

Analysis of limiting factors in vestibular rehabilitation

Maria Luiza Diniz, Diego André Resende Assis, Najlla Lopes de Oliveira Burle, Patrícia Cotta Mancini
Federal University of Minas Gerais, Minas Gerais – Brazil
(marialuizadnz@hotmail.com)



INTRODUCTION

Vestibular rehabilitation (VR) is a specialized form of therapy intended to alleviate problems caused by vestibular disorders, primarily vertigo and dizziness, gaze instability, and/or imbalance and falls based in the neuroplasticity.



Spatial orientation, visual stability, self-confidence, social activities, and activities of daily living may be improved by VR.

- Dizziness Handicap Inventory (DHI) is a self perception questionnaire that evaluates the functional, physical and emotional aspects in individuals with vestibular disorders.
- The VR results can be measured by the DHI and effectiveness is achieved when DHI's total score decreases at least 18 points from pre to post treatment.



OBJECTIVE



Assess the factors that may contribute to a limited benefit on the VR based on the pre treatment compared to post treatment DHI score.

METHODS

A descriptive study approved by the Ethics Committee under number 0551.0.203.000-11.

- The clinical history from 619 patients submitted to VR at the University Hospital between 2014 and 2020 was analyzed.
- All patients answered the DHI pre and post treatment to measure the effectiveness of the VR.



The diagnosis and number of sessions were extracted from the patients' medical records.



RESULTS

Only 45 (7.26%) participants showed a decrease in the total score lower than 18 points comparing pre to post treatment scores (mean: 2.3; $\pm 12,51$).

The mean number of VR sessions was 7,64 ($\pm 3,9$).

In those patients with limited benefit, it was observed that the emotional aspect increased, while the functional and physical aspects had a decrease in the average scores.

Main cause of dizziness symptoms: Multiple sclerosis (17.77%), Ménière's disease (11.11%), Stroke (11.11%), Benign paroxysmal positional vertigo (4.44%), Presbyvertigo (4.44%), Metabolic diseases (4.44%), Labyrinthopathy (4.44%), Vestibulotoxicity (4.44%), Otosclerosis (2.22%), Mastoidectomy (2.22%), VII Pair tumor (2.22%), and Other undefined diagnosis (31.1%).

CONCLUSION

- ❖ Patients with undefined diagnosis and central diseases achieved a more limited benefit in VR.
- ❖ The emotional dimension should be considered and can influence the benefit of VR treatment.

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