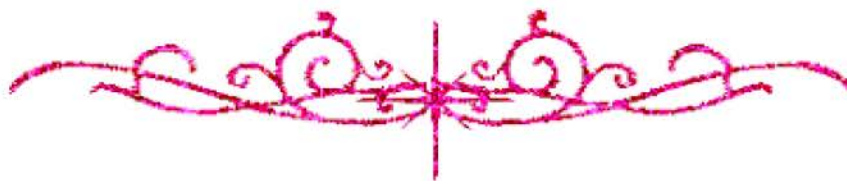


بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

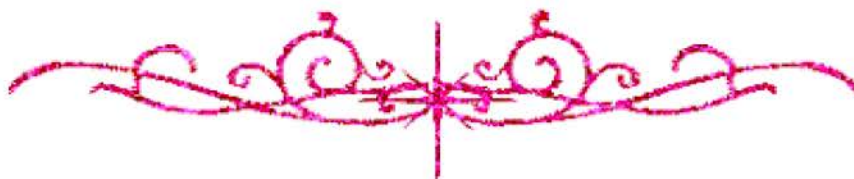
قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



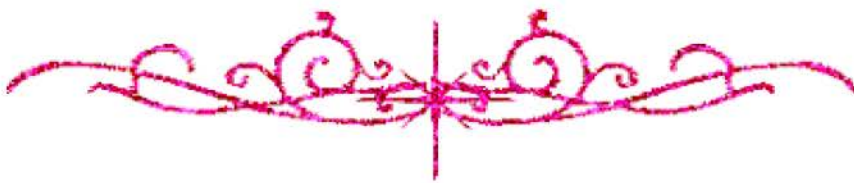
يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



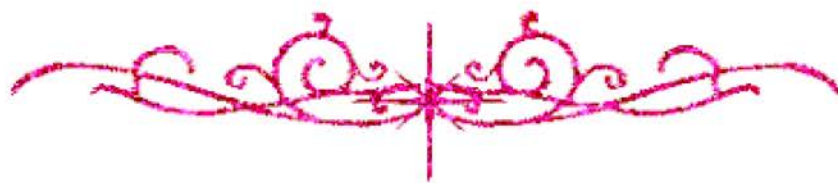


بعض الوثائق الأصلية تالفة





بالرسالة صفحات
لم ترد بالأصل



Effect of Vibratory Stimulation on Crouch Gait in Spastic Diplegic Children

By

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M.Sc. in Physical Therapy
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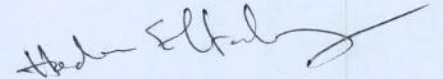
Thesis

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2002

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Hadya Mourice

2002

Dedication

To My Parents,
My Husband and
My Son Fady & My Daughter Mony.
For their patience and support during conduction of
this work

Effect of vibratory stimulation on crouch gait in spastic diplegic children/ *Hadya Mourice Ibrahim*; Supervisors: Prof.Dr. Hoda Abdel Aziem El Talawy – Dr. Hala Ibrahim Ahmed Kassem. Faculty of Physical Therapy - Cairo University, 2002. Doctoral Thesis.

ABSTRACT

The aim of this study was to evaluate the effect of high and low frequency vibratory stimulation and a specially designed exercise program on crouch gait in spastic diplegic cerebral palsied children. Sixty diplegic children (35 males and 25 females), ranging in age from three to six years old participated in this study. The study sample was classified randomly into two study groups and one control group. The first study group received a program of high frequency vibratory stimulation in addition to a specially designed exercise program. The second study group received a program of low frequency vibratory stimulation in addition to the specially designed exercise program given to the first group, while the control group received the specially designed exercise program only. The angles of hip, knee and ankle joints and the temporal - distance parameters of gait were evaluated before and after three months of application of different treatment programs. The results of the study revealed highly significant improvement in all measuring variables of the first and second study groups (except the step width), while no significant improvement was observed in the results of the control group. Improvement in the two study groups may be attributed to the effect of vibratory stimulation program on improving muscle function.

Key words: CP- Vibratory Stimulation- Crouch Gait- Gait Analysis.

List of Abbreviation

cm	:	Centimeter.
CNS	:	Central nervous system.
Fig.	:	Figure.
HS	:	Highly significant.
Hz	:	Hertz
Lt.	:	Left
MD	:	Mean difference.
MS	:	Mean squares
m / sec.	:	Meter per second.
MVIC	:	Maximum voluntary contraction.
NDT	:	Neuro developmental treatment.
NS	:	Non significant.
Rt.	:	Right
S	:	Significant.
SD	:	Standard deviation.
SS	:	Sum of squares
step / m.	:	Step per minute.
TVR	:	Tonic vibratory stimulation.
$\bar{X}$	:	Mean.

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