

Semont and Epley Maneuvers Alleviated Vertigo in a Patient with Multiple Sclerosis

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Abstract

The aim of this case report was to describe an MS patient with vertigo as the most disabling chief complain. The case was a 34 years old woman with diagnosis of MS from six years ago. Her MS EDSS was 6.5 and AI was 7. She demonstrated that positional vertigo interfered with her ADLs. Her Dix- Halpike established benign paroxysmal positional vertigo. Semont an Epley maneuvers were prescribed for her. After two weeks, vertigo was completely alleviated and the symptoms did not recur after two weeks of follow up.

Keywords: Multiple sclerosis; Dix Halpike; Semont Maneuver; Epley Maneuver; Vertigo

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Introduction

Sensory symptoms are commonly reported in MS patients. Pain syndromes, Lhermitte's phenomenon, fatigue, and vertigo had more prevalence in MS patients compared with control group [1,2]. Vertigo in MS resulted from central signs or peripheral condition known as benign paroxysmal positional vertigo (BPPV) [3]. Regardless of the cause, vertigo can deteriorate physical fitness and cooperation [2]. It seems mandatory to alleviate vertigo in MS patients but only pharmaceutical approaches have been proposed.

The objective of this case report was to investigate Semont and Epley methods in an MS patient.

These methods have been used with high rate of success in multiple studies [4-6].

Description of Case

Patient was a 34 years old woman a known case of MS diagnosed from 6 years ago. Her first signs were paraesthesia of right hand. She had a labor 4 years ago and her symptoms attenuated during the gestation period. After the labor, the symptoms aggravated and paraesthesia influenced her legs. The patient had a general weakness with MS EDSS=6.5 and MS AI=7 [7,8]. In addition to motor symptoms, her major objective sign was vertigo and dizziness during changing the position from lying to sitting and also from sitting to standing which affected her ADLs seriously. Vertigo also routinely elicited when the patient gazed upward or forward. Using Dix-Halpike test, her symptoms were exacerbated

which definitely established benign paroxysmal positional vertigo (BPPV) [9].

We prescribed Semont and Epley exercises for the patient and asked her to perform exercises three times a week for two weeks. These are very effective treatments applied for BPPV with an 80% cure rate [10,11]. The Semont maneuver, also called the liberatory maneuver, involves a procedure whereby the patient is rapidly moved from lying on one side to lying on the other. It's rate of success is 90% after 4 treatment sessions [12]. The Epley maneuver also known as the particle repositioning or canalith repositioning procedure was invented by John Epley. It involves sequential movement of the head into four positions, staying in each position for roughly 30 seconds [13]. The patient was instructed not to move head violently and to be in semi-reclining position while sleeping for the following 48 hours [14].

Following the first treatment session, the patient reported decline in vertigo and dizziness symptoms. After two weeks of treatment, the vertigo alleviated completely and the patient did not report vertigo during changing the position. She also claimed better feeling during ADLs. Vertigo and its symptoms did not recur during two weeks of following up.

Discussion

To our best knowledge, it is the first study applying Semont and Epley maneuvers in an MS patient suffering from BPPV. Vertigo in MS patients may result from either central or peripheral conditions [3]. Prescription of Semont and Epley maneuvers for an

MS patient alleviated her vertigo and the symptoms did not recur for a two-week period follow up. It may be attributable to canal-clearing procedures that validate the canalithiasis hypothesis of BPPV [15]. This theory is the most accepted one. According to this theory, substances having a specific gravity greater than the endolymph, and thus subject to movement with changes in the direction of gravitational forces, come into contact with the cupola of the posterior semicircular canal or of the lateral semicircular canal. The change in position of the labyrinth during

movement of the head provokes the displacement of the cupola by direct influence of the heavy substances on it [16].

Conclusion

A two-week Semont and Epley manuevere prescription alleviated BPPV symptoms in a patient suffering from MS. The symptoms did not recure for the following two weeks. More future studies are necessary to establish the usefulness of these manuevers in MS patients.

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