VERTIGO IN THE ELDERLY

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Introduction

Vertigo in the older population is a common symptom and a frequent reason to consult a general practitioner. Its clinical presentation is not very specific, and its diagnosis and treatment are quite challenging. Dizziness in this situation is quite benign, but it can have serious physical, functional and psychological consequences. One of the common consequences of vertigo is the risk of falls and fractures, which has been recognized as a frequent and significant problem in the elderly and comprises multifactorial causes.

Approach to the elderly patient with vertigo

Vertigo occurs in up to 20% of elderly (≥65 years old). The process of ageing is associated with the progressive degeneration of vestibular structures, starting with the decline of sensory vestibular hair cells at an early age, which is followed by vestibular nerve and central neuron decline. One of the most common causes of vertigo in the elderly is benign paroxysmal positional vertigo, but also neurologic problems, vestibular areflexia, vascular disorder and Meniere's disease should be considered. A complete vestibular examination should be performed to be able to confirm the diagnosis and treat the patient. Importantly, standard caloric tests, using video systems, may show slower responsiveness, possibly due to ageing issues which is essential to take into consideration and individually adapt all examinations. Treatment of vertigo includes vestibular rehabilitation (Fig. 1), canalith repositioning procedures, medications (anticholinergics, antihistamines, benzodiazepines, calcium channel antagonists and dopamine receptor antagonists) and rarely surgery.

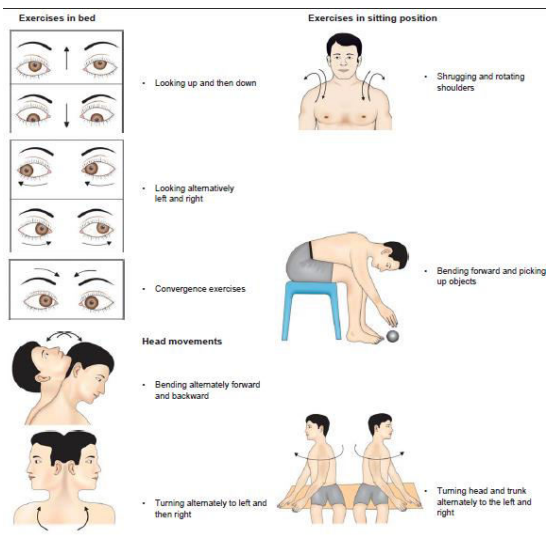

Fig. 1: Cawthorne-Cooksey exercises. Source: Writer HS, Arora RD. Vestibular rehabilitation: An overview. Int J Otorhinolaryngol Clin 2012;4(1):54-69.

The risk for falls and fractures

Vertigo is one of the most common causes of falls in elderly, which occur at least once per year in 33% of people above 65 years and result with hip fractures in 25% of these cases (Fig. 2). Moreover, falling is the leading cause of accidental death in the elderly. Falls may be prevented by strengthening and balance training.

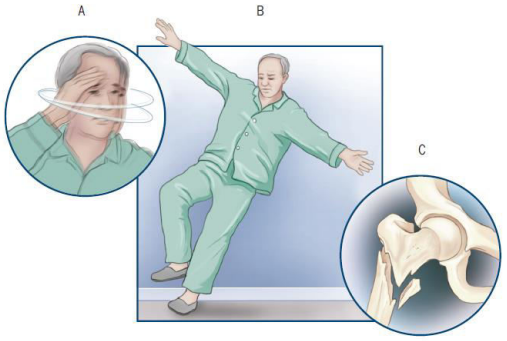

Fig. 2. Vertigo as a risk factor for falls and fractures in elderly. Source: Liao WL et al. Benign paroxysmal positional vertigo is associated with an increased risk of fracture: A population-based cohort study. J Orthop Sports Phys Ther 2015;45(5):406-412.

Conclusion

Careful medical history, adequate diagnostic tools and appropriate, early and usually multidisciplinary treatment are necessary to prevent falls and fractures, which can seriously affect the quality of life in the elderly.