THE EFFECTS OF HIGH-INTENSITY TRAINING IN PATIENTS WITH PARKINSON’S DISEASE

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Abstract (Limited to 300 Words):

Introduction: Parkinson’s Disease is a progressive neurological disorder that affects over one million Americans, and while there is no cure, there is evidence that exercise can positively influence its symptoms. Higher intensity exercises such as bicycling or treadmill walking with a weight-support system are not frequently utilized, however they can also reduce Parkinson’s symptoms and may have long-term benefits for the patient. The purpose of this critical review was to examine the effects of high-intensity exercise on Parkinson’s patients and to determine whether or not its use should be implemented into clinical practice.

Methods: Including SOLAR, CINAHL Plus, Medline, PubMed, and Proquest Medical Library were used to find each article. Studies were included if they utilized an intervention that required subjects to perform at a high intensity, or if the subjects were forced to continue the activity at a constant speed.

Results: The target intervention was equally or more beneficial than conventional therapy in the ten articles reviewed. Common outcome measures included gait speed, stride length, lower extremity symmetry, and strength. An increase in cortical silent periods (CSP) in one study indicated possible improvement in neuroplasticity.

Discussion/Implications for Clinical Practice: The results of this literature review suggest that high-intensity exercises can be just as beneficial if not more so than traditional Parkinson’s therapy, resulting in decreased severity of symptoms throughout the body and a positive influence on central motor control and neuroplasticity. Physical therapists should consider the implementation of high intensity gait training and cardiovascular exercise in order to improve the overall function and quality of life of Parkinson’s patients.