

A META-ANALYSIS OF THE REHABILITATION EFFECTS OF EMGBFT COMBINED WITH MT ON LOWER LIMB FUNCTION AND ACTIVITIES OF DAILY LIVING IN PATIENTS AFTER STROKE

Shunhao Feng, Hao Guo

Beijing Sport University, China
e-mail: 2483531603@qq.com

Background and Aims

Lower limb dysfunction is a major problem in stroke patients. To systematically evaluate the rehabilitation effect of Myoelectric biofeedback(EMGBFT) combined with mirror therapy (MT) on lower limb function and daily living ability of stroke patients with hemiplegia.

Results

A total of nine randomized controlled trials involving 750 patients were included. The results showed that compared with the EMGBFT group alone, FMA-LE score [MD=2.82,95%CI (1.45, 4.20), $P < 0.05$] and BBS score [MD=3.68, 95%CI (2.22,) in the combined group were significantly higher than those in the EMGBFT group alone. 5.15), $P < 0.05$] and MBI scores [MD = 7.21, 95% CI (3.92, 10.50), $P < 0.05$] were significantly improved; Compared with the single MT group, the combined group had FMA-LE [MD=3.28,95%CI (0.29,6.26), $P < 0.05$], BBS [MD=3.20,95%CI (1.67,4.72), $P < 0.05$] scores and MBI The scores [MD=5.43,95%CI (2.36,8.50), $P < 0.05$] were significantly higher. Compared with conventional treatment group, FMA-LE score [MD=3.73,95%CI (3.23, 4.23), $P < 0.05$] and BBS score [MD=6.18,95%CI (3.09, 9.26), $P < 0.05$] and MBI score [MD= 9.55, 95%CI (2.29,16.80), $P < 0.05$] were significantly increased.

Conclusion

Compared with EMGBFT or MT alone or conventional therapy, EMGBFT combined with MT can improve lower limb motor function, balance function and activity of daily living ability in stroke patients more significantly.

Keywords: myoelectric biofeedback, mirror therapy,stroke,Meta-analysis