mechanism is considered to involve external pathogenic factors such as wind, cold, and dampness invading the muscles, tendons, bones, and joints, causing meridian obstruction and vessel blockage, leading to malnourishment of the limbs and tendon tension, thus producing bi syndrome [**?**]. Clinical observation has revealed that the cold-dampness obstruction pattern demonstrates the highest incidence [**?**]. In this case, the disease location involved tendons, bones, and joints, resulting from kidney deficiency with pathogenic stagnation and dual deficiency and obstruction. The pattern differentiation for this case was qi and blood deficiency with cold-dampness obstruction; therefore, pattern-based nursing focused on supplementing qi and nourishing blood while dispelling cold and eliminating dampness.

Medicine-separated moxibustion functions to uplift yang qi, support healthy qi and dispel pathogenic factors, and warm and unblock meridians, while also enhancing immune function [**?**]. The medicinal herbs selected for this study were turmeric, sparganium, sinomenium, asarum, and ginger juice. Turmeric disperses wind-cold pathogenic factors and promotes qi and blood circulation, particularly excelling at relieving bi pain; sparganium activates blood and resolves stasis, promotes qi flow to relieve pain; sinomenium and asarum dispel wind and eliminate dampness, resolve the exterior and scatter cold, effectively relieving bi and reducing swelling; ginger disperses cold and warms meridians [**?**]. Additionally, ginger juice modulation promotes blood vessel circulation, transforms stasis, and enhances skin absorption of medicinal substances [**?**]. Medicine-separated moxibustion combines medicinal efficacy with moxibustion heat, more effectively penetrating therapeutic effects into the body to achieve superior outcomes. The selected acupoint combination of Pishu, Yanglingquan, Yaoyangguan, and Mingmen aims to enhance moxibustion efficacy, promoting spleen fortification, dampness elimination, and collateral warming. Among these, Pishu and Yanglingquan primarily fortify the spleen, eliminate dampness, and unblock collaterals, while Yaoyangguan and Mingmen warm and supplement kidney yang. This combined action achieves the goals of fortifying the spleen, eliminating dampness, and unblocking collaterals [**?**]. In this cold-dampness obstruction pattern patient, medicine-separated moxibustion demonstrated significant efficacy in relieving pain and improving physical mobility limitations.

Herbal bamboo cupping is a traditional TCM therapy that applies bamboo cups to meridian acupoints, utilizing negative pressure to promote qi and blood circulation, relax tendons and activate collaterals, and clear heat and toxins [**?**]. Decocted bamboo cups can rapidly absorb and store medicinal substances, employing combined suction, medicinal vapor, and warmth to achieve cold dispelling, dampness elimination, and meridian warming effects. This therapy offers advantages of thorough blood stasis removal, flexible application sites, strong suction, and minimal pain [**?**]. Bamboo cupping can enhance blood circulation and immune function while reducing inflammatory responses. Clinical studies have found that bamboo cupping therapy can significantly improve patient symptoms and quality of life while reducing inflammatory markers such as erythrocyte sedimentation rate and C-reactive protein [**?**]. In this study, the medicinal solution for soaking bamboo cups included clematis, spatholobus, saposhnikovia, safflower, peach kernel, cinnamon twig, notopterygium, and mugwort leaf. The combination of multiple herbs produces synergistic effects of dispelling wind, scattering cold, eliminating dampness, warming meridians, promoting qi and blood circulation, and relieving pain, significantly alleviating knee pain in RA patients, improving joint mobility, and enhancing clinical therapeutic effects [**?**].

The integration of TCM treatment with emotional nursing accelerated patient recovery while utilizing modern scientific technology and methods to promote continuous development of TCM theory and practice. This approach upholds and advances the characteristic advantages of TCM, maintains TCM original thinking, and continuously forms new characteristics and advantages through innovation, enabling effective promotion of TCM nursing techniques. This case outcome indicates that post-intervention VAS, SAS, HAQ, and DAS28 scores were all significantly lower than pre-intervention values. Moreover, no adverse reactions were observed during treatment, demonstrating good safety.

In summary, the combination of medicine-separated moxibustion and herbal bamboo cupping is technically simple to operate, has few adverse effects, and is readily accepted by patients. When combined with conventional nursing measures including dietary guidance, emotional care, daily living support, health education, and functional exercise, this approach effectively improves clinical symptoms such as pain, anxiety, and insomnia. However, as this case analysis represents a single case report, its conclusions inevitably have certain limitations. Future prospective studies with larger sample sizes and long-term patient follow-up are urgently needed.

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Conflict of Interest Statement: The authors declare no conflicts of interest.
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Note: Figure translations are in progress. See original paper for figures.