# To Evaluate Physiotherapy Exercises on Dizziness and Vertigo Patients: A Systemic Review

# Shahanawaz SD<sup>1</sup>, Priyanshu.V.Rathod<sup>2</sup>

<sup>1</sup>PhD Scholar ,School of Physiotherapy, RK University Rajkot ,Gujarat, India <sup>2</sup>Director , School of Physiotherapy, RK University, Gujarat, India

# ABSTRACT

**Objective:** To evaluate the Effectiveness of Physiotherapy Exercises on dizziness and vertigo patients and elucidate vestibular rehabilitation as a feasible treatment for various causes of dizziness. Design, Systemic Review, Data Sources or Database Searches: PubMed , PubMed central ,PEDro ,Medline ,Cochrane reviews. **Results:** We included 12 trials in the review with a total of 758 patients.All patients were adults aged 18 to 70years old. All studies were randomized with four applying sealed envelope or external allocation techniques. All the studies showing the improvement of BPPV or Dizziness and Vertigo patients and there were no serious adverse effects of treatment.Rates of nausea during the repositioning manoeuvre varied from 15 to 27 %. Some patients were unable to tolerate the manoeuvres because of cervical spine problems. **Conclusion:** This systematic review provides an insight into the evidence to support Epley Manoevre ,Sement and Gansmanovres and also brand off exercises are helpful in treating the Benign Positional Vertigo Patients, that conclusion remains weak, and further studies are needed to treat the patients with neck stiffness or clavicle fracture or any associated disorders of neck movements.

Key words: Dizziness, BPPV, Vertigo, Physiotherapy Exercises, Vestibular Rehabilitation.

## Introduction

Benign paroxysmal positional vertigo (BPPV) is considered the most common peripheral vestibular disorder, affecting 64 of every 100,000 Americans. Women are more often affected and symptoms typically appear in the fourth and fifth decades of life. In 1980, Epley proposed that free-floating densities (canaliths) located in the semicircular canals deflect the cupula creating the sensation of vertigo. This is well documented in his Canalithiasis Theory. Although these canaliths are most commonly located in the posterior semicircular canal, the lateral and superior canal may also be involved Patients with BPPV complain of vertigo with change in head position, rolling over, or getting out of bed, and the vertigo is often side specific. Vertigo occurs suddenly and lasts for less than 1 minute. Attacks are separated by remissions; however, patients may complain of

\*Correspondence Shahanawaz SD, School of Physiotherapy, RK University Rajkot, Gujarat, India constant light-headedness between episodes. Classic BPPV involving the posterior semicircular canal is characterized by the following: geotropic nystagmus with the problem ear down, predominantly rotary nystagmus toward the undermost ear, latency of a few seconds, duration limited to less than 20 seconds, reversal of nystagmus when the patient returns to an upright position, and a decline in response with repetitive provocation[1-10].

## **Purpose of review**

Persons with vestibular disorders experience symptoms of dizziness and balance dysfunction, resulting in falls, as well as impairments of daily life. Various interventions provided by physical therapists have been shown to decrease dizziness and improve postural control. In the present review, we will focus on the role of physical therapy in the management of vestibular symptoms in patients with peripheral and central vestibular disorders.

## Methods

Using the keyword vestibular rehabilitation, searches were performed in PubMed, AMED, CINAHL and Pedro. Seventy-eight studies were included in the review. Strong scientific evidence for vestibular rehabilitation was found for vestibular hypofunction, for multisensory dizziness and for Meniere's disease[11-19]. Moderately strong scientific evidence

### Result

We included 12 trials in the review with a total of 758 patients.. All patients were adults aged 18 to 70 years old. All studies were randomized with four applying sealed envelope or external allocation techniques. Eight of the trials blinded the assessors to the participants' treatment group and data on all outcomes for all participants were reported in eight of the 12 studies. Complete resolution of vertigo Complete resolution of vertigo occurred significantly more often in the Epley treatment group when compared to a sham manoeuvre or control the proportion of patients resolving increased from 32% to 46%. None of the trials comparing Epley versus other particle repositioning manoeuvres reported vertigo resolution as an outcome. . In two study a single Epley treatment was more effective than a week of three times daily Brandt-Daroff exercises).All the studies showing the improvement of BPPV or Dizziness and Vertigo patients and there were were no serious adverse effects of treatment. Rates of nausea during the repositioning manoeuvre varied from 15 to 27%. Some patients were unable to tolerate the manoeuvres because of cervical spine problems.

### Conclusion

This systematic review provides an insight into the evidence to support Epley Manoevre ,Sement and Gans manovres and also brandoff exercises are helpful in treating the Benign Positional Vertigo Patients, that conclusion remains weak, and further studies are needed to treat the patients with neck stiffness or clavicle fracture or any associated disorders of neck movements.

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was found for vestibular rehabilitation after vestibular surgery. For neurological causes of dizziness, benign positional paroxysmal vertigo (BPPV),vertigo (PPV), dizziness concomitant to whiplash-associated disorders (WAD) and migraine-associated dizziness there seems to be insufficient scientific evidence. Vestibular rehabilitation can be recommended as treatment for vestibular hypo function, for multisensory dizziness, for Meniere's disease and after vestibular surgery.

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