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

<b>Doctoral Degree</b>			
2004			

Author	:	Enas El Sayed Mohamed.
Title	:	Role of physical therapy in patients with focal dystonia injected with botulinum toxin.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Nahed Ahmed Salem.
	2.	Mohamed Soliman El-Tamawy.
	3.	Mohamed Nabil El-Bahrawy.
Degree	:	Doctoral.
Year	:	2004.
Abstract	:	

The purpose of this study is to evaluate the effects of prolonged stretch and transcutaneous electrical nerve stimulation (TENS) on the overactive muscles in patients with cervical dystonia injected with botulinum toxin. Thirty patients of both sex participated in this study. The program consisted of; botulinum toxin injection with the suitable dose, prolonged stretch for 10 min each muscle and tens application for 30 min each muscle. The program was conducted for 8 weeks (three times / week). The patients were assessed before and after treatment regarding severity of dystonia, neck ROM at resting posture and the ratio between EMG amplitude under maximum contraction and spontaneous conditions. The results of this study show significant improvement of those variables in the study group. It can be concluded that this suggested program is effective in increasing the inhibitory effect in patients with cervical dystonia injected with botulinum toxin.

Key words	1.	Focal Dystonia.
THES	2.	Botulinum Toxin.
	3.	Prolonged Stretch.
	4.	Transcutaneous Electrical Nerve Stimulation,.
	5.	TENS.
Arabic Title Page	:	دور العلاج الطبيعي في مرضى الخلل التوترى الموضعي الذين تم حقنهم بسم
		البتيولينوم.
Library register number	:	1093-1094.

Author	:	Hayam Mahmoud Sayed Mahmoud.
Title	:	The use of vestibular galvanic stimulation in stroke patients.
Dept.	:	Physical Therapy Department for Neuromuscular and
		Neurosurgical Disorder and its Surgery.
Supervisors	1.	Naeima Hamdy Hassan.
	2.	Ann Aly Abd El-Kader.
	3.	Magdy Ahmed Arafa.
Degree	:	Doctoral.
Year	:	2004.
Abstract	:	

The purpose of this study was to evaluate the effect of galvanic vestibular stimulation (GVS) on functional recovery and brain plasticity promotion in stroke patients. Forty spastic hemiplegic patients were randomly assigned equally into control / study group subjects. Both groups received the ordinary designed program of treatment. The study group received in addition to this transmastoid GVS. Both groups were treated three times per week for successive three months and evaluated pre and post treatment through clinical (muscle tone, muscle power, and functional activities assessment) and electrophysiological evaluation (somatosensory evoked potentials). Results showed that both groups were improved clinically and electro physiologically with significant improvement of study group subjects more than control group subjects. It was concluded that GVS is a beneficial central non-invasive modality to improve functional recovery and promote neural plasticity of stroke patient.

Key words		1.	Vestibular Stimulation.
		2.	Recovery.
		3.	Somatosensory.
DUVCI		4.	Evoked Potential.
PHYS.		5.	Plasticity.
		6.	Stroke.
Arabic Title Page		:	تنبية دهليز الاذن باستخدام التيار الكهربائي المستمر في حالات مرضى السكتة
			الدماغية.
Library register num	ıber	:	1085-1086.

Author	:	Hoda Mohammad Zakaria Zaki.
Title	:	Task oriented rehabilitation therapy via early program of proprioceptive training in stroke patients.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Naima Hamdy Hassan.
-	2.	Magdy Ahmed Arafa.
	3.	Abdel-Moez Abd El-Aziz.
Degree	:	Doctoral.
Year	•	2004.
Abstract	:	

The purpose of this study was to determine the influence of task-oriented approach on functional outcome in stroke patients . Thirty stroke patients were randomly assigned into study and control groups. The study group recieved selected task specific training. The control group relived a conventional physical teary program. Each treatment program was conducted three times per week, for eight weeks. The patients were assessed for static and dynamic balance parameters, gait, functional outcomes, muscle tone and muscle strength of the upper and lower limbs, and handgrip. These measurements were recorded two times during the period of the study; pre-treatment and post treatment. The results of this study revealed statistically highly significant improvement in all variables of the study group. From the obtained results of this study, it can be concluded that task-oriented approach is a beneficial modality that can be used to improve the functional outcome in stroke patients.

Key words	1.	Stroke.
	2.	Rehabilitation.
DUVOTO	3.	Task.
PHISIC	4.	Training.
	5.	proprioceotion.
Arabic Title Page	:	العلاج التأهيلي لعمل موجه من خلال التمرين المبكر للمستقبلات الحسية العميقة لمرضى السكتة الدماغية.
		لمرضي السكتة الدماغية.
Library register number	:	1005-1006.

Author	:	Nashwa Sayed Hamed Mohammad.
Title	:	Motor relearning of gluteus maximums and gluteus mediums muscles: its effect on standing balance in stroke patients.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Naiema Hamdy Hassan.
-	2.	Omar Ameen Elserafy.
	3.	Salah Abd-Elmonem Sawan.
Degree	:	Doctoral.
Year	:	2004.
Abstract	:	

The purpose of this study was to investigate the effect of motor relearning program of gluteus maximums and gluteus mediums muscles on stroke patients' standing balance . Forty recent hemiplegic stroke patients were randomly assigned into study and control groups equally. Twenty normal subjects were assigned into the normal group. The study group received motor relearning program to the gluteus maximums and the gluteus Medias muscles. The normal group was evaluated by the Kinisiological integrated electromyography, balance assessment and muscle strength assessment. Both study and control groups were treated three times per week for successive six weeks. Assessment consisted of balance scores, muscle strength, kinisiological integrated electromyography, time of single leg stance and muscle tone of the affected lower limb . Serial evaluations were performed at pre-treatment, after two weeks, after four weeks and after six weeks. The results of this study showed that both groups were improved in all assessment results. However, the study group showed more significant improvement than the control group in balance scores, muscle strength scores, time of single leg stance as well as muscle tone scores. This improvement is postulated to the early use of motor relearning program. It was concluded that the motor relearning program of gluteus maximums and gluteus maximums and gluteus mediums muscles is beneficial for the improvement of standing balance of stroke patients.

Key words	1.	Motor relearning.
	2.	Stroke.
THE	3.	standing balance.
Arabic Title Page	:	تأثير اعادة التعليم الحركي لعضلة الاليية العظمي وعضلة الاليية الوسطي علي
		الوقوف المتوازن لدى مرضي السكتة الدماغية.
Library register number	:	1125-1126.