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課程・論文の別	学位規則第 4 条第 1 項該当
学位論文題名	Effects of Dynamic Sitting Exercise with Delayed Visual Feedback in the Early Post-Stroke Phase: A Pilot Double-Blinded Randomized Controlled Trial 発症早期脳卒中患者における遅延視覚フィードバックを用いた動的座位練習の効果：二重盲検ランダム化比較試験
論文審査委員	主査 教授 網本 和 委員 准教授 金子 文成 委員 准教授 儀間 裕貴

【論文の内容の要旨】

Introduction : Sitting ability in the early post-stroke phase affects functional balance ability and other prognoses. We investigated whether dynamic sitting exercise with delayed visual feedback in the mediolateral and anteroposterior directions affected postural control in the early post-stroke phase.

Methods : In this pilot randomized controlled trial, 27 hemiparetic stroke patients were randomized to experimental (n = 13) and control (n = 14) groups. Dynamic sitting exercise (30 times/day, 5 days/week) in the mediolateral and anteroposterior directions, with 500-ms-delayed (experimental group) or real-time (control group) visual feedback on a computer, was added to usual physical therapy. We evaluated the postural assessment scale for stroke (PASS), static and dynamic sitting balance tasks, the

five-times sit-to-stand test, trunk impairment scale, functional ambulation category, and functional independence measure–motor items.

Results : In intention-to-treat analysis, the experimental group demonstrated a significant intervention effect on the PASS score ($p < 0.05$). The mean percentage of body weight on the moving side in the lateral sitting task and the number of successes in the five-times sit-to-stand test were significantly higher in the experimental group than those in the control group ($p < 0.05$).

Conclusion : The proposed exercise improves postural control, dynamic sitting balance, and sit-to-stand ability in early post-stroke patients.