Oral Communication

OC-685

Changes in Functional Capacity by Motor Function in Children and Adolescents with Cerebral Palsy: 12-Month Rehabilitation Follow-up in the Teletón Chile Network- A Retrospective Cohort Study

Topic: Specific Target Groups (Children, Women, Elderly, Athletes, Musicians, Refugees, Ethnic Groups, Workers, and Others)

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BACKGROUND

Cerebral palsy (CP) comprises a group of motor disorders that impair mobility and object manipulation, affecting daily function. Rehabilitation interventions are essential for improving these abilities, enhancing independence in activities of daily living. However, motor function severity may influence the effectiveness of rehabilitation, potentially modifying its impact on functional capacity.

To determine the 12-month change in functional capacity among children and adolescents with CP according to gross motor function.

METHODS

This retrospective longitudinal cohort study included 852 participants aged ≤ 18 years from Teletón Institutes in Chile, all diagnosed with CP, with recorded medical consultations and functional capacity assessments at baseline and after 12 months. Gross motor function was classified into five categories using the Gross Motor Function Classification System (GMFCS), and functional capacity was assessed with the WeeFIM questionnaire. Descriptive data are presented overall and by motor function level. Crude changes in functional capacity were evaluated using a paired t-test, while adjusted changes were analyzed using a mixed-effects linear regression model, incorporating medical consultations (physiatry, speech therapy, physiotherapy, occupational therapy, and psychology) as covariates. A p-value < 0.05 was considered statistically significant.

RESULTS

The mean age of participants was 3.7 ± 3.8 years, with older age observed in groups with better motor function. Boys comprised 57.7% of the sample, and the Santiago institute had the highest number of patients (41.9%). The evaluation period between baseline and follow-up was similar across groups, while medical consultations were more frequent among participants with poorer motor function. In the crude analysis, all GMFCS groups showed improvements in functional, cognitive, and total WeeFIM scores. However, significant changes in self-care were only observed in the two groups with better motor function. After adjusting for medical consultations, all groups demonstrated statistically significant improvements across all WeeFIM domains ($p < 0.05$).

CONCLUSION

Although the magnitude of improvement varied by motor function level, these findings highlight that timely and appropriate interventions can significantly enhance functional capacity in children and adolescents with CP, regardless of initial motor function. This underscores the importance of ensuring access to rehabilitation services, particularly for those with greater impairments.

Statement of Disclosures

None

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