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Vertigo and Balance Disorders

BALANCE AND THE RISK OF FALLS IN ELDERLY INDIVIDUALS: ASSESSMENT OF THE EFFECTS OF HEARING REHABILITATION

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Abstract

The risk of falls among the elderly is both prevalent and significant within this population. This phenomenon is associated with various etiological factors, with age-related damage to the auditory system being particularly prominent. Changes in body balance and falls associated with hearing loss are generally very insidious in the elderly and have a negative impact on quality of life, as they often result in loss of autonomy, in addition to various complications, such as fractures and decline in health. In order to reduce these adverse effects, the Brazilian government established the National Hearing Health Care Policy in 2004, to provide the population with access to hearing care services. This framework enables the diagnosis of hearing loss, the selection and fitting of hearing aids, and comprehensive hearing rehabilitation, all of which contribute to enhancing the quality of life and independence of elderly individuals.

Objectifs

To analyze balance and the risk of falls in elderly individuals after hearing rehabilitation.

Méthodes et Matériels

Uncontrolled single-group intervention study. The research was approved by the Research Ethics Committee of the home institution under Number 5,690,286.

- Fifteen elderly users of sound amplification devices receiving care at a Specialized Clinical Center.
- The following instruments were applied to collect data:
  1) Hearing Handicap Inventory for the Elderly (HHIE);
  2) Mini-BESTest;
  3) Questionnaire of Falls Identification.
- Two assessments were carried out at different intervals: one at the time of hearing aid fitting and the second after 6 months.

The significance level adopted was 5% (p-value ≤ 0.05) and the data were analyzed using SPSS software (version 27.0).

Résultats

The study involved mainly men (73.3%), with an average age of 75.6 years and hypertensive patients (60%).

		Mean (n=15)	Standard deviation	P-value
Mini-BESTest	Pre	21,10	24,0	**0,046***
	Post	24,67	12,0	
HHIE-S Total	Pre	23,87	8,43	**0,046***
	Post	12,13	8,63	
TUG	Pre	9,24	2,77	**0,625**
	Post	9,11	2,36	

Conclusion

Hearing rehabilitation generated a positive impact on the elderly's participation, both emotionally and socially, on balance and on the risk of falling. Based on these findings, this study concludes that it is crucial to conduct further research to more precisely investigate the effects of hearing rehabilitation on balance and the risk of falls to inform future preventive strategies, thereby contributing to improving the quality of life for elderly individuals.

Références

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