

The Influence of Eight-section Brocade Exercise Combined with Prokin Balance Training Device on Balance Function and Walking Ability of Elderly Stroke Hemiplegic Patients

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Abstract

Background: The incidence rate of stroke and consequent disability in China is increasing year by year. **Objectives:** The objective of this study was to observe the influence of the Eight-section Brocade exercise combined with the Prokin balance training device on balance function and walking ability of elderly stroke hemiplegic patients. **Materials and Methods:** Sixty stroke patients who met the inclusion criteria were randomly divided into an experimental group (30 cases) and a control group (30 cases). The control group received conventional rehabilitation training, whereas the experimental group received rehabilitation treatment using an Eight-section Brocade exercise combined with a Prokin balance training device in addition to the conventional training. The differences in the scores of the Fugl-Meyer balance scale (FM-B), Berg Balance Scale (BBS), functional ambulation category scale (FAC), and average trace error (ATE) before and after 8 weeks of treatment were evaluated. **Results:** Compared with the control group, the experimental group showed a significant improvement in the FM-B scores, BBS scores, FAC scores, and ATE index, with statistically significant differences in improvement values ($P < 0.05$). **Conclusion:** The combination of Eight-section Brocade exercise and Prokin balance training device can effectively improve the balance function of stroke hemiplegic patients, and it has a significant promoting effect on improving patients' walking ability, proprioceptive ability, and activities of daily living.

Key words: Balance function, Eight-section Brocade exercise, Prokin balance training device, stroke, walking ability