Nursing Experience of Cupping Therapy for Lumbar Disc Herniation: A Case Report

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Date: 2023-12-06T00:00:00+00:00

Abstract

This article summarizes the nursing experience of cupping therapy application in a patient with lumbar disc herniation. During hospitalization, the patient received cupping therapy as a traditional Chinese medicine treatment; based on the principles of traditional Chinese medicine meridian theory, acupoints were selected and manipulated, including Geshu (BL17), Shenshu (BL23), Ciliao (BL32), Xuehai (SP10), Weizhong (BL40), and Ashi points, to observe clinical efficacy. Following implementation of the aforementioned traditional Chinese medicine intervention, the patient' s pain was significantly alleviated, demonstrating remarkable therapeutic efficacy and receiving positive feedback from the patient.

Full Text

Nursing Experience of Cupping Therapy for a Patient with Lumbar Disc Herniation

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Abstract

This article summarizes the nursing experience of applying cupping therapy to a patient with lumbar disc herniation. During hospitalization, the patient received cupping therapy based on traditional Chinese medicine (TCM) meridian theory. Acupoints were selected according to TCM principles, including Geshu (BL17), Shenshu (BL23), Ciliao (BL32), Xuehai (SP10), Weizhong (BL40), and Ashi points. Clinical efficacy was observed following treatment implementation.

After completing the TCM therapeutic interventions, the patient' s pain was significantly alleviated, demonstrating remarkable therapeutic effects and earning high praise from the patient.

Keywords: Cupping therapy; Lumbar disc herniation; Nursing care; Traditional Chinese medicine nursing

Lumbar disc herniation is a neurological syndrome caused by degeneration and injury of lumbar intervertebral disc tissue, leading to rupture of the annulus fibrosus and outward or posterior protrusion of the nucleus pulposus, which compresses nerve roots or cauda equina nerves, resulting in localized pain and radiating pain in the distal lower limbs [1]. Lumbar disc herniation accounts for 30% of cases of low back and leg pain [2]. The condition predominantly affects young and middle-aged adults, most commonly occurring at the L4-L5 and L5-S1 levels. In traditional Chinese medicine, lumbar disc herniation falls under the categories of "lower back pain" and "bi syndrome." The incidence rate of lumbar disc herniation is 3.7%-5.1% [3] and approximately 15% among adults in China [4]. TCM nursing methods for lower back pain and bi syndrome include cupping therapy, which when used for early conservative treatment can effectively reduce pain and shorten hospitalization duration. This approach is characterized by simple operation, easy learning, accessible materials, broad applicability, high efficacy, low cost, and absence of toxic side effects, making it widely welcomed by patients [5].

Clinical Data

The patient was a 58-year-old female who developed lower back pain with radiating pain in the right lower limb in July 2017 without apparent cause. Symptoms worsened with exertion and slightly improved with rest. She had previously received conservative treatment at another hospital, with gradual alleviation of lumbar and right lower limb pain, without accompanying limb numbness or weakness. Over the past month, she experienced recurrent lower back pain with worsening radiating pain in the right lower limb without apparent cause. Lumbar X-ray examination indicated lumbar disc herniation. She was admitted to our hospital on July 7, 2020, with presenting symptoms including lower back pain with radiating pain in the right lower limb, aggravated by exertion and slightly relieved by rest, without intermittent claudication or paresthesia. The patient was alert but reported poor appetite and sleep. Bowel and bladder functions were normal. Tongue presentation was dark red with a thin white coating, and pulse was wiry. TCM diagnosis: Lumbar bi syndrome, pattern differentiation: Qi stagnation and blood stasis. Western medicine diagnosis: Lumbar disc herniation. After admission, the patient received neurotrophic medication as prescribed, along with cupping therapy as the TCM nursing intervention. Following five sessions of cupping therapy, the patient' s lumbar and right lower limb pain symptoms were significantly relieved, walking distance increased, and limb strength and endurance improved.

2.1 Nursing Diagnosis

The nursing diagnosis encompassed three aspects: (1) Chronic pain: related to nerve root compression by herniated nucleus pulposus; (2) Impaired physical mobility—gait disturbance: related to radiating pain in the right lower limb; and (3) Risk of falls: related to radiating pain in the right lower limb and gait disturbance.

2.2 Nursing Assessment

The nursing assessment included four dimensions: 1) Visual Analogue Scale (VAS) score of 7, indicating moderate pain; 2) Morse Fall Scale score of 55, classifying the patient as moderate fall risk (vital signs were normal upon admission, and psychological-social status was stable); 3) Activities of Daily Living (ADL) score of 85, indicating basic self-care ability; and 4) Active range of motion in flexion, extension, lateral flexion, rotation, and combined movements was relatively good. Trunk flexor muscle strength was graded as level 3, trunk extensor muscle strength as level 4, and internal and external oblique abdominal muscle strength as level 3.

2.3 Expected Goals

The expected goals included: 1) Alleviation of lumbar and right lower limb pain; 2) Increased individual walking distance; and 3) Enhanced individual-reported limb strength and endurance.

2.4 Nursing Measures

Nursing measures were implemented to achieve the expected goals: 1) Due to the prolonged disease course and suboptimal outcomes from multiple previous treatment regimens, the patient experienced excessive anxiety. We provided disease-related health education and psychological counseling to enhance her confidence in treatment; 2) We instructed the patient to temporarily reduce activity or utilize assistive devices (cane, wheelchair) when pain was difficult to control; and 3) We encouraged short-distance walking with gradual progression to increase walking distance [6].

Treatment Phase 1: Based on the patient' s symptoms, the first cupping therapy session was administered on July 8, 2020, following medical orders. After cupping, the patient reported improvement in lumbar and right lower limb pain compared to before treatment, with increased comfort in these areas. Skin condition remained good.

Treatment Phase 2: The second cupping session was administered on July 12. Following treatment, the patient reported significant improvement in lumbar and right lower limb pain compared to after the first session. Skin condition remained good.

Treatment Phase 3: The third cupping session was administered on July 16. Post-treatment, the patient reported further significant improvement compared to after the second session, with increased individual walking distance. Skin condition remained good.

Treatment Phase 4: The fourth cupping session was administered on July 20. Following treatment, the patient reported significant pain improvement with further increased walking distance. Skin condition remained good.

Treatment Phase 5: The fifth cupping session was administered on July 24. After completing five cupping therapy sessions, the patient reported significant relief of lumbar and right lower limb pain, increased walking distance, and enhanced limb strength and endurance. Skin condition remained good.

Treatment Phase 6: Following 18 days of treatment, the attending physician evaluated the patient' s condition and approved discharge for the following day. The patient was discharged on July 25.

Operation Methods

3.1 Effective Communication We communicated with the patient to obtain cooperation and ensured comfortable positioning while exposing the treatment areas, maintaining privacy protection and warmth.

3.3 Cupping Therapy Procedure First, lubricant oil was applied to the treatment area. After the cup was attached to the treatment site, the cup body was held and pushed forward and backward repeatedly until the skin became flushed. Large-caliber, thick-walled glass cups were selected, and the cupping areas should be broad and muscular. Following moving cupping, the cups were retained for a period (retaining cupping), typically 5-15 minutes. Retaining cupping is suitable for areas with relatively loose, flat skin and muscle [7].

Following treatment, the patient' s pain symptoms were significantly relieved: 1) VAS score of 3, indicating mild pain; 2) Morse Fall Scale score of 20, classifying as low fall risk; and 3) ADL score of 95, indicating independent living capability.

Traditional Chinese medicine classifies lumbar disc herniation under lower back pain and bi syndrome categories. Clinically, patients primarily complain of lumbar and leg pain. According to TCM theory, blood stasis and qi stagnation lead to impaired qi and blood circulation, resulting in pain due to obstruction [8]. The pathogenesis involves liver-kidney deficiency and impaired qi flow. Following lumbar trauma or strain, pathogenic factors invade the deficient area, causing blood stasis, meridian obstruction, and malnourishment of the lumbar region, leading to pain. The pathological process of lumbar bi syndrome involves gradual loss of spinal stability, where poor lifestyle habits cause atrophy and functional abnormalities of local stabilizing muscles, subsequently leading to degenerative changes in lumbar intervertebral discs and decreased lumbar stability, ultimately causing pain.

Cupping therapy utilizes vacuum suction principles to act on local acupoints, promoting qi and blood circulation and eliminating dampness and cold [9]. This case demonstrated significant improvement in lumbar disc herniation through cupping therapy, with timely adjustments made according to the patient' s symptoms during treatment [10]. The vacuum negative pressure generated by cupping acts on meridian acupoints, and through suction on skin, pores, meridians, and acupoints, can unblock meridians, mobilize body fluids, regulate qi and blood, and balance yin and yang. Cupping therapy guides the distribution of nutritive and defensive qi, stimulates meridian qi and blood, nourishes viscera and tissues, warms the skin and hair, unblocks meridians, and regulates the body' s yin-yang balance, thereby achieving the therapeutic goal of reducing excess and supplementing deficiency to assist in disease treatment.

The selected acupoints in this case included: Huantiao (GB30) belonging to the Gallbladder Meridian of Foot-Shaoyang, which can tonify qi, dispel wind and transform dampness, strengthen lumbar and knee, dispel wind and cold, and relax muscles and meridians; Shenshu (BL23) belonging to the Bladder Meridian of Foot-Taiyang, which can tonify kidney and nourish blood, activate blood and soothe liver, and relieve lower back pain; Geshu (BL17) belonging to the Bladder Meridian of Foot-Taiyang and being one of the eight influential points, with effects of nourishing blood and harmonizing nutritive qi, activating blood and unblocking vessels, and regulating qi to relieve pain; Weizhong (BL40) belonging to the Bladder Meridian of Foot-Taiyang, which can regulate qi, widen the middle, tonify kidney and strengthen bone; Ciliao (BL32) belonging to the Bladder Meridian of Foot-Taiyang, which supplements the lower jiao, strengthens the waist and benefits dampness; and Xuehai (SP10) belonging to the Spleen Meridian of Foot-Taiyin, which activates blood and resolves stasis, supplements blood and nourishes blood, and guides blood back to its meridian. Through five sessions of cupping therapy, the patient' s symptoms were significantly relieved.

In summary, the application of cupping therapy in conservative treatment of lumbar disc herniation is safe, simple to operate, demonstrates significant efficacy, and shows no adverse reactions, making it worthy of reference and promotion.

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