### Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and Its Surgery

## Master Degree 2003

Author	:	Ehab Abd El-Rahman Taha.	
Title	:	Influence of interferential therapy combined with specific	
		exercises program on the hip abductors strength and gait	
		in paraparetic patients.	
Dept.	:	Physical Therapy Department for Neuromuscular and	
		Neurosurgical Disorder and its Surgery.	
Supervisors	1.	Mohamed Sadik Badawy.	
	2.	Eglal Mokhtar El-Nesr.	
	3.	Gehan Mousa Ahmed	
Degree	:	Master.	
Year	:	2003.	
Abstract	:		

The purpose of this study was to investigate the effect of interferential therapy stimulation combined with specific exercises program on hip abductor muscles strength , and to investigate its influence on gait parameters in cases of spastic paraparetic patients . twenty spastic paraparetic patients of both sexes were assigned into control and study groups . both groups received therapeutic exercises program in the form of mat exercises (strengthening exercises , stretching exercises of hip adductors , endurance and balance exercises), and gait training . the study group received additional interferential stimulation to the hip abductors . all patients in both groups received their treatment for six days / week for four successive weeks . the patients were assessed for muscle strength of hip abductors , muscle tone of both lower limbs , and certain gait parameter . these measures were recorded two times during the period of the study ; before treatment , and after treatment . the results of the study group showed significant increase of muscle strength of hip abductors , and improvement of gait parameters compared to the control group. can be concluded that this combination of interferential current as electrical stimulation and suggested physical therapy program can improve gait parameter.

Key words	1.	hip abductors.	
	2.	interferential current.	
	3.	gait, paraparesis.	
Arabic Title Page	:	التيار المتداخل العلاجي مع برنامج تمرينات محدد على قوة العضلات	تاثير ا
		ة للفخذ والمشى لمرضى الضعف النصفي المستعرض.	الباعدة
Library register number	:	998-999.	

Author	:	El-Badawy Ibrahim Mohammad El Hinidy.
Title	:	Balance outcome in hemiparetic patients following use of
		a selected balance program.
Dept.	:	Physical Therapy Department for Neuromuscular and
		Neurosurgical Disorder and its Surgery.
Supervisors	1.	Mohammad Sadek Badawy.
	2.	Ebtsam Mohammad Fahmy.
	3.	Gehan Mousa Ahmad.
Degree	:	Master.
Year	:	2003.
Abstract	:	

The purpose of this study was to evaluate the influence of use of a selected balance program on improving balance outcome in hemiparetic patients following cerebrovascular insult. forty patients participated in the study and classified randomly into two equal groups : study and control groups. both groups received a conventional physical therapy treatment including tone reduction techniques , trunk control training , upper extremity control exercises , lower extremity exercises . in addition , the study group received also a selected balance program by using the biodex balance system including static balance training and dynamic limits of stability training . the treatment program was conducted three times per week for six weeks . the patients were assessed for : muscle force of quadriceps , hamstrings , dorsi flexors and evertors of the foot by using the tensiometer , static balance and dynamic limits of stability by using the biodex balance system , and berg balance scale . these measures were recorded two times : before the application of the treatment program (post). the results of this study showed that there was significant improvement of muscle force , static balance , dynamic limits of stability and scores on berg balance scale for both groups , but the improvement was higher in the study group than in the control group . it could be concluded that this selected balance program is effective in improving balance of hemiparetic patients following cerebovascular insult.

Key words	1.	Balance.	
1 7 10	2.	Hemiparesis.	
LID	3.	Stroke.	
Arabic Title Page	:	زن بعد استعمال برنامج توازن مختار لمرض الشلل النصفى الطولى	
		52005	(الفالج).
Library register number	:	976-977.	

Author	:	Moussa Abd El-Fattah Youssif Sharaf.
Title	:	The influence of foot evertors re-education on gait in stroke patients.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Nalema Hamdy Hassan.
	2.	Hussein Ahmad Shaker.
	3.	Maggdy Ahmad Arafa.
Degree	:	Master.
Year	:	2003.
Abstract	:	

The purpose of this study to evaluate the influence of foot evertors re-education in correcting varus abnormal position in stroke patients and to investigate its influence on gait parameters. twenty stroke patients participated in this study . the program consisted of ; quick stretch combined with tapping and synkinetic movement (stepI), EMG biofeedback training (step II), and graduated active exercises (step III). the program was conducted three times / week for six weeks . the patients were assessed for muscle strength of foot evertors , active ROM of subtler version, the degree of varus abnormal position during gait , and certain gait parameters . these measures were recorded at pre treatment , after step I , after step II , and at the end of the six weeks . the results of this study show significant decrease in the degree of varus abnormal position at the end of the re-education program . it can be concluded that this suggested re-education program is effective in decreasing the degree of varus deformity in stroke patients during gait .

Key words	1.	foot evertors.	
	2.	re-education.	
	3.	Gait.	
	4.	Stroke.	
Arabic Title Page	:	ة تاهيل عضلات القدم القالبة للخارج على المشى فى مرضى السكتة	تاثير اعاد
			الدماغية.
Library register number	:-	936-937.	

# THESES 2003

Author	:	Yasser Ibrahim Ali Seada.
Title	:	Calcium gluconate intophoresis versus lidocaine topical
		anesthesia on spastic wrist flexors in stroke patients.
Dept.	:	Physical Therapy Department for musculoskeletal
		disorder and its Surgery.
Supervisors	1.	Nahed Ahmad salem.
	2.	Nawal Abd El-Raouf Abou-Shady.
	3.	Mohamad Nanil El-Bahrawy.
Degree	:	Master.
Year	:	2003.
Abstract	:	

The purpose of this study was to investigate the effect of both calcium gluconate iontophoresis and lidocaine spray topical anesthesia combined with exercise therapy in controlling wrist flexors spasticity which will lead to (increasing range of motion of wrist joint, improving voluntary contraction of wrist extensors and improving hand function of stroke patients). subjects, thirty hemiplegic patients due to cerebro vascular accident with wrist flexors participated in this study. they were diagnosed clinically and radiologically by their own neurologists. the methods, they were randomly assigned to either group one (G)receiving lidocaine spray topical anesthesia in addition to exercises therapy program (prolonoged stretching to wrist flexors, weight bearing exercise for wrist joint, active strengthening exercises for extensors and training manipulative skills of the hand)or group two (Gll)receiving calcium gluconate iontophoresis and the same exercise program as group one. assessment, subjects in birth groups were evaluated pre and post experimental for spastic wrist flexors by modified ash worth scale, range of motion by digital goniometer, tension of the muscles by tensiometer, dexterity of hands by Purdue pegboard and grip power by dynamometer. therapeutically, subjects in both groups received eighteen session (one session every other day for six weeks). the results, showed that group two was improved more than group one.

Key words	1.	Iontophoresis.
ITD	2.	topical anesthesia.
LID	3.	Calcium.
THES	4.	Lidocaine.
	5.	spasticity.
Arabic Title Page	:	مقارنة كلا <mark>من علاج التحليل الكهربي لايونات جلوكونات الكالسيوم والتحذير.</mark> الموضعي <mark>بالليدوكايين علي تصلب عضلات ثني الرسغ في مرضي السكتة</mark>
		الموضعي بالليدوكايين علي تصلب عضلات ثني الرسغ في مرضي السكتة
		الدماغية
Library register number	:	972-973.