Effect of Whole Body Vibration versus Suspension Therapy on Balance and Functional Capacity in Children with Diplegic Cerebral Palsy

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Abstract: Objectives: To compare between the effect of whole body vibration training and suspension therapy on balance and functional capacity in children with diplegic cerebral palsy. Subjects and methods: Thirty diplegic cerebral palsied children from both sexes were enrolled in this study, ranging in age from 7 to 9 years. They were assigned randomly into two groups of equal numbers. Study group I received whole body vibration training and study group II received suspension therapy via spider cage. In addition to the same designed physical therapy program was given to both groups. Stability indices and functional capacity were evaluated by using 6-minute walk test and Biodex stability system respectively before and after six successive months of treatment. Results: Significant improvement was observed in both groups when comparing their pre and post treatment mean values of all measuring variables. Also, significant differences were recorded in all measuring variables when comparing the post treatment results of both groups in favor of the study group II. Conclusion: Whole body vibration and suspension therapy training are effective additional tools in rehabilitation of diplegic cerebral palsied children with decreased balance and functional capacity in favor of the suspension therapy.

Key words: Whole body vibration, suspension therapy, Balance, Functional capacity, Diplegic Cerebral Palsy


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