

Capstone Narrative and Summary of Literature Review

Most peripheral vestibular lesions have a benign etiology and undergo spontaneous resolution due to the self-limiting nature of the condition and the process of central nervous system compensation.¹ Vestibular rehabilitation is a specialized form of therapy intended to capitalize on the body's natural compensation process and help alleviate both the primary and secondary problems due to vestibular disorders. It is an exercise-based program primarily designed to reduce vertigo and dizziness, reduce gaze instability, and/or reduce imbalance and fall risk as well as address any secondary impairments that are a consequence of the vestibular disorder.²

Symptoms due to vestibular disorders can diminish quality of life and can impact all aspects of life from economic to social participation as well as can contribute to emotional problems, like anxiety and depression. Additionally, one of the consequences of having a vestibular disorder is that the symptoms frequently cause people to adopt a sedentary lifestyle in order to avoid bringing on, or worsening, dizziness and imbalance that occurs with movement. As a result, decreased muscle strength and flexibility, increased joint stiffness, and reduced stamina can occur from this lifestyle.

The goal of vestibular rehabilitation is to use a problem-oriented approach to promote compensation. This is achieved by customizing exercises to address the specific problems of each individual. Therefore, before an exercise program can be designed, a comprehensive clinical examination is needed to identify problems related to the vestibular disorder. Following a thorough examination of the patient, a home exercise program should be established to

promote patient autonomy with rehabilitation and future management of vestibular dysfunction.

A recent systematic review found weak evidence to support supervised vestibular rehabilitation for patients with dizziness and imbalance led to significant improvement compared to unsupervised protocols.³ The authors continued to state that a supervised rehabilitation program is probably ideal for people with cognitive impairment, mobility dysfunction, or fear of falling for safety. Patients that do not fit this profile should be provided with a comprehensive home exercise program.

Studies have shown that high quality booklet-based exercises improve home exercise adherence for vestibular rehabilitation.⁴ In addition to this, another study has reported that at a minimum, the simple provision of a booklet explaining to patients how to self-manage their symptoms using vestibular rehabilitation exercises seems to have lasting benefits, without incurring any additional resource use relative to routine care.⁵ This further emphasizes the need for clinicians to have access to these resources to administer as they deem necessary. These materials should be utilized in attempts to improve the patient's symptom management, activity participation, and quality of life.

References

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