

Improvement in Balance After Bobath Concept in Acute and Chronic Stroke Patients, Using Berg Balance Scale Test

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Abstract

Balance and gait disorders of acute and chronic stroke patients prevent them to walk and stay independent in activities of daily-living. The Bobath concept is often used in neurorehabilitation of stroke patients and in the literature mainly good results are presented with the improvement of sitting and walking balance. In our study with twenty-six stroke patients we wished to find out if ten sessions of neurorehabilitation with the Bobath concept can improve balance, walking pattern, quality of life, independence in daily-life activities, and diminish fear of falling in patients after stroke.

Berg Balance Scale Test Before and after ten sessions of neurorehabilitation with the Bobath concept showed importantly improved balance confidence and stability in most of patients, which helped them to sit independently, walk or improve their gait-pattern, as well as balance, and take active part in or stay independent in their daily-life activities.

Keywords: Acute stroke, Balance, Berg Balance Scale Test, Bobath concept, Daily-living activities, Fear of Falling, Gait.

Introduction:

Cerebrovascular insult, more commonly known as stroke, is one of the most common causes of death and disability in the world (1-4). Balance and gait disorders are often present at acute and chronic stroke patients (1-4). If they are capable of walking, poor balance and fear of falling often prevent them to walk and stay independent in activities of daily-living (5-10). Improvement of sitting and walking balance is one of main goals of neurorehabilitation in patients after stroke (7-10). The Bobath concept is often used in neurorehabilitation of stroke patients and in the literature mainly good results are presented (7-10).

Objective: The aim of the study was to find out, if ten sessions of neurorehabilitation with the Bobath concept can improve balance, walking pattern, quality of live, independence in daily-life activities, and diminish fear of falling in patients after stroke.

Method: In years 2018 and 2019 twenty-six stroke patients were included in the study. Before and after ten sessions of neurorehabilitation with the Bobath concept patients performed Berg Balance Scale Test.

Results: Berg Balance Scale Test showed importantly improved balance confidence and stability in most of patients. In the end patients could sit independently, walked or improved their gait-pattern, as well as balance, which helped them to take active part in or stay independent in their daily-life activities.

Conclusions: Neurorehabilitation with Bobath concept can help patients to improve balance, gait-pattern, quality of life, independence in activities of daily-living and diminish fear of falling.

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