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## The effects of visual control whole body vibration exercise on balance and gait function of stroke patients.

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Abstract

**[Purpose]** This study aims to verify the effects of visual control whole body vibration exercise on balance and gait function of stroke patients.

**[Subjects and Methods]** A total of 22 stroke patients were randomly assigned to two groups; 11 to the experimental group and 11 to the control group. Both groups received 30 minutes of Neurodevelopmental treatment 5 times per week for 4 weeks. The experimental group additionally performed 10 minutes of visual control whole body vibration exercise 5 times per week during the 4 weeks. Balance was measured using the Functional Reach Test. Gait was measured using the Timed Up and Go Test.

**[Results]** An in-group comparison in the experimental group showed significant differences in the Functional Reach Test and Timed Up and Go Test. In comparing the groups, the Functional Reach Test and Timed Up and Go Test of the experimental group were more significantly different compared to the control group.

**[Conclusion]** These results suggest that visual control whole body vibration exercise has a positive effect on the balance and gait function of stroke patients.

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## Can Galileo Training increase mobility and balance in stroke patients

## The answer is: YES

Training

This study investigated the effects of Galileo Training on Balance and Mobility in stroke patients (Galileo Delta tilt-table, deep squat, 25Hz, pos. 2.5, 10 min., 5/week, 4 weeks). Both groups received additional 30 minutes of standard neuro-developmental therapy. The Galileo group showed significantly higher results with up to 30% improvement in times up & go tests and 32% improvement in the functional reach test.



Similar to <u>#GRFS40</u> this study examined the effects of Galileo Training on balance (functional reach test) and mobility (times up & go test, TUG) in stroke patients (stroke since at least 6 months). For the Galileo Training a Galileo Delta tilt-table in upright position was used.

The patients did squat at 25Hz (pos. 2.5, 10 minutes) with their back leaning against the Galileo Delta for 5 times per week over a period of 4 weeks. Both groups received additional 30 minutes of standard neuro-developmental therapy. With only additional 10 minutes the Galileo groups showed significantly higher results with improvements over 30% in balance and mobility.

The same therapy could have been realized using a standard Galileo (standing) device – the advantage of using the Galileo Delta tilt-table was that the patients felt more secure since they could lean with their back against the Galileo Delta).

Using a standing device however could have further improved the effects of the Galileo Training on balance.