

1717

## **The Effect of Palmar Thenar Pressure On Hand Function and Spasticity in Hemiparetic Cerebral Palsied(CP) Children**

HILAL HOTAMAN, SIDIKA FATMA UYGUR  
*Hacettepe University, ANKARA, Turkey*

**Introduction:**Therapists frequently apply thenar palmar pressure during neurodevelopmental therapy(NDT) to control spasticity and manipulate the hand.

**Objectives:**To investigate if palmar thenar pressure applied during a session of NDT by means of kinesiotope for a period of 30 minutes has an effect on hand function and spasticity.

**Methods:**Seven children (5 girls and 2 boys) with an age range between 4-14 years, who were regularly receiving NDT were included in the study. Evaluations were made before intervention and after 30 minutes of pressure application to the thenar region of the affected side hand- while the children were being treated. Nine hole peg test and Modified Ashworth Scale(MAS) were used for assessment.Pressure was applied by anchoring a small semicircular piece of plastozone to the thenar region with kinesiotope.

**Results:** Wilcoxon Rank test showed that there was a significant difference in MAS values of wrist flexion and pronation but not in finger flexion. Also, the number of pegs put in and taken out in 18 seconds increased significantly and a decrease in associated reactions was observed.

**Conclusion:** Thenar pressure applied by means of taping was effective in decreasing spasticity and associated reactions and in enhancing hand function (most probably through autogenic inhibition).

**Contribution to the practice:** Taping utilizing thenar pressure can be used as an adjunct to NDT in CP to enhance hand function and decrease spasticity.