

BACHELOR THESIS ABSTRACT

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Title:

Use of vestibular rehabilitation in patients after stroke

Abstract:

The thesis focuses on the application of Vestibular Rehabilitation Therapy (VRT) in the treatment of Cerebrovascular accident (CVA). Annually, on average 50 thousand patients are hospitalised when diagnosed with CVA, of those only 25 % do not suffer the consequences and fully recover to their former health. Vestibular disorders account for one of the consequences of CVA. Patients suffer from dizziness, imbalance and the fear of falling down. To compensate for the deficiencies, VRT could be availed to improve stability, dizziness intensity, lower the risk of falling, ultimately leading to patient's social and occupational activity return.

The thesis constitutes theoretical and practical parts. The former part is divided into 4 sections. The first section discusses the issue of CVA. The second one describes the vestibular system. The third section provides an insight to findings of VRT. The last section summarises the key concepts of postural stability. The practical part contains case history of three patients diagnosed with CVA and related balance disorders. Special rehabilitation program reflecting VRT principles was designed based on patients' initial health examination. To evaluate the results objectively, following methods were used: PhysioSensing Plate, 10 Meter Walk Test, Timed Up and Go Test. The aim of this thesis is to apply an individually designed program, based on VRT, to patients diagnosed with CVA. The results showed that application of this program led to improvements in postural stability and balance abilities.

Key words: vestibular rehabilitation, vestibular system, dizziness, stroke, postural stability