氏 名 深田 和浩

所 属 人間健康科学研究科 人間健康科学専攻

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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 diagonally aligned sitting training with a tilted surface

on sitting balance for low sitting performance in the early phase

after stroke: a randomised controlled trial

(発症早期の座位能力が低下した脳卒中患者に対する対角平面上の

座位傾斜練習が座位バランスに与える効果:無作為化比較試験)

論文審查委員 主查 教 授 網本 和

委員 教 授 池田 由美

委員 准教授 古川 順光

## 【論文の内容の要旨】

Purpose: To clarify the effects of diagonally aligned sitting training using a tilted surface on sitting balance for patients with low sitting performance in the early phase after stroke.

Materials and methods: This was an assessor-blinded randomised controlled trial. The experimental group used a surface tilted 10° backward and down toward the most affected side; the control group trained on a horizontal surface. Both groups were asked to move their trunk diagonally forward toward the least affected side. Participants performed the activity 40 times/session for seven sessions over 8 days. Sitting performances were assessed using the function in sitting test (FIST), subjective postural vertical (SPV) on the diagonal plane, and trunk impairment scale (TIS).

Results: Thirty-three stroke patients were randomly allocated into two groups. Treatment effects differed significantly: mean differences between groups for FIST (total score, static, dynamic, scooting, and reactive) were 8.96, 2.35, 3.01, 1.27, and 1.72 points, for the mean SPV value was 1.82°, and for the TIS (total score and static) were 1.87 and 1.58 points, respectively. These results were more favourable in the experimental group.

Conclusions: Diagonally aligned sitting training on a tilted surface improves sitting balance and modulates the SPV compared with a horizontal surface.