
WALKING ABILITY OF POSTOPERATIVELY MEDICALLY TREATED AND REHABILITATED CHILDREN WITH CEREBRAL PALSY

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Objective To determine if the orthopaedic-surgical treatment of lower limbs and rehabilitation can cause improvement in walking in children with CP and also to determine the influence of intensity of rehabilitation and the child's age at the time of surgery on the outcome of both treatments.

Subjects and methods There were 44 children with CP that enrolled in this historically-prospective study. These children were treated at the Clinic for physical medicine and rehabilitation, University Clinical Center Tuzla from 2000 to 2009. The basic criterion for entering this research was diagnosed CP and orthopaedic-surgical interventions on the lower limbs during the rehabilitation treatment. Quantity walk assessment was measured by the section of Gillette Functional Assessment Questionnaire and the quantity walk assessment of quality was measured by an adapted Physician Rating Scale.

Results After postoperative rehabilitation there was an increased number of subjects that were able to walk and a significantly decreased normal walk deviation with statistical relevance ($p < 0.001$). More than half the children (25 or 57%) underwent surgery before the age of five. The connection between child's age and walk improvement were not proven, ($p = 0.982$; $p = 0.902$) Quantity walk improvement regarding rehabilitation intensity was statistically relevant ($p = 0.017$), while there was no influence on qualitative walk improvement made. ($p = 0.151$).

Conclusion: Orthopedically-surgical lower limbs treatment and standard kinetic therapy have a significant role in the complex rehabilitation treatment of children with CP. Making the proper selection of children for operational treatment along with intensive rehabilitation is a way to achieve significant walk improvement.

Key words: Cerebral palsy ▪ Operation ▪ Walk
