THE EFFICACY OF BODY WEIGHT SUPPORT TREADMILL TRAINING FOR STROKE PATIENTS

Wischer, K., Nelson, J. Supervising Physical Therapist

College of Saint Scholastica

Disclosure of source of funding for this project (if none, indicate "no funding"): No Funding

Compliance Statement: Not applicable

Abstract (Limited to 300 Words):

Purpose: To determine the efficacy of using BWSTT to improve gait characteristics in stroke patients as compared to less task specific forms of gait rehabilitation as well as overground walking techniques through a critical review of literature.

Methods: Literature searches were performed with search terms including “partial body weight support,” “body weight support,” “treadmill training,” and “stroke.” Exclusion criteria included studies that did not combine treadmill training with body weight support, diagnoses other than stroke, and case studies.

Results: The literature review consisted of 5 randomized control trials with subjects who had suffered a stroke with resulting hemiparesis. Common outcome measures included FIM, Fugl-Meyer Stroke Assessment, Berg's Balance Scale, Temporal Gait Characteristics, EMG Activity, Tinetti Gait and Balance, Six Minute Walk Test, and STREAM. Three studies revealed that BWSTT is more effective than a control group of no therapy or treadmill training with no BWS. The researchers, however, were inconsistent on whether BWSTT was more effective than overground walking.

Conclusions: The results of the literature review suggest that BWSTT is an effective intervention for improving gait in patients following stroke, however, overall it has not been proven to be more effective than overground walking. Implications: Physical therapists should feel confident using BWSTT during a patient's recovery, especially with more involved patients who are unable to walk overground, as it has been proven to be just as effective as overground walking and more effective than less task specific interventions.