Vestibular Rehabilitation for Management of Vertigo in a Patient with Parkinson’s Disease: A Case Report

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Introduction

Dizziness in patients with Parkinson’s disease (PD) is often attributed to orthostatic hypotension, however benign paroxysmal positional vertigo (BPPV) is a pathophysiology that should also be considered.1,2 Van Wensen et al conducted an observational study involving 305 patients with PD, and reported an 11% prevalence of BPPV.3 When BPPV is identified in patients with PD, vestibular rehabilitation techniques are a safe and efficacious form of management.

Case Presentation

A 77-year-old female presented with complaints of dizziness. This patient had a past medical history of Parkinson’s disease, diabetes mellitus, and hyperlipidemia. She arose from bed one evening to use the restroom, and began feeling extremely dizzy, nauseous, and weak. Dizziness was described as a subjective feeling of her surroundings spinning. While returning to her bed from the restroom, she lost her balance and fell. She remained on the ground for less than one minute, and was able to make her way back to her bed. Her husband contacted emergency medical services, and the patient was transferred to the emergency room. In the emergency department, she reported dizziness, nausea, and generalized weakness. She denied double vision, tinnitus, confusion, or lightheadedness.

Physical exam revealed no focal weakness, numbness, slurred speech, or double vision. Lab values were all within normal limits. Computed tomography (CT) scan of the brain showed no acute intracranial abnormality. Dix-Hallpike test reproduced symptoms, and patient was diagnosed with BPPV (Fig. 1). She was treated with meclizine, and the physical therapy department was consulted for vestibular rehabilitation. After complete work-up and stabilization, the patient was admitted for acute inpatient rehabilitation.

Upon admission to the rehabilitation hospital, the patient still reported intermittent vertigo, which was characterized as a subjective sensation of the room spinning. She stated that the episodes of vertigo were often precipitated by abrupt head movement to either the left or right side. Treatment with meclizine was continued, as was physical therapy. Brandt-Daroff exercises were taught, and cantholith repositioning procedure (CRP) was performed (Fig. 2). After several days of management, she reported resolution of vertigo, nausea, and weakness. Vital signs were stable, and Dix-Hallpike test was negative. Patient was deemed stable for discharge, with continued outpatient physical therapy.

Discussion

BPPV is often an overlooked cause of dizziness in patients with PD.3 This case report describes a patient with a history of PD who presented with complaints of dizziness, and was diagnosed with BPPV. This patient was successfully managed using vestibular rehabilitation techniques.

References