

Therapeutic Horseback Riding: Its Effects on Gait and Gross Motor Function in Children with Cerebral Palsy

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Abstract

This pilot study investigated the effects of Therapeutic Horseback Riding (THR) on gait and gross motor function in fourteen children with cerebral palsy (CP). Subjects were evaluated one week prior to initiating an eight-week trial of biweekly, 30 min. sessions of THR using the GAITRite walkway system and Gross Motor Function Measure (GMFM) Dimension E, at the end of the intervention (post-test 1) and four weeks later (post-test 2). Statistically significant improvements ($p=0.001$) were identified in GMFM scores (Dimension E) between the pretest and post-test 1 with an increase in scores from 71% to 79%. Improvements in gross motor function remained elevated and unchanged four weeks after cessation of THR. Pretest gait velocity averaged 59.19 (SD 12.75) m/min increasing significantly to 66.7 (SD15.71) m/min in post-test 1, an increase of 12.7% ($p=0.047$). THR had beneficial effects on gait velocity and GMFM Dimension E in children with CP.