

Abstract:

This thesis concentrates an objective evaluation of therapy based on the principle of sensorimotor stimulation. The objectivity is aided by the use of the stabilometric platform Wii Balance Board and diagnostical and therapeutical Stereo Balance software. The aim is to demonstrate the positive effect of therapy on the state of postural stability in patients with brain damage and to evaluate possibility of using the Stereo Balance system as an objective evaluation of therapy.

In this thesis two patients have been studied. The monitoring of stability parameters was done with the aid of the Stereo Balance system. Subsequently, analysis and interpretation was provided by tables and graphs.

A stabilometric platform – the Wii Balance Board and Physio Fun software – was used for the additional assesment of postural stability. The transfer of acquired skills by therapeutic interventions in ordinary daily activities was monitored by testing the Functional Independence Measure.

Key words:

Stereo Balance, stabilometric platform Wii Balance Board, stabilometric examination, brain damage, postural stability, sensorimotor stimulation