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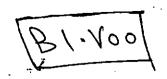
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## Knee Cage Versus Below Knee Orthosis In The Control Of Genu Recurvatum In Cerebral Palsied Children

#### **THESIS**

Submitted In A partial Fulfillment Of The Requirement Of The Master Degree In Physical Therapy

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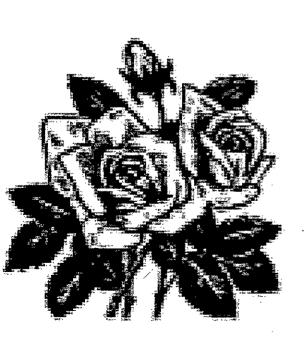
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### **DEDICATION**

To my parents, my husband and my daughter Theodora with all love.



#### **Abstract**

Knee Cage Versus Below Knee Orthosis In The Control Of Genu Recurvatum In Cerebral Palsied Children. / Nivirt Girgis Dawoud, Prof. Emam H. El-Negmy, Prof. Nagy M. Abd El-wahab, Ass. Prof. Khaled A. Mamdouh: Cairo University. Faculty Of Physical Therapy, Department of Physical Therapy for disturbance of growth and development in children and its surgery, 2002 - Master Thesis.

The purpose of this study was to determine and compare the effect of below knee orthosis and knee cage on genu recurvatum control of cerebral palsied children. Forty children with age ranging from 3 to 7 years were randomly assigned to either a knee cage or below knee orthosis group. Both groups also received the same traditional program. Assessments were made using x-ray and goniometer to assess genu recurvatum degree and tensiometer to assess their effects on quadriceps, hamstring, and gastrocnemius muscles strength. Both groups showed significant reduction in genu recurvatum degrees after the treatment period. They also showed significant improvement in the concerned muscles strength in knee cage group. While in below knee orthosis group, there was no significant improvement in the concerned muscles except hamstring muscle. There was no significant difference between the two groups in all parameters. It can be concluded that both orthoses were helpful in genu recurvatum control but knee cage was more accepted by patients.

(Key words: genu recurvatum - cerebral palsy - orthosis)

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