The Effect of Mirror Therapy on Finger Motor Dysfunction after Stroke

Shogo HIRAGAMI, OT, MS, Yu INOUE, PT
Research Institute of Health and Welfare, Kibi International University

Shogo HIRAGAMI, OT, MS
Department of Rehabilitation, Kurashiki Rehabilitation Hospital

Yu INOUE, PT
Department of Rehabilitation, Kurashiki Heisei Hospital

Yukari SATO, PhD, Kojiro KAGAWA, PT, PhD
Faculty of Health and Welfare Science, Department of Health and Welfare Science, Okayama Prefectural University

Kazuhiro HARADA, PT, PhD
Department of Physical Therapy, Faculty of Health and Welfare Science, Kibi International University

**Purpose:** To evaluate the effects of mirror therapy on finger motor dysfunction after stroke.

**Methods:** Fourteen convalescent stroke patients were randomly assigned to the mirror therapy group trained thirty minutes of mirror therapy in addition to conventional rehabilitation program or control group trained conventional therapy only, and then conducted each 4-week training program. The primary outcome measure was the Brunnstrom recovery stage (Brs), Fugl-Meyer assessment (FMA) sub-scores for the upper extremity, Wolf motor function test (WMFT) and the self-care items of the Functional independence measure.

**Results:** The scores of the Brs for the hand, FMA for the wrist and hand, and the WMFT improved more in the mirror therapy group than in the control group (all p < 0.05). Furthermore, these outcome change scores between pretreatment and posttreatment on mirror therapy group reached the distribution based minimal clinically important difference.

**Conclusions:** These results suggested that mirror therapy in addition to a conventional rehabilitation program can be effectiveness for finger motor dysfunction after stroke.