

Nursing Experience of Ear Gua Sha Combined with Gu Bi Exercise in a Patient with Osteoarthritis

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Abstract

An exploration of nursing experience in applying auricular scraping combined with Gubi exercise for a patient with osteoarthritis. Through the implementation of auricular scraping combined with Gubi exercise in an osteoarthritis patient with right hip joint pain, after two weeks of treatment and nursing intervention, the patient's pain score decreased significantly, anxiety symptoms were markedly alleviated, and activities of daily living were substantially improved. As characteristic therapies of traditional Chinese medicine, auricular scraping and Gubi exercise demonstrate positive auxiliary effects in relieving pain and improving joint function in osteoarthritis patients, without obvious side effects. This method is worthy of promotion and application in clinical nursing practice.

Full Text

Nursing Experience of Auricular Scraping Combined with Bone Bi Exercise in a Patient with Osteoarthritis

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Abstract

This study explores the nursing experience of applying auricular scraping combined with bone bi exercise in a patient with osteoarthritis. A patient with right hip pain due to osteoarthritis received auricular scraping combined with bone bi exercise. After two weeks of treatment and nursing care, the patient's pain score decreased significantly, anxiety was markedly relieved, and daily living ability improved substantially. As characteristic therapies of Traditional Chinese Medicine (TCM), auricular scraping and bone bi exercise demonstrate positive auxiliary effects in relieving pain and improving joint function in osteoarthritis patients, with no obvious side effects. This approach warrants promotion in clinical nursing practice.

Keywords: Osteoarthritis; Auricular scraping; Bone bi exercise

Introduction

Osteoarthritis, also known as “bone bi” in TCM, is a common chronic joint disease characterized primarily by joint pain, stiffness, and limited mobility [1]. With the intensification of population aging, the incidence of osteoarthritis has been increasing annually, significantly impacting patients' quality of life [2]. Conventional treatment methods mainly include medication, physical therapy, and surgical intervention; however, these approaches often involve side effects or have limited applicability, failing to fully meet patients' needs. Therefore, identifying a safe and effective auxiliary treatment is particularly important [3]. As an essential component of China's traditional medicine, TCM has accumulated rich experience in treating osteoarthritis. Auricular scraping, a characteristic TCM therapy, offers advantages including simple operation, non-invasiveness, and absence of side effects by stimulating specific auricular acupoints to regulate bodily functions. Bone bi exercise, as a form of functional training, can improve pain status and enhance daily living ability when combined with nursing interventions, demonstrating promising clinical efficacy in recent years [4]. This article discusses the nursing experience of applying auricular scraping combined with bone bi exercise in an osteoarthritis patient through a clinical case study, aiming to help alleviate pain, improve joint function, and enhance quality of life. By documenting and summarizing this TCM characteristic therapy, we hope to provide a reference for comprehensive osteoarthritis nursing care.

1. Case Report

1.1 Basic Information The patient was a 47-year-old female freelancer. She was admitted on June 3, 2024, due to right hip pain for over one year that had worsened over the past half-month, and discharged on June 17, 2024, after improvement. One year prior, the patient had undergone exploratory laparotomy and bilateral chocolate cystectomy for intermittent right lower abdominal pain at our hospital. Postoperatively, she developed paroxysmal distending pain in the right hip joint unrelated to activity, which she ignored. Half a month before admission, the symptoms worsened without obvious cause, prompting her visit to our department. Current symptoms included paroxysmal right joint pain with distending sensation, no limitation in limb joint movement, no aversion to cold or fever, no dry mouth or bitter taste, normal appetite and sleep, normal bowel movements and urination, dark tongue with thin yellow coating, and wiry pulse. No significant recent weight change. Past medical history included laparoscopic exploration and bilateral ovarian cystectomy in March 2023. No history of drug or food allergies. Specialized examination revealed paroxysmal right hip pain with distending characteristics. Auxiliary examination of lumbar spine MRI showed degenerative changes: (1) lumbar vertebral hyperostosis; (2) L5-S1 disc herniation with narrowing of intervertebral foramen and spinal canal.

1.2 Physical Examination Vital signs: temperature 36.6°C, pulse 86 beats/min, respiration 20 breaths/min, blood pressure 100/76 mmHg. No jaundice of skin or mucous membranes, no palpable superficial lymph node enlargement.

1.3 Diagnosis TCM diagnosis: Bone bi with liver-kidney deficiency and phlegm-stasis intermingling patterns. Western medicine diagnosis: Joint pain, etiology to be determined.

1.4 Treatment Principles Western medicine principles: Control inflammation, relieve pain, improve blood circulation, and promote tissue repair. TCM principles: Tonify liver and kidney, activate blood and unblock collaterals, resolve phlegm and dissipate stasis.

2. Nursing Care

2.1 Nursing Assessment **2.2.1 Pain Assessment:** The patient reported paroxysmal right hip pain with distending sensation. Pain severity was evaluated using the Visual Analogue Scale (VAS), where 0-10 represents pain intensity divided into four levels: no pain (0), mild pain (1-3), moderate pain (4-6), and severe pain (7-10) [5]. The patient's pain score was 5, indicating moderate pain.

2.2.2 Anxiety Assessment: Psychologically, the patient exhibited anxiety and worry about pain affecting daily life and work. Anxiety was assessed using the Self-Rating Anxiety Scale (SAS) with a four-level scoring system; higher scores indicate more pronounced anxiety tendencies: normal (<50), mild anxiety (50-60), moderate anxiety (61-70), and severe anxiety (>70) [6]. The patient's anxiety score was 55, indicating mild anxiety.

2.2.3 Daily Living Ability Assessment: The patient had limited daily activities but no obvious mobility impairment. Daily living ability was evaluated using the Barthel Index (BI), which includes ten items: feeding, bathing, grooming, dressing, bowel control, bladder control, toilet use, bed-to-chair transfer, ambulation, and stair climbing. The sum of all items yields a total score out of 100, where higher scores indicate greater independence [7]. The patient's score was 95, indicating mild functional impairment.

2.2.4 Fall Risk Assessment: Fall risk was evaluated using the Morse Fall Scale, which comprises six items: history of falls within three months, number of medical diagnoses, need for gait assistance, medication use, gait/mobility, and mental status, with a total possible score of 125. Scores are categorized as no risk (0-24), low risk (25-45), and high risk (>45) [8]. The patient was not taking antihistamines, anesthetics, or other medications affecting the score. Her fall risk assessment score was 35, indicating low fall risk.

2.3 Nursing Plan 2.3.1 Pain Management: Address pain through comprehensive TCM treatments including auricular scraping combined with bone bi exercise to reduce pain from moderate (5 points) to mild (1 point).

2.3.2 Psychological Support: For mild anxiety, provide positive counseling, encourage emotional expression, build trust, understand psychological status, offer positive suggestions to reduce anxiety, and coordinate with TCM treatment to decrease anxiety score from 55 (mild anxiety) to 40 (normal).

2.3.3 Activity Guidance: Guide appropriate joint movement and functional exercises such as bone bi exercise and Tai Chi to promote recovery while avoiding strenuous activity. Improve Barthel Index from 95 (mild functional impairment) to 100 (normal).

2.3.4 Health Education: Provide education on diet, daily living, and hip joint care for patients and families to reduce unnecessary activity and prevent further injury. The current fall risk score is 35 (low risk). Through treatment and education, reduce fall risk score to <24 (no risk).

2.4 Nursing Implementation 2.4.1 TCM Characteristic Nursing

2.4.1.1 Auricular Scraping: Based on the patient's condition, auricular scraping was administered three times weekly as prescribed. After confirming intact auricular skin, 75% alcohol was used for routine disinfection of the auricle [9], cleaning oil and secretions from top to bottom and inside to outside. With

the patient seated, a small amount of scraping oil was applied to the auricular skin. A copper auricular scraper was used to scrape acupoints from bottom to top, outside to inside, and front to back for 10-15 minutes per session, three times weekly for two weeks. Special attention was given to key acupoints (liver, spleen, kidney, sanjiao, and shenmen) with light-to-moderate pressure.

2.4.1.2 Bone Bi Exercise: Bone bi exercise should be performed progressively according to individual capacity, with movement amplitude increasing gradually. The exercise comprises ten steps:

Step 1: Comb Baihui (with fingers spread like a comb, use fingertips to stroke from anterior hairline to Baihui acupoint).

Step 2: Pinch both ears (use index fingers and thumbs to pull ear apex, middle helix, and earlobes; use index fingers to massage cavum conchae; pull ear apex, middle helix, and earlobes with index finger anterior and thumb posterior to earlobe, massaging the earlobe).

Step 3: Press Shenshu (place hands on waist with thumbs on Shenshu acupoint, knead clockwise; place hands on both sides of spine and knead downward fan-shaped to buttocks).

Step 4: Rub Dantian (place right hand on left hand with tiger mouths crossed, place hands in front of abdomen and knead clockwise; cross hands and knead counterclockwise).

Step 5: Knead Zusanli (in sitting position, use both thumbs to knead Zusanli acupoint counterclockwise).

Step 6: Press Jianjing (cross hands on shoulders to pat Jianjing acupoint; place hands on respective shoulders to pat acupoint).

Step 7: Comb chest (in standing position, with fingers together and hands crossed at shoulder peaks, move from contralateral to ipsilateral shoulder peak along clavicle, extending outward; bring both hands forward to chest front, repeat).

Step 8: Regulate sanjiao (overlap hands on chest and slowly press downward from upper to lower jiao).

Step 9: Press Yanglingquan (use both thumbs to pluck Yanglingquan acupoint from front to back and back to front).

Step 10: Regulate breathing (in standing position, with palms facing upward, slowly raise arms from body sides to maximum extent, then turn palms downward and return to original position in front of body).

The exercise was led by nurses daily at 16:30, lasting 30 minutes per session until mild sweating, avoiding fatigue.

2.4.2 Psychological Nursing: Establish good nurse-patient relationships through active inquiry about feelings and needs. Provide positive psychological suggestions to build patient confidence and ease disease-related distress. Encourage participation in departmental patient forums to exchange experiences with others facing similar conditions, thereby obtaining greater social support. Through these multifaceted psychological support measures, help patients maintain positive attitudes when confronting pain and anxiety, better cooperate with

treatment and rehabilitation, and ultimately improve quality of life.

2.4.3 Health Education

2.4.3.1 Daily Living: Keep joints warm, protected from wind-cold and dampness. Protect joints in daily life, wear lumbar support when necessary, avoid accidental injuries such as sprains or collisions, correct poor postures, and avoid prolonged walking or standing.

2.4.3.2 Dietary Guidance: Consume foods that tonify liver-kidney, resolve phlegm-stasis, and strengthen tendons and bones, such as beef and radish. Avoid foods that generate phlegm and dampness. Recommended recipes include black sesame paste and stewed beef with radish soup.

2.5 Nursing Evaluation After two weeks of nursing intervention, pain was relieved with VAS score decreasing to 1. Anxiety improved with SAS score of 40 (normal). Joint range of motion improved with Barthel Index of 100 (normal). Fall risk score decreased to <24 (no risk). Quality of life improved. See figure below:

VAS/Score SAS/Score Barthel/Score Morse/Score After one week of treatment
After two weeks of treatment Treatment effect evaluation

3. Results and Follow-up

Following auricular scraping and bone bi exercise, the patient's pain symptoms significantly decreased and overall comfort improved. Telephone follow-ups were conducted on days 3, 7, and 14 after discharge to inquire about pain duration, intensity, and functional status. Patients were instructed to protect the hip joint during home care and maintain rehabilitation exercises. Subsequent monthly telephone follow-ups monitored pain status and mobility, encouraged maintenance of healthy habits to prevent pain recurrence, and provided psychological support to foster positive attitudes.

4. Discussion

4.1 With continuous modern societal development, TCM has achieved remarkable progress in treating osteoarthritis through holistic pattern differentiation and treatment according to individual constitution and disease stage. TCM nursing constitutes an important component of TCM practice, playing significant roles in disease prevention, treatment, and rehabilitation [11]. This patient had a prolonged disease course primarily involving hip pain. Through comprehensive TCM nursing care and bone bi exercise, including pain management, psychological support, rehabilitation guidance, and health education, we effectively alleviated pain and anxiety while improving quality of life.

4.2 Auricular copper-scraper scraping is based on TCM meridian theory, utilizing a brass scraper on auricular meridian points with scraping oil as a medium to perform repeated rotational friction on the skin, creating stimulation to promote blood circulation and achieve meridian-unblocking effects. Copper possesses strong conductivity and antimicrobial properties. Using a copper scraper enables the body to achieve optimal resonance frequency, thereby enhancing therapeutic efficacy [12].

4.3 Bone bi exercise demonstrates meridian-dredging, blood-activating, collateral-unblocking, and pain-relieving effects while improving joint function, playing a positive role in rehabilitation and holding important significance for disease prevention and treatment. Bone bi exercise promotes blood circulation in periarticular tissues, enhances joint flexibility, regulates qi and blood flow, and facilitates functional exercise of the whole body or local areas [13]. This case demonstrated that auricular scraping combined with bone bi exercise significantly relieved joint pain. Future nursing research should further investigate the effects of different nursing measures on hip pain and functional recovery to improve nursing quality.

Patient Informed Consent: All participants signed informed consent forms.

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.

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