1. INTRODUCTION

Children with cerebral palsy (CP) have limitations in postural reactions and antigravity movements. Trunk control is the determinant of posture, balance, walking and functional activities. Core stability connects deep abdominal muscles, spine, pelvis, and shoulder girdle to protect the posture and provides support for extremity movements. The aim of this study was to investigate the effects of modified pilates exercises on trunk control, gait and function in children with CP.

2. PATIENTS AND METHODS

Ethics approval for the study was obtained on 10.11.2017 (Decision No. 2017/576) from the Ethics Committee for Interventional Research Studies of the Gazi University. 9 CP children (5 Diparetic, 2 Ataxic, 2 Hemiparetic) with the mean age of 9.00 ± 1.58 years old, having spasticity of 1 and 1+ in the lower extremity according to the Modified Ashworth (MASH) Score and level of GMFCS I-II-III scores (Gross Motor Functional Classification System) were included to the study. Children have participated in clinical pilates exercises for 1 hour/day, 2 days per week/ during 8 weeks. Demographic information and GMFCS levels were recorded and Seated Postural Control Measure Test (SPCMT), MASH scale, Pediatrik Berg Balance Test (PBBT), Pediatric Reach Test (PRT), Trunk Control Measurement Scale (TCMS), 6 minute walking test (6MWT), Physicians Rating Scale (PRS), Core Stability Performance Tests (CSPT) and Core power tests (CPT) were applied before and after treatment program.

3. RESULTS

When total score averages of PBBT, PRT distance, SPCMT, 6MWT distance, CSPT, CPT, PRS scores and TCMS were compared before and after treatment, there was a statistically significant difference between the mean scores (p <0.05).

4. CONCLUSION

Modified pilates exercises are recommended to be used in the physiotherapy program of children with CP.

REFRENCES


