Comparison of Effectiveness of Adeli Suit Therapy and Bobath Approach on Gross Motor Function Improvement in Children with Cerebral Palsy

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Receive date: 8/3/2009 Accept date: 8/3/2010

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Abstract

Objective: The aim of this study was to determine the effectiveness of Adeli Suit Therapy (AST) and Bobath approach on improvement of gross motor function in children with cerebral palsy aged 4 to 11 years of old.

Materials & Methods: In this experimental and randomized clinical trial study, 24 children with cerebral palsy were selected simply according to inclusive and exclusive criteria from patients referred to ValieAsr rehabilitation center and then assigned into two Adeli Suit Thrapy and Bobath groups by simple random method. Period of therapeutic intervention was 36 sessions, 3 times per week for both groups. Assessment tool was Gross Motor Function Measure test (GMFM–66). Data was analyzed by Kolmogroff Smirnoff, Independent T-test and ANOVA for repeated measurements.

Results: After intervention, the gross motor function improved significantly in both groups (P<0.001). Follow up study revealed significant improvement of functions in Adeli Suit group (P=0.007) and significant regression of functions in Bobath group (P=0.004). There was no significant difference, just after the intervention, between two groups (P=0.598), but there was significant difference between two groups at follow up assessments (when therapy abondoned) (P=0.002).

Conclusion: Both Adeli Suit and Bobath approaches are effective in improvement of gross motor functions in children with cerebral palsy during the therapeutic sessions. At follow up study, the Adeli Suit group, were still improving their function whereas the Bobath group regressed.

Keywords: Cerebral palsy/ Gross Motor Function/ Adeli Suit/ Bobath approach