

**ELECTRONIC GUIDE TO THESES APPROVED BY
PHYSICAL THERAPY DEPARTMENT FOR NEUROMUSCULAR
AND NEUROSURGICAL DISORDER AND ITS SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and Its Surgery

Doctoral Degree
2007

Author	:	Moussa Abd El-Fattah Youssif Sharaf.
Title	:	Clinical, electrophysiological and kinesiological study of foot-knee-hip interaction in stroke patients.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Nahed Ahmad Salem.
	2.	Usama Mohamed Rashad.
Degree	:	Doctoral.
Year	:	2007.
Abstract	:	
<p>The aim of this study was to evaluate the foot-knee-hip interaction during sit-to-stand (STS) movement and gait, balance and clinical functional skills of the lower limbs in stroke patients. Thirty patients and ten normal subjects participated in this study. Patients were divided into two equal subgroups. All subjects were assessed for; clinical functional skills of the lower limbs, standing balance and muscular activities of selected muscles controlling the lower limb joints & range of motion (ROM) of these joints during STS movement and gait. The results showed significant differences in the EMG findings among the normal subjects, mild and moderate spastic patients during STS movement and gait. There was significant differences in hip, knee and ankle ROM during STS (during all phases except phase II of knee) and gait (during both stance [except knee extension] and swing [except ankle dorsiflexion] phases). There was an impairment in clinical functional skills of the lower limbs and standing balance in stroke patients. It was concluded that stroke patients suffer from muscular imbalance that affects activities of daily living including STS movement, balance and gait.</p>		
Key words	1.	Stroke.
	2.	electromyography.
	3.	3-D motion analysis.
	4.	foot.
	5.	Knee.
	6.	hip interaction.
	7.	STS,.
	8.	gait.
	9.	balance.
Arabic Title Page	:	دراسة إكلينيكية كهروفسيولوجية حركية للتفاعل بين القدم-الركبة-الفخذ في مرضى السكتة الدماغية.
Library register number	:	1475-1476.

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Author	:	Yasser Ibrahim Ali Seada.
Title	:	The use of electromagnetic therapy in the treatment of parkinsonian patients.
Dept.	:	Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.
Supervisors	1.	Nahed Ahmed Salem.
	2.	Manal Salah El Din Fahmy.
	3.	Husien Ahmed Shaker.
Degree	:	Doctoral.
Year	:	2007.
Abstract	:	
<p>The purpose of the study is to evaluate if electromagnetic therapy can improve muscle activities, gait disorders (Kinetic and Kinematic analysis) and activities of daily living in parkinsonian patients. Subjects thirty male and female parkinsonian patients, their ages ranged from 50 to 77 years. They were randomly divided into two equal groups (GI and GII), GI is a control group and was treated by traditional physical therapy program only, GII is an experimental group and was treated by the same traditional physical therapy program and low frequency electromagnetic therapy. All subjects have received the therapy training exercises for 40 minutes (five minutes training and five minutes rest respectively), this means 20 minutes training and 20 minutes rest, three days per week day after day for six weeks. The frequency of electromagnetic therapy is 0.5 Hz, 30% intensity and 20 minutes duration. Vital signs (Blood pressure, temperature, pulse rate and respiratory rate) for all patients were measured before, during and after the treatment sessions. Assessments, all patients were assessed by unified parkinson's disease rating scale, motion analysis system, Purdue pegboard and EMG before and after the last session. Statistically the results showed that, there was a significant improvement that occurred in both groups with the best results for GII, regarding the clinical kinematics, kinetics and electromyographic parameters. According to the statistical analysis, the electromagnetic stimulation with 0.5 Hz, 30% intensity and 20 minutes is considered very effective in rehabilitating parkinsonian patients.</p>		
Key words	1.	Electromagnetic stimulation.
	2.	Gait analysis.
	3.	Electromyography.
	4.	Kinetic analysis.
	5.	Kinematic analysis.
	6.	Parkinsonism.
Arabic Title Page	:	استخدام العلاج الكهرومغناطيسي في علاج مرضى الشلل الرعاش.
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