THE EFFECTIVENESS OF BILATERAL VERSUS UNILATERAL TASK RETRAINING USING THE SAEBOFLEX DEVICE IN INDIVIDUALS WITH SUBACUTE AND CHRONIC STROKE

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Objective: This study compares the effectiveness of unilateral and bilateral task retraining using the SaeboFlex orthosis in individuals with upper extremity (UE) dysfunction following a cerebrovascular accident (CVA). While individually, bilateral task training and the SaeboFlex orthosis used unilaterally appear to be effective in increasing UE function after stroke, no research has been done to date to determine whether bilateral training using the SaeboFlex is more effective than unilateral training.

Design: An ABA design was used which included the Wolf Motor Function Test (WMFT), Canadian Occupational Performance Model (COPM), Range of Motion (ROM), Motor Assessment Activity Log (MAL), and Modified Ashworth Scale (MAS). The intervention consisted of two 60-minute sessions, twice a day, and six days per week, that participants completed at home for four weeks. Participants were also seen two times a week for 90-minutes in an outpatient clinic.

Results: Both unilateral and bilateral task retraining using the SaeboFlex orthosis resulted in improvements on all assessments; however, the results for both groups were not found to be statistically significant. Overall, the unilateral group has demonstrated greater improvement compared to the bilateral group to date.

Conclusion: Preliminary results of this ongoing study suggest that unilateral task retraining while using the SaeboFlex orthosis may be more beneficial in improving UE function for use in daily activities after CVA compared to bilateral task retraining using the Saeboflex. Further analysis of baseline function of both groups is necessary to ascertain the potential influence of this factor on the degree of overall improvement attained.