

# EFFECTS OF MYOFASCIAL RELEASE ON CHILDREN WITH CEREBRAL PALSY: SIX CASE REPORTS

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**BACKGROUND:** The effects of Myofascial Trigger Point Release on spasticity utilizing the Modified Ashworth Scale were studied in six children with Cerebral Palsy.

**METHODS:** The Modified Ashworth Scale of Spasticity [1] was used to assess spasticity (increased tone) in the upper and lower extremities of six children with cerebral palsy following an intervention utilizing Myofascial Trigger Point Release techniques, over a period of six months. Caregivers were taught these techniques and provided with an evaluation sheet to assess different clinical and behavioral parameters during the study. The following statistical tests were incorporated into this study: paired t-tests were used to test for left-right sided differences and for differences at 6 weeks compared to baseline, combined upper extremities and the lower extremities measurements were averaged, 2-way ANOVA (analysis of variance) was used for differences in Modified Ashworth values over weeks due to location and to assess nine clinical parameters (body symmetry, muscle tone, range of motion of joints, teeth grinding, ambulation, self-stimulation behaviors, alertness, cooperation, and fatigue) presented as a profile at week 1 versus week 5, and behavioral/clinical parameters were tested for linear trend and quadractic curvature over 6 weeks by regression methods.

**RESULTS:** Benefits were observed in some of the children, including decreased spasticity, improved body symmetry, improved tone, improved range of motion, improved ambulation, decreased self stimulatory behaviors, improved alertness and cooperation, cessation of significant choreoathetoid movements, decreases in tactile defensiveness, and improvement in bowel movements. These children's caregivers knew these children's clinical and behavioral issues extremely well but they were not trained professionals in these areas. The same improvements in muscle tone, bodily functions, clinical parameters, and behavioral parameters would not have been observed in a control group who did not receive these treatments.

**CONCLUSIONS:** Myofascial Trigger Point Release may be of value to reduce spasticity/muscle tone and improve the quality of life in children with cerebral palsy.

## **REFERENCES:**

[1] Bohannon RW and Smith MB 1987 Interrater reliability of a modified Ashworth scale of muscle spasticity. Physical Therapy 67(2): 206-207.