Background & Purpose

Lewy Body Dementia (LBD), and the role of physical therapy (PT) in treating this population, is scarce in the literature. LBD is considered a differential diagnosis of Parkinson’s Disease (PD); therefore, the idea to use PD specific interventions, primarily Lee Silverman Voice Treatment-Big (LSVT BIG), may be considered a suitable intervention.

Purpose: To educate the readers about LBD, how it presents, and how PD related interventions can be used as a treatment.

What is Lewy Body Dementia?

Lewy Body Dementia (LBD), or dementia with Lewy bodies, is considered the second most common type of degenerative dementia, after Alzheimer disease (AD). LBD is associated with an abnormal deposit of alpha-synuclein protein in the brain. Clinical features: May involve multiple systems including the presentation of Parkinsonism. Parkinsonism is a term to define a presentation of symptoms that may include bradykinesia, limb rigidity, and gait disorders including shuffling gait and stride length. Approximately 70 to 90 percent of patients with LBD present this way.

Patient Case Description History

57 year old male

Diagnosis: Paralysis Agitans (Parkinson’s Disease) at the age of 51.

Differential Diagnosis: Lewy Body Dementia at the age of 56.

Primary Concern: Difficulty rising from chairs, impaired gait, and experienced two falls six months prior to initial evaluation.

Clinical features include:

- Rigid and flexed posture with lines around the hands indicating resting tremors.
- Tremor: Intermittent; resting right > left arm
- Bradykinesia: Positive
- Rigidity: Cogwheel rigidity (more at the wrist) with activation of other side
- Postural Instability: pull test
- Sensation: Normal light touch sensation bilateral upper and lower extremities.

The patient was seen for 8 visits including the initial evaluation over 3 months span. Patient continued PT as his treatment was not concluded on his 8th visit.

Interventions

The patient was seen for 8 visits including the initial evaluation over a 3 month span. Patient continued PT as his treatment was not concluded on his 8th visit.

Discussion

Future studies should look at rehabilitation interventions for patient’s LBD as the resources are scarce. The proposed idea to use PD specific interventions for patients with LBD may be considered a viable option.

References & Acknowledgements

1. Farlow, MR. Clinical Features and Diagnosis of Dementia with Lewy Body. In: Eichler, AF, ed. UpToDate: Waltham, MA—UpToDate. https://www.uptodate.com


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Outcome

The patient’s progress was reported through the following outcomes: 30 second sit to stand, gait speed, Timed Up and Go, Mini-BESTest, and 6 Minute Walk Test. Improvements were made in all outcomes.