

“体医融合”背景下健身气功八段锦对脑卒中人群平衡功能的有效性研究

张艳梅

西安体育学院，西安市 710068

摘要：研究目的：脑卒中作为全球范围内致残率最高的疾病之一，患者发病后由于中枢神经系统受损，特别是小脑部位严重病变者会出现不同程度的平衡功能障碍，导致躯体控制能力下降，平衡稳定性受到一定的影响，容易发生跌倒导致二次损伤，影响患者的日常生活能力及生活质量。因此，改善和提高脑卒中患者的平衡功能，是康复治疗中的重要内容之一。传统康复训练手段虽有一定疗效，但存在训练枯燥、依从性低等问题。近年来，“体医融合”理念作为体育运动与医疗健康相结合的综合性健康促进模式，强调通过运动干预与医学治疗的协同作用提升康复效果，而健身气功八段锦作为一项融合了中医经络理论与传统身心锻炼方式的中国传统养生运动文化，与呼吸技巧相结合通过一系列柔和连贯的动作，可以改善心肺功能和提升机体耐力，同时该项运动需要在各个方位保证重心的不断迁移和动态稳定，来增强多个方向的运动控制能力，有利于增强动态平衡，从而提高患者的生活自理能力，被认为可能对脑卒中患者的平衡功能具有潜在作用。然而，现有的临床研究多集中于八段锦对老年人群或慢性病患者的健康促进效果，针对脑卒中人群的平衡功能干预研究仍显不足。本研究旨在探讨“体医融合”背景下，八段锦对脑卒中患者平衡功能的有效作用，明确其作为辅助康复手段的可行性，为优化脑卒中康复方案提供循证依据。**研究方法：**本研究采用文献资料法，以“体医融合”、“八段锦”、“脑卒中”、“平衡功能”等为中文关键词，“Baduanjin”、“Stroke”、“Balance”等为英文关键词，在中国知网、PubMed、Web of Science 等数据库进行系统检索，收集 2020 年至 2025 年相关文献。对筛选出的文献进行整理与分析，归纳和总结八段锦在脑卒中平衡功能障碍方面的康复机制，为临床应用提供理论依据与方法参考。**研究结果：**（1）平衡的维持需要感觉输入、中枢整合、运动控制三个方面进行协调，八段锦的动作模涉及到了对躯干及四肢所有参与运动的肌群进行兴奋与抑制的同时刺激，还通过缩唇呼吸、腹式呼吸等技巧，将肢体运动与呼吸吐纳相结合，通过对高级中枢进行刺激，促进大脑皮层与脊髓运动神经元的协同工作，强化中枢神经系统对肌肉的控制能力，帮助脑卒中患者从视觉、前庭觉、本体感觉多方面增强下肢和腰腹部的肌肉力量，是在意识与物质两个层面上激发人体潜能的一项温和的有氧运动。（2）八

段锦运动通过增强核心肌群及下肢肌肉力量、改善神经整合及心理状态，可以有效提升脑卒中患者的平衡功能，训练强度超过 8 周患者可显著提升其日常生活能力（MBI 评分）和生活质量。（3）八段锦的动作设计以脊柱中线为中轴，通过下肢的屈曲伸直降低患者的重心偏移速度和单位面积轨迹长度来增强下肢负重和控制能力，从而减少跌倒概率，增强平衡功能。其特点是动作连贯柔和、协调而缓慢，有助于机体建立正常的运动模式，同时可以起到舒经活络，调畅周身气血运行，改善血液循环，提高心肺耐力的积极作用。（4）适时适量的进行八段锦运动可以通过副交感神经激活降低应激反应，缓解卒中患者的焦虑情绪，心理状态的改善也可减少因恐惧跌倒导致的运动限制，间接提升平衡训练依从性。**研究结论：**八段锦作为一种低强度、高安全性的身心整合运动形式，能够通过改善身体功能与心理状态协同提升患者的整体健康水平，易于被患者接受且依从性较高，可作为常规康复训练的有效补充手段。系统的进行八段锦运动可显著改善脑卒中患者的平衡能力和生活质量，并降低发生跌倒的风险。另外，其“调身、调息、调心”的特点也与康复医学中“功能恢复-心理适应-社会参与”的目标高度契合，因此为脑卒中患者的综合康复提供了新思路，未来研究应进一步探索其作用机制，优化干预方案，并推动传统运动在康复医学中的标准化应用，为脑卒中患者的功能恢复与健康促进提供更为丰富的策略选择。

关键词：体医融合；八段锦；脑卒中；平衡

Effectiveness of Health Qigong Baduanjin on Balance Function in Stroke Patients under the Integration of Sports and Medicine

Yanmei Zhang

Xi'an Physical Education University, Xi'an 710068, China

Abstract: Objective of the study: As one of the diseases with the highest disability rate worldwide, stroke patients suffer from different degrees of balance dysfunction due to the damage to the central nervous system, especially the severe lesions in the cerebellum, which leads to the decrease of body control ability and the stability of balance, and makes them prone to fall and cause secondary injuries, which affects the patients' daily life ability and quality of life. Therefore, improving and enhancing the balance function of stroke patients is one of the important contents of rehabilitation treatment. Although traditional rehabilitation training methods have certain efficacy, there are problems such as boring training and low compliance. In recent years, the concept of “physical and medical integration”, as a comprehensive health promotion model combining sports and medical health, emphasizes the synergistic effect of sports

intervention and medical treatment to enhance the effect of rehabilitation, and the fitness qigong eight-duan brocade, as a traditional Chinese health exercise culture integrating the meridian theory of traditional Chinese medicine and traditional physical and mental exercises, is combined with the breathing technique through a series of gentle and coherent exercises. As a traditional Chinese health exercise that combines the theory of Chinese medicine and traditional physical and mental exercises, the combination of breathing techniques with a series of soft and coherent movements can improve cardiorespiratory function and enhance physical endurance. At the same time, the exercise needs to ensure the continuous migration of the center of gravity and dynamic stabilization in all directions to enhance the ability to control movement in multiple directions, which is conducive to the enhancement of dynamic balance, thus improving the self-care ability of the patients, which is thought to be potentially useful for the equilibrium function of the patients suffering from strokes. However, most of the existing clinical studies have focused on the health-promoting effects of Baduanjin on the elderly or patients with chronic diseases, and there are still insufficient studies on the intervention of balance function in the stroke population. This study aimed to investigate the effective effect of Baduanjin on the balance function of stroke patients under the background of “Body-Medicine Integration”, to clarify the feasibility of Baduanjin as an auxiliary means of rehabilitation, and to provide an evidence-based basis for optimizing stroke rehabilitation programs.

Methods: The study was conducted using the literature method, with the keywords “body-medicine integration”、“eight-duanjin”、“stroke”and“balance function”as characters, systematic searches were conducted in databases such as China Knowledge, PubMed, Web of Science, etc. to collect relevant literature from 2020 to 2025. The screened literature was sorted and analyzed to summarize and conclude the rehabilitation mechanism of Baduanjin in balance dysfunction in stroke, providing theoretical basis and methodological reference for clinical application.

Results: (1) The maintenance of balance requires the coordination of sensory input, central integration, and motor control. The movement pattern of Baduanjin involves the simultaneous stimulation of excitation and inhibition of all the muscle groups involved in the movement of the trunk and limbs, and it also combines the movement of the limbs with respiration and exhalation through the techniques of lip-contracting breathing and abdominal breathing, etc. It promotes the synergy of the cerebral cortex and the spinal cord through the stimulation of higher centers, and strengthens the coordination of motor neurons. By stimulating the higher centers, it promotes the synergy between the cerebral cortex and the spinal cord, strengthens the central nervous system's ability to control

the muscles, and helps the stroke patients to strengthen the muscle power of the lower limbs and the waist and abdomen from the visual, vestibular, and proprioceptive aspects, and it is a mild aerobic exercise to stimulate the human body's potentials at both the conscious and material levels. (2) By strengthening the core muscles and lower limb muscles, improving the neural integration and psychological state, the Baduanjin exercise can effectively improve the balance function of stroke patients, and the training intensity for more than 8 weeks can significantly improve the ability of daily life (MBI score) and the quality of life of patients. (3) The movements of Baduanjin are designed with the spinal midline as the central axis, and the flexion and extension of the lower limbs reduces the speed of the patient's center of gravity deviation and the length of the trajectory per unit area to enhance the ability of the lower limbs to bear weight and control the lower limbs, thus reducing the probability of falling and enhancing the balance function. It is characterized by consistent, soft, coordinated and slow movements, which helps the body to establish a normal movement pattern, and at the same time, it can play a positive role in relaxing the meridians and activating the collaterals, regulating the flow of qi and blood around the body, improving blood circulation, and improving the endurance of heart and lungs. (4) The timely and appropriate amount of Badaanjin exercise can reduce the stress response through parasympathetic activation, alleviate the anxiety of stroke patients, and the improvement of the psychological state can also reduce the limitation of movement due to the fear of falling, which can indirectly improve the adherence to the balance training.

Conclusion: As a low-intensity, high-security form of physical and mental integration exercise, Ba Duan Jin can improve the overall health of patients by improving physical function and psychological status, and is easily accepted by patients with a high degree of compliance, so it can be used as an effective supplement to conventional rehabilitation training. Systematic Badaanjin exercises can significantly improve the balance and quality of life of stroke patients and reduce the risk of falling. In addition, its characteristics of “regulating the body, regulating the breath, and regulating the mind” are also highly compatible with the goal of “functional recovery, psychological adaptation, and social participation” in rehabilitation medicine, which provides a new way of thinking for the comprehensive rehabilitation of stroke patients, and future studies should further explore its role and mechanism, optimize the intervention program, and promote the rehabilitation of stroke patients. Future research should further explore its mechanism, optimize the intervention plan, and promote the standardized application of traditional

exercises in rehabilitation medicine, so as to provide more abundant strategic choices for the functional recovery and health promotion of stroke patients.

Keywords: Sports-Medicine Integration; Baduanjin; Stroke; Balance Function