Yesos seriados en niños con parálisis cerebral espástica con pie y marcha en equino previamente infiltrados con toxina botulínica tipo A. Estudio de 8 casos

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ABSTRACT

Serial casts in children with spastic cerebral palsy and equinus foot previously treated with botulinum toxin type A. Study of 8 cases

Introduction: Serial casting is a treatment strategy to prevent, correct or reduce alterations of equinus foot; however, the results are not conclusive when used in combination with botulinum toxin to improve function. Objective: To evaluate the effects of serial casting on the range of motion (ROM) of the ankle, and the gross motor function of patients with spastic cerebral palsy (CP) admitted into the serial casting program at Coquimbo Telethon Institute between June and September 2014. Method: The ROM of the ankle was evaluated using the Silfverskiold Test and the selective motor control (CMS), according to the serial casting program at Coquimbo Telethon Institute in 8 children with spastic CP, Gross Motor Function Classification System (GMFCS) level I, and injected with botulinum toxin type A, at a dose of 3U per kg of body weight. Children were evaluated before the first cast and after the last one with the Gross Motor Function Measure, version 66 (GMFM-66), dimensions D and E. Wilcoxon test was used to compare the medians of the differences in all the tests applied. A p-value < 0.05 was considered statistically significant. Results: All children showed significant improvement in ROM of the ankle with extended knee (p = 0.011), and flexed knee (p = 0.011). Similarly, all children showed significant improvement in the GMFM-66 (p = 0.034) and GMFM-66-D (p = 0.038). The GMFM- E did not show significant changes. Conclusion: Serial casting in patients with spastic CP, GMFCS I and previously injected with botulinum toxin type A improved ROM of the ankle and the GMFM-D.

Key words: Serial casting, cerebral palsy, botulinum toxin type A, GMFM-66.