

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL  
THERAPY DEPARTMENT FOR GROWTH AND DEVELOPMENT  
DISORDER IN CHILDREN AND ITS SURGERY  
PREPARED BY ADEL ABD EL SALAM  
NERVEEN ABD EL SALAM ABD EL KADER AHMED**

## Physical Therapy Department for Growth and Development Disorder in children and Its Surgery

Doctoral Degree 2019

Author	:	Amia Faag Hamed El Sheikh.
Title	:	Effect Of Masticatoy Muscle Electical Stimulation On Dysphagia In Spastic Ceebal Palsy.
Dept.	:	Physical Therapy Department for Growth and Developmental Disorder in Children and its Surgery.
Supervisors	1.	Amia Mohamed El- Tohamy.
	2.	Manal Salah El Din abd el wahab.
	3.	Bosina Mohamed Abd El-Aziz El Naga.
Degree	:	Doctoral.
Year	:	2018.
Abstract	:	
<p>Pupose: The pupose of this study was to investigate the effectiveness of masticatoy muscles electic stimulation in dysphagia in childen with spastic CP. Methods: Foty childen, with age anging fom 2 to 5 yeas with a diagnosis of spastic ceebal palsy, they had dysphagia with level fou o moe in functional oal intake scale. They wee andomly assigned into two goup of equal numbe. The Feeding level pogess was evaluated by functional oal intake scale, oomoto skills wee measued with oomoto assessment scale, weight gain and height wee measued by weight and height measuing scale.. The study goup was teated by a selected oomoto excise home pogam in addition to neuomuscula electical stimulation (NMES) fo massete and digastic muscles, wheeas the contol goup which was teated by the same home pogam giving to the study goup in addition to NMES (placebo effect ). The two gouns wee assessed befoe and afte 2 months of the teatment application. Results: A statistically insignificant diffeence was ecoded befoe teatment between the study and contol goup (<math>P &gt; 0.05</math>), while a significant diffeence was ecoded in each goup afte teatment in all measued vaiables. Compaing between both gouns egading feeding level pogess thee was significant diffeence (<math>P &lt; 0.05</math>), but no statistically significant diffeence between both gouns egading weight gain, height and oomoto assessment skills (<math>P &gt; 0.05</math>). Conclusions: The esults of this andomized contolled study showed that NMES has moe effect on feeding level pogess than oomoto excise home pogam but no effect on oomoto skills, weight gain and height, so the study suggests that oomoto excise home Pogam with NMES is supeio to oomoto excise home Pogam alone fo teating dysphagia in childen with spastic cp .</p>		
Key words	1.	Dysphagia.
	2.	functional oal intake scale.
	3.	Neuomuscula electical stimulation.
	4.	Masticatoy Muscle.
	5.	oo moto assessment scale.
	6.	Spastic Ceebal palsy.
Classification number	:	000.000.
Pagination	:	104 p.
Arabic Title Page	:	تأثير التنبيه الكهربى لعضلات المضغ فى صعوبة البلع عند أطفال الشلل الدماغى التقصى.
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NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Asmaa Abd El Rhman Ahmed.
Title	:	Influence of Biofeedback and task oriented training on hand skills in children with spastic cerebral palsy.
Dept.	:	Physical Therapy Department for Growth and Developmental Disorder in Children and its Surgery.
Supervisors	1.	Kamal El Sayed Shoukry.
	2.	Gehan Mosaad Abd El Maksoud.
	3.	Mostafa Hassan Aboulftoh Elsherbini.
Degree	:	Doctoral.
Year	:	2019.
Abstract	:	
<p>Background: The purpose of this study was to determine the effect of biofeedback training, task oriented training program and combination of both treatment on hand skills in children with spastic cerebral palsy. Subjects and methods: Sixty six children with spastic cerebral palsy, ages ranged from 3 to 6 years, were randomly divided into three groups of equal number: group I, II and III. Children in group I received biofeedback training (BFB) and traditional occupational therapy program. Children in group II received task oriented training (TOT) program and traditional occupational therapy program. Children in group III received biofeedback training, task oriented training program and traditional occupational therapy program. Treatment was conducted for one hour and half, three times per week for a successive 3 months for all groups. Peabody Developmental Motor Scale (PDMS) was used to assess hand skills. Wrist extension angle was also measured using CorelDraw graphic suite X5 program. Results: Significant improvement in hand skills and wrist extension angle after treatment was gained in the three groups. Significant difference among three groups was obtained regarding fine motor quotient (FMQ), while no significant difference was gained regarding wrist extension angle after treatment. Conclusion: It can be concluded that biofeedback training and task oriented training in conjunction with traditional occupational therapy significantly improved hand skills in children with spastic CP. Results: The statistic of results showed there were significant differences in the same both groups pre and post treatment (<math>P &lt; 0.05</math>), and was no significant differences compare between both groups (A&amp;B) (<math>P &gt; 0.05</math>); clinically group A percentage improvement in balance was higher than group B Conclusion: Balance training proved to beneficial clinically improving postural stability in post infectious polyneuropathy to prevent guest falling.</p>		
Key words	1.	Biofeedback.
	2.	Cerebral palsy
	3.	Task oriented training.
	4.	hand skills in children.
	5.	Children with spastic cerebral palsy
Classification number	:	000.000.
Pagination	:	121 p.
Arabic Title Page	:	تأثير التغذية الارتجاعية و التدريب الموجه على مهارات اليد في حالات الشلل الدماغي التشنجي
Library register number	:	6235-6236.

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NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Dina Hamdy Dosoky.
Title	:	Effect of Low Level Laser Therapy on Type I Diabetic Cheiroarthropathy.
Dept.	:	Physical Therapy Department for Growth and Developmental Disorder in Children and its Surgery.
Supervisors	1.	Manal Salah El-Din Abd El-Wahab.
	2.	Sahar Mohamed Nour.
Degree	:	Doctoral.
Year	:	2018.
Abstract	:	<p><b>Background:</b> Cheiroarthropathy is one of diabetic complications that has greater impact on the hand performance. <b>Objective:</b> The purpose of this study was to evaluate the effect of low level laser therapy on hand function performance of type I diabetic children with cheiroarthropathy. <b>Subjects and procedures:</b> Forty diabetic boys, suffering from diabetic cheiroarthropathy, aged between 14 to 17 years participated in this study, they were selected from endocrinology department of Benha Teaching hospital from May 2016 to April 2017. They were randomly assigned into two groups of equal number, the first group represented the control group that was treated by a conventional physical therapy exercises program directed towards improving hand function performance, while the other 20 children represented the study group that was treated by the same exercise program given to the control group in addition to 10 min of low level laser therapy. Pinch strength, hand function performance and metacarpophalangeal and interphalangeal joints range of motion were assessed for all children before and after three months. <b>Results:</b> Post treatment results showed a statistically significant difference in pinch strength, hand function performance and range of motion of metacarpophalangeal and interphalangeal joints in favor to the study group (<math>P &lt; 0.05</math>) <b>Conclusion:</b> It could be concluded that laser therapy in addition to physical therapy program is an effective treatment modality in controlling cheiroarthropathy of children with type I diabetes.</p>
Key words	1.	Type I Diabetes.
	2.	Foot And Ankle Ability Measure Questionnaire.
	3.	Cheiroarthropathy.
	4.	Low Level Laser Therapy.
	5.	Validity.
	6.	Reliability
	7.	Children - Laser Therapy.
Classification number	:	000.000.
Pagination	:	123 p.
Arabic Title Page	:	تأثير الليزر منخفض الشدة على الحركة المفصالية المحدودة في الأطفال مرضى السكري (النوع الأول).
Library register number	:	6589-6590.

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NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Ragae Saeed Mahmoud Al-Sakhawi.
Title	:	Balance Master Versus Treadmill Training On Dynamic Balance In Hemiparetic Cerebral Palsied Children.
Dept.	:	Physical Therapy Department for Growth and Developmental Disorder in Children and its Surgery.
Supervisors	1.	Emam Hassan El-Nagmy
	2.	Hebatallah Mohamed Kamal
	3.	Mohamed El-Sayed Alawady
Degree	:	Doctoral.
Year	:	2018.
Abstract	:	
<p><b>Purpose:</b> The present study was conducted to compare between the effect of balance master system versus treadmill training in improving dynamic balance of hemiparetic cerebral palsied children. <b>Subjects and Methods:</b> Thirty hemiparetic cerebral palsied children ranged in age from 8 to 12 years were assigned randomly into two groups of equal number (A and B). Group (A) received selective physical therapy program in addition to balance master system training while group (B) received the same selected physical therapy program as group (A) in addition to treadmill training. Balance Master System was used to evaluate dynamic balance of all children in both groups before and after twelve successive weeks of the treatment program. <b>Results:</b> The obtained results revealed significant differences of all measured variables of dynamic balance between pre and post- treatment in the two groups. Statistical significant difference was also found in post mean values of all measured variables in favor of group (B). <b>Conclusion:</b> Balance Master System and treadmill training can be added to the physical therapy program and treadmill training was more effective than Balance Master System training in which aiming to improve dynamic balance of hemiparetic cerebral palsied children.</p>		
Key words	1.	Hemiparetic Cerebral Palsied Children.
	2.	Balance Master System.
	3.	Treadmill
	4.	Dynamic Balance.
Classification number	:	000.000.
Pagination	:	139 p.
Arabic Title Page	:	تأثير جهاز التوازن مقارنة بتدريب المشاية الكهربائية على الإلتزان المتحرك لدى الأطفال المصابين بالفالج الشقي.
Library register number	:	6293-6294.

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NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Seham Mohamed Abd El-Moghny.
Title	:	Biofeedback versus Electrical Stimulation in Children with Monosymptomatic Nocturnal Enuresis.
Dept.	:	Physical Therapy Department for Growth and Developmental Disorder in Children and its Surgery.
Supervisors	1.	Manal Salah El-Dien Abd El-Wahab
	2.	Samah Attia El Shemy
	3.	Ashraf Mohamed Abd Elaal
Degree	:	Doctoral.
Year	:	2019.
Abstract	:	
<p><b>Background:</b> The impact of bed-wetting on children and families can affect a child's self-esteem, school achievement, and interpersonal relationship of child and caregivers with increased risk of physical abuse. <b>Purpose:</b> To compare the effect of intra-anal biofeedback and intra-anal electrical stimulation on pelvic floor muscles (PFMs) activity, nocturnal bladder capacity and frequency of wet night episodes in children with refractory primary monosymptomatic nocturnal enuresis (PMNE). <b>Methods:</b> Ninety children of both sexes aged between 8 to 12 years with refractory PMNE participated in this study. They were randomly assigned to 3 groups of equal number: control group that underwent behavioral therapy and PFMs training, and two study groups (I and II) that underwent the same program in addition to intra-anal biofeedback training and electrical stimulation, respectively. PFMs activity was assessed using electromyography, nocturnal bladder capacity was evaluated by measuring the first morning voided volume and a nocturnal enuresis diary was used for documenting wet night episodes before, and after 3 months of treatment. <b>Results:</b> After training, all groups showed a statistically significant improvement in all measured outcomes, with more improvement in favor to the electrical stimulation group II. <b>Conclusions:</b> Electrical stimulation combined with behavioral therapy and PFMs training is more effective in the treatment of PMNE than biofeedback training.</p>		
Key words	1.	Biofeedback.
	2.	Children.
	3.	Electrical Stimulation.
	4.	Monosymptomatic Nocturnal Enuresis.
	5.	Children with Monosymptomatic Nocturnal Enuresis.
Classification number	:	000.000.
Pagination	:	123 p.
Arabic Title Page	:	الارتجاع البيولوجي مقابل التنبيه الكهربائي في الاطفال المصابين بسلس البول الليلي وحيد العرض.
Library register number	:	6587-6588.

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Author	:	Ramy Hamdy Abd El- Moniem Hegazy.
Title	:	Effect of Push-Up Exercises on Hand Grip Strength in Diplegic Children.
Dept.	:	Physical Therapy Department for Growth and Developmental Disorder in Children and its Surgery.
Supervisors	1.	Emam Hassan El-Negmy.
	2.	Hebatallah Mohamed Kamal.
	3.	Amina Salem Hendawy.
Degree	:	Doctoral.
Year	:	2018.
Abstract	:	
<p><b>Background:</b> Diplegia is a spastic form of cerebral palsy with lower limbs more affected than upper limbs. The hand is effector organ of upper extremity for support, manipulation and prehension. <b>Purpose:</b> The purpose of this study is to determine the effect of push-up exercises on hand grip strength in spastic diplegic cerebral palsied children. <b>Subjects and Methods:</b> Sixty spastic diplegic children with age ranged from 4 to 7 years from both sexes participated in this study. They were chosen from physical therapy department, Mubarak Central Hospital, Giza Governorate, Egypt. The clinical work was started at October 2017 and ended at October 2018. Subjects were divided randomly into three groups A, B and C, of equal number (twenty patients each). Each patient was evaluated pre and post-treatment individually by using Baseline pneumatic squeeze handheld dynamometer to detect maximum hand grip strength and Peabody Developmental Motor Scale (PDMS-2) to determine age equivalent and standard scores of grasping fine motor skills. Control group (A) received designed physiotherapy program for spastic diplegia and the two study groups (B and C) received the same designed physiotherapy program in addition to push-up exercises on stable surface where group B received wide base push-up exercises, and group C received narrow base push-up exercises. The treatment protocol was conducted for three successive months for each group. <b>Results:</b> The results of this study revealed significant improvement in the selected variables (hand grip strength, age equivalent of grasping and standard scores of grasping) in the three groups with higher percent of improvement in HGS of group B than other groups. Also, Results revealed statistically non-significance between three groups post treatment. There was positive correlation between hand width and hand grip strength. <b>Conclusion:</b> Push-up exercises do not alone improve HGS in spastic diplegic children.</p>		
Key words	1.	Spastic Diplegia.
	2.	Developmental Motor Scale (PDMS-2).
	3.	Baseline pneumatic squeeze handheld dynamometer.
	4.	Hand grip strength.
	5.	Peabody.
	6.	Push-up exercises.
	7.	Children in Diplegic.
Classification number	:	000.000.
Pagination	:	114 p.
Arabic Title Page	:	تأثير تمارين الضغط الأرضية على قوة قبضة اليد للأطفال المصابين بالشلل الدماغي التصلبي.
Library register number	:	6677-6678.