Nursing Experience of Balanced Cupping Combined with Warm Moxibustion Apparatus Therapy in the Treatment of Cervical Spondylotic Radiculopathy of Qi Stagnation and Blood Stasis Type: A Case Report

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Date: 2023-10-12T00:00:00+00:00

Abstract

This article summarizes the nursing experience in treating one case of cervical spondylotic radiculopathy of qi stagnation and blood stasis type using balanced cupping combined with warm moxibustion device therapy. By applying syndrome differentiation and nursing care based on Traditional Chinese Medicine, implementing balanced cupping technique, integrating warm moxibustion device therapy, and strengthening guidance on functional exercise, dietary regimen, and daily living, the patient's symptoms were effectively improved and suffering was alleviated.

Full Text

Nursing Experience in Treating One Case of Cervical Spondylotic Radiculopathy with Qi Stagnation and Blood Stasis Using Balanced Cupping Combined with Warm Moxibustion Apparatus

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Abstract

This paper summarizes the nursing experience in managing a patient with cervical spondylotic radiculopathy (CSR) of qi stagnation and blood stasis pattern using a combination of balanced cupping therapy and warm moxibustion apparatus. By applying nursing care based on Traditional Chinese Medicine (TCM)

syndrome differentiation, implementing balanced cupping techniques combined with warm moxibustion apparatus, and strengthening guidance on functional exercise, diet, and daily living activities, we effectively alleviated the symptoms and reduced suffering in this patient with CSR characterized by qi stagnation and blood stasis.

Keywords: Cervical spondylotic radiculopathy; qi stagnation and blood stasis pattern; balanced cupping; warm moxibustion apparatus

Introduction

Cervical spondylosis is a common and frequently occurring disease whose incidence has been rising in recent years, seriously affecting people's normal work and daily life. The World Health Organization (WHO) recently listed cervical spondylosis as the second most stubborn disease in its "Global Top Ten Stubborn Diseases" report. Among all types of cervical spondylosis, cervical spondylotic radiculopathy (CSR) has the highest incidence rate, accounting for 60%–70% of cases [1]. CSR is a complex of symptoms caused by degenerative changes in cervical intervertebral discs and surrounding structures, osteophyte formation, or altered cervical physiological curvature that stimulates or compresses cervical nerve roots. In addition to common symptoms such as neck and shoulder pain and upper limb numbness, it is often accompanied by limited cervical spine mobility [2].

Balanced cupping, guided by "balance theory," targets key acupoints on the neck, back, and meridians using techniques including flash cupping, rubbing cupping, moving cupping, shaking cupping, and retaining cupping. It utilizes both the negative pressure and thermal effects of cupping to remove obstruction, improve local blood circulation, and promote normal qi and blood flow, thereby relieving pain [3].

Moxibustion, known as "jiuru" in ancient times and also called "aijiu," is a therapeutic method that uses mugwort wool as the main material to directly or indirectly burn and fumigate body surface acupoints. It constitutes a major component of acupuncture and moxibustion science and represents one of China's important traditional non-pharmacological therapies [4]. This method possesses multiple therapeutic effects including warming meridians and collaterals, raising yang, promoting qi and blood circulation, dispelling cold and dampness, reducing swelling and dissipating masses, and restoring yang from collapse, and can be used for health preservation. Due to variations in the form of mugwort preparation and application methods, moxibustion can be divided into several types including stick moxibustion, cone moxibustion, warm needle moxibustion, and warm moxibustion apparatus. To free practitioners' hands and make moxibustion more convenient, accessible, and safe, the warm moxibustion apparatus was developed [5].

The combined application of balanced cupping technology and warm moxibustion apparatus can significantly improve pain, limited neck mobility, and other

symptoms in CSR patients with qi stagnation and blood stasis pattern, yielding satisfactory therapeutic outcomes.

Case Presentation

Clinical Data

The patient was a 46-year-old male admitted to the Tuina Department on September 12, 2023, with a chief complaint of "neck and back pain for over 10 days." He reported neck and back pain with limited cervical mobility, exacerbated right back pain during neck extension, soreness and heaviness in the right back, and occasional right upper limb heaviness. Physical examination revealed no cervical deformity or torticollis, with symmetrical bilateral supraclavicular fossae. Tenderness was positive at the spinous and transverse processes of C5–7 and T1–3 and at the medial borders of both scapulae, with negative radiation pain. Cervical mobility was limited: flexion 15°, extension 15°, left lateral flexion 20°, and right lateral flexion 20°. Bilateral cervical muscles were tense with increased elasticity. The neck rotation test was negative, the right brachial plexus tension test was positive, and bilateral foraminal compression tests were positive. Skin temperature and sensation in all four limbs were normal, with grade V muscle strength and normal muscle tone. The patient had normal appetite and sleep, with regular bowel movements and urination. The tongue was dark red with a thin white coating, and the pulse was wiry.

The patient had no past medical history and no history of drug or food allergies. TCM diagnosis: Neck Bi disease with qi stagnation and blood stasis pattern. Western medicine diagnosis: Cervical spondylotic radiculopathy. The patient was prescribed balanced cupping therapy focusing on Dazhui (GV14), Jianjing (GB21), and Dazhu (BL11) acupoints, combined with warm moxibustion apparatus treatment on cervical Jiaji points, Gaohuang (BL43), and Jianjing (GB21).

Assessment

Pain Assessment Using Numerical Rating Scale (NRS) The NRS is primarily used for pain assessment with four grades: 0 indicates no pain; 1–3 indicates mild pain; 4–6 indicates moderate pain; and 7–10 indicates severe pain, with higher scores representing stronger pain intensity. The patient's neck and back pain was assessed at 4 points, indicating moderate pain intensity.

Cervical Range of Motion (ROM) Due to limited resources, a goniometer was used for measurement. Normal cervical mobility ranges are: flexion/extension 35°–45°, lateral bending 45°, and rotation 60°–80°. The patient's cervical ROM was flexion 15°, extension 15°, left lateral flexion 20°, and right lateral flexion 20°, demonstrating significantly limited cervical mobility.

Nursing Diagnoses

1. **Pain:** Positive tenderness at C5–7 and T1–3 spinous and transverse processes, positive tenderness at bilateral scapular medial borders, positive right brachial plexus tension test, and positive bilateral foraminal compression tests.
2. **Limited Neck Mobility:** Cervical ROM measurements of flexion 15°, extension 15°, left lateral flexion 20°, and right lateral flexion 20°.

Nursing Interventions

Traditional Chinese Medicine Techniques

Balanced Cupping Therapy The patient was placed in a prone position with the treatment area exposed. The procedure consisted of five steps: (1) **Flash cupping:** Performed along both sides of the bladder meridian on the neck and both shoulders for three cycles, focusing on key acupoints including Dazhui (GV14), bilateral Jianjing (GB21), and Dazhu (BL11). (2) **Rubbing cupping:** Building on flash cupping, the heat retained in the cups was used to perform circular movements along the neck, following the sequence of contralateral bladder meridian first, then governor vessel, then ipsilateral bladder meridian, driving local skin movement to allow heat penetration into the cupped areas. (3) **Moving cupping:** A small amount of moisturizing oil was applied to the neck and shoulders, and cups were moved back and forth along neck meridians for three cycles with slow, gentle movements, maintaining patient comfort. (4) **Shaking cupping:** Using wrist strength to shake cups left and right along both bladder meridians and the trapezius muscles of both shoulders for three cycles. These two methods enhance nerve and muscle excitability, accelerate blood circulation, and promote metabolism. (5) **Retaining cupping:** Appropriately sized cups were placed on Dazhui (GV14), Jianjing (GB21), Dazhu (BL11), and areas with abundant neck muscles for 5 minutes. (6) **Cup removal:** The cup was held while the thumb of the other hand pressed the skin at the cup rim to allow air entry for removal. Treatment was administered twice weekly as one course, with a total of two courses.

Warm Moxibustion Apparatus Therapy Using a warm moxibustion apparatus on Dazhui (GV14), Gaohuang (BL43), and Jianjing (GB21) acupoints, moxa cones were suspended 2–3 cm above the skin until the area became flushed. Treatment was administered daily, with 7 days constituting one course, for a total of two courses.

Health Education

Functional Exercise Based on the patient's condition, we guided him progressively through neck exercises including cervical traction, neck-arm resistance, shoulder shrugging and chest expansion, head raising to look at the sky,

head raising to look at the moon, and the cervical health "rice character" exercise, emphasizing self-monitoring to avoid excessive force.

Dietary Guidance The patient was advised to consume foods that promote qi and blood circulation and resolve stasis, such as hawthorn, white radish, and wood ear mushrooms, while avoiding fried, fatty, and rich foods.

Lifestyle Modifications The patient was instructed to avoid prolonged head-down work. When working at a desk, he should move his neck every 1–2 hours by looking up, resting his head against the chair back, or rotating his head. Chair height should be moderate, allowing feet to touch the ground when sitting upright. He should avoid half-lying in bed with a flexed neck and inclined pillow while watching TV or reading. During sleep, the head and neck should maintain a straight line without twisting, with the cervical portion of the pillow slightly higher than the head to prevent neck suspension.

Outcome Evaluation

The treatment efficacy was evaluated at three time points: (1) before intervention, (2) after the first treatment course, and (3) after the second treatment course. The patient demonstrated progressive improvement in pain scores and cervical range of motion throughout the treatment period.

Discussion

Ancient and modern TCM physicians believe that CSR can result from constitutional deficiency, prolonged sitting with improper pillow support, and invasion of wind-cold-damp pathogens, falling under the category of "neck Bi disease." According to TCM theory, "blood is the mother of qi" and "qi stagnation leads to blood stasis." Due to long-term desk work, CSR patients often experience sluggish qi and blood circulation, consequently presenting with qi stagnation and blood stasis patterns [6]. Liu Sheng et al. [7] have pointed out that the pathogenesis of CSR with qi stagnation and blood stasis lies in obstructed meridian qi flow, following the principle that "when meridians are unobstructed, there is no pain."

Cupping therapy provides strong stimulation to the skin, and cutaneous nerve endings transmit these signals to the brain center, reestablishing the balance of excitation and inhibition in the brain and thereby improving systemic fatigue status and relieving local pain symptoms [8]. Balanced cupping is a cupping technique based on TCM meridian theory, primarily acting on the bladder and governor meridians. This causes capillary dilation in the skin along the meridians, promotes histamine release, and enhances the body's self-repair capacity. Simultaneously, the heat from the cups strengthens local qi and blood, accelerates metabolic waste transport, promotes inflammation resolution, and relieves pain. Additionally, during treatment, Dazhui (GV14), Jianjing (GB21), and

Dazhu (BL11) acupoints receive multiple mechanical stimulations. Dazhui, also known as "Bailao," is where qi, blood, and yang qi converge, possessing the effect of supplementing qi and strengthening yang. Jianjing (GB21) treats shoulder and back Bi pain, inability to raise the arm, and neck rigidity. Dazhu (BL11), also called Beishu, belongs to the bladder meridian and is a branch point of the governor vessel, with the effect of strengthening tendons and bones, treating neck and back disorders. Balanced cupping's repeated pulling, ironing, and compression of Dazhui, Dazhu, and Jianjing acupoints can stimulate the points, unblock meridians, harmonize qi and blood, improve bodily functions, and effectively reduce neck pain while improving cervical mobility.

Moxibustion possesses effects of regulating qi and blood, dispelling cold and dampness, and warming meridians and collaterals, providing certain therapeutic benefits for cervical spondylosis [9]. As previously introduced, Dazhui (GV14) and Jianjing (GB21) have been described above and will not be repeated. The "Zhenjiu Shenshu" (Divine Book of Acupuncture and Moxibustion) by Qiongyao Zhenren of the Northern Song Dynasty states: "For whole-body pain, raise yang; lift qi with careful massage; for tendon pain, use diaphoresis; moxibustion at Gaohuang is excellent, avoid needling." This provides guidance for using moxibustion in Bi syndrome treatment. Pressing Gaohuang (BL43) can treat shoulder muscle stiffness and soreness. Moxibustion at Dazhui (GV14), Gaohuang (BL43), and Jianjing (GB21) can promote neck and shoulder blood circulation, activate meridian qi, relax tendons and collaterals, and relieve pain and numbness symptoms, demonstrating certain effectiveness and feasibility. Simultaneously, using a fixed warm moxibustion apparatus offers advantages of non-slippage, stability, and high safety, positively contributing to improved nursing service quality.

Conclusion

In summary, the combined application of balanced cupping and warm moxibustion apparatus therapy can effectively alleviate symptoms in CSR patients with qi stagnation and blood stasis pattern. This approach demonstrates significant efficacy and safety, effectively reducing patient suffering and warranting clinical promotion.

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