Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and Its Surgery

Master Degree

2015

Author	**:**	**Abdelaziz Abdelaziz Mohammed Elsherif**
Title	**:**	**Quantitative Assessment of Shoulder Proprioception in Patients with Stroke**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Moshera H. Darwish**
	2.	**Sandra M. Ahmed**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	

Background: Impairment of proprioception in the upper extremity may impede activities of daily living and limit motor gains after stroke. The aim of this study was to assess and evaluate objectively shoulder proprioception (joint position sense) in affected (contralesional) and unaffected (ipsilesional) side of stroke patients. Methods: Thirty stroke patients from both sexes (study group, G1) and thirty normal matched subjects (age, sex, weight and height) (control group, G2) participated in this study. The age of the patients ranged from 48 to 63 years and the duration of illness was more than six months post stroke. Joint position sense (JPS) was assessed by the Biodex system 3 Isokinetic dynamometer through determining angular displacement error of active and passive angle repositioning of shoulder external and internal rotation . Assessment procedures applied on both shoulders in patients' group (G1) and on the shoulder of the dominant arm only of normal subjects in control group (G2). The results: revealed a significant increase in the mean values of errors in the affected arm in all tested movements (active and passive external rotation, active and passive internal rotation) comparing the mean values of errors in the affected arm (G1) with the mean values of errors of both the dominant arm of normal subject (G2) and the unaffected arm (G1) ($p<0.05$). A non significant difference of all tested movements between the mean values of errors in the unaffected arm (G1) and the dominant arm of normal subject (G2). A non significant correlation between the mean values of errors in the affected arm in all tested movements in (G1) and the site of the lesion (cortical or subcortical). A non significant correlation between the mean values of errors in the affected arm in the following tested movements (active and passive external rotation, active internal rotation) in (G1) and the side of the lesion in the brain except for passive internal rotation as there was a significant inverse reasonable correlation between the mean values of errors of passive internal rotation in the affected arm and the side of the lesion in the brain ($p<0.05$). Conclusion: Proprioceptive deficit is evident in the affected shoulder in hemiparetic patients. Physical therapy programs must focus on proprioceptive training for better functional outcome.

Key words	**1.**	**Stroke**
	2.	**Shoulder**
	3.	**Proprioception**
	4.	**Assessment of Shoulder**
Classification number	**:**	**000.000.**
Pagination	**:**	**108 p.**
Arabic Title Page	**:**	**التقييم الكمي للإحساس العميق بالكتف في مرضي السكتة الدماغية.**
Library register number	**:**	**4199-4200.**

Author	**:**	**Engy El-Sayed Ibrahim Sarhan**
Title	**:**	**Effect of Nitrogen-Based Cryotherapy on the Calf Muscle Spasticity in Stroke Patients**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Usama Mohammad Rashad**
	2.	**Ehab Shaker Belal**
	3.	**Bassam Abd-Almageed Al-Nassag**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	

The purpose of this study was to know the effect of nitrogen-based cryotherapy on the spasticity of calf muscle in stroke patients. Assessment: patients were assessed through modified Ashworth's scale, H/M ratio for affected soleus muscle and two-dimentions motion analysis for ankle dorsiflexion ROM. All these measurements were assessed before and after treatment program. Thirty stroke patients were selected from outpatient clinic of Neurology, Al-Mansoura general hospital and Patients were divided randomly into two equal groups. Methods: patients in study group (n=15) received a selective physical therapy program and nitrogen-based cryotherapy and AFO, while as patients in control group (n=15) received selective physical therapy program and AFO only. Results: There was no significant difference between the two groups regarding the H/M ratio scores and 2D motion analysis findings before treatment, but there was ahighly significant difference between the two groups regarding the scores of MAS. After treatment, there was a highly significant decrease in the study group compared to the control group regarding the score of MAS, no significant decrease in the study group compared to the control group regarding the readings of H/M ratio, highly significant increase in the study group compared to the control group regarding the 2D motion analysis findings. Conclusion: Nitrogen-based cryotherapy considers an effective method in reducing spasticity in calf muscle and improving ankle dorsiflexion of the affected limb.

Key words	**1.**	**Stroke**
	2.	**nitrogen-based cryotherapy**
	3.	**Spasticity**
	4.	**Calf Muscle Spasticity**
Classification number	**:**	**000.000.**
Pagination	**:**	**95 p.**
Arabic Title Page	**:**	تأثير التبريد بالنيتروجين على تقلص عضلة السمانة في مرضى السكتة الدماغية
Library register number	**:**	**4565-4566.**

Author	**:**	**Hosam Magdy Metwally Abd Al Hamid**
Title	**:**	**Task Oriented Program versus Balance Training on Postural Stability in Stroke Patients**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Mohamad Sadek Badawy**
	2.	**Waleed Talat Mansour**
	3.	**Gihan Mahmoud Ramzy**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	

Background: Sensorimotor cortex is responsive to peripheral and central stimulation by mechanisms that are important for learning motor tasks. The purpose of this study was to investigate difference between the effect of task oriented program and balance exercises on postural stability in stroke patients. Methodology: Thirty stroke hemiparetic subjects were assigned into two equal groups (group I and II): group (I) received task oriented training program in addition to selected physical therapy program (PNF technique, weight bearing exercises and gait training) while group (II) received balance exercise in addition to selected physical therapy program (PNF technique, weight bearing exercises and gait training). Subjects were assessed using biodex stability system including postural stability test and clinical tests (berg balance scale, functional reach test, and time up and go test). Results: This study revealed that balance is significantly improved in both groups with the best results for group I. Conclusion: Task oriented training could be considered a valuable method for treating balance in stroke patients.

Key words	**1.**	**Stroke**
	2.	**Postural stability**
	3.	**Task oriented program**
	4.	**Balance**
Classification number	**:**	**000.000.**
Pagination	**:**	**92 p.**
Arabic Title Page	**:**	**برنامج المهمه الموجهه مقابل تمرينات الإتزان على مدى ثبات القوام فى مرضى السكته الدماغيه**
Library register number	**:**	**4269-4270.**

Author	**:**	**Islam Hasan Fayed**
Title	**:**	**Relationship between the Trunk Muscles and Ventilatory Function in Stroke Patients**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Mohamad Sadek Badawy**
	2.	**Waleed Talat Mansour**
	3.	**Nasr Hafez Khalil**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	

The purpose: to assess the relationship between trunk muscles and ventilatory function using computerized spirometer in stroke patients. Subjects: One hundred ischemic stroke patients from both sexes (78 male and 22 female) were participated in the study. The age ranged from 40-60 years. Methods: Subjects were assigned into two equal groups; Group A Patients with acute ischemic stroke, Group B Patients with chronic ischemic stroke. Results: For group (A), the results showed that there was a significant weak direct relationship between overall score of Trunk impairment scale and peak expiratory flow and maximum voluntary ventilation, while there was no significant relationship between overall score of Trunk impairment scale and forced expiratory volume in one second/ forced vital capacity. For group (B), the results showed that there was a significant moderate direct relationship between overall score of Trunk impairment scale and peak expiratory flow and maximum voluntary ventilation, while there was no significant relationship between overall score of trunk impairment scale and forced expiratory volume in one second/ forced vital capacity. Conclusion: The relationship between trunk muscles and ventilatory function appear to be more significant in chronic than acute stroke.

Key words	**1.**	**Stroke**
	2.	**trunk muscles**
	3.	**trunk impairment scale**
	4.	**Ventilatory Function**
Classification number	**:**	**000.000.**
Pagination	**:**	**122 p.**
Arabic Title Page	**:**	دراسة العلاقة بين عضلات الجذع وكفاءة الرئة في مرضى السكتة الدماغية
Library register number	**:**	**4267-4268.**

Author	**:**	**Mariana Atef Adeeb**
Title	**:**	**Efficacy of kinesiotape in Cervicogenic Headache Patients**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Nawal Abdel-Raof Abou Shady**
	2.	**Amira Mohamed El- Gohary**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	
Subjects and methods: thirty patients were recruited from Kasr EL- Aini hospital and faculty of physical therapy Cairo University assigned into two equal groups a study group (1) and a control group (2). Group (1) received selected physical therapy program (Us, IR and isometric exercise) in addition to kinesiotape, while Group (2) received the same physical therapy program only as group(1). The patients were assessed with Quantitative EMG, Visual analogue scale (VAS), OB goniometer (Myrin) and migraine disability questionnaire (MDAS) before and after treatment. Results: showed significantly decreased in the scores of EMG and VAS with marked improving the score of Myrin and MDAS post treatment In group (1) more than group (2) as compared with the base line levels pretreatment with P- value less than or equal to 0.05 considered significant and highly significant if P-value < 0.01. Conclusion: kinesiotape is effective and non invasive in treatment of cervicogenic headache patients.		
Key words	**1.**	**cervicogenic headache**
	2.	**kinesiotape**
	3.	**Quantitative EMG**
	4.	**OB goniometer.**
	5.	**MDAS**
Classification number	**:**	**000.000.**
Pagination	**:**	**92 p.**
Arabic Title Page	**:**	**كفاءة لاصق الكنيسيو فى مرضى الصداع العنقي**
Library register number	**:**	**4147-4148.**

Author	**:**	**Mennat Allah Mohamed Ali**
Title	**:**	**Influence of transcranial direct current stimulation on dysphagia in stroke patients**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Salah Abdel-Monem Sawan**
	2.	**Abd El-Azem Mohamed Reda**
	3.	**Ahmed Hosny Kamel**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	

The purpose of this study was to examine the effect of anodal transcranial direct current stimulation combined with intensive swallowing therapy on improving dysphagia in stroke patients. Subjects: Forty patients were selected from in-patient department of neurology, El-Kasr El-Ainy hospital with acute or sub-acute stroke. Patients were divided into two equal groups. Methods: patients in the study group (n = 20) received the selected physical therapy program as well as active transcranial direct current stimulation (tDCS), whereas patients in control group (n =20) received the selected physical therapy program as well as sham (tDCS). The following assessment including Dysphagia Outcome and Severity Scale (DOSS) and videofluoroscopy were measured before and after two weeks of treatment program. The period of the study was from June 2013 to February 2014. Results: before treatment there was no significant difference between the two groups regarding the scores of DOSS and the digital fluoroscopic findings. After treatment there was a very highly significant difference between the study group and the control group regarding the scores of DOSS, highly significant difference between the study group and the control group regarding the digital fluoroscopic findings. Conclusion: anodal tDCS combined with intensive swallowing therapy is effective in improving dysphagia in stroke patients.

Key words	**1.**	**Stroke**
	2.	**Dysphagia**
	3.	**noninvasive brain stimulation**
	4.	**transcranial direct current stimulation**
Classification number	**:**	**000.000.**
Pagination	**:**	**106 p.**
Arabic Title Page	**:**	**تأثير التنبيه الكهربي المباشر عبر الجمجمة في علاج صعوبة البلع في مرضى السكتة الدماغية**
Library register number	**:**	**4165-4166.**

Author	**:**	**Mohammed Samir Kamel Suwaidan**
Title	**:**	**Lumbar spondylosis; its relation to sacral angle and postural instability**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Nahed A. Salem**
	2.	**Mohammed N. El-bahrawy**
	3.	**Mohammed E. El-awady**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	

Each person has a unique posture and spinopelvic balance with a particular set of sagittal alignments. Alterations in postural control have been reported in persons with low back pain (LBP). The purposes of this study were to evaluate the biomechanical features of the lumbosacral region in patients with low back pain secondary to lumbar spondylosis and to determine if there was a relationship between postural stability and sacral angle in patients with low back pain as a result of lumbar spondylosis. Methods: Twenty participants suffering from lumbar spondylosis were included in this study. Postural stability was measured using computerized dynamic posturography (Smart Balance Master and the Balance Master systems) as methods of laboratory examination for postural stability. The computerized dynamic posturography tests included rhythmic weight shift and limits of stability tests. Also, sacral angle was objectively measured for patients using plain X-ray. Results: The results showed that there is a significant correlation between changes in sacral angle (increase/decrease) and postural instability in patients with back pain secondary to lumbar spondylosis. Conclusion: There is a significant correlation between medio-lateral stability and increase in sacral angle in patients with low back pain as a result of lumbar spondylosis. There is a significant correlation between antero-posterior stability and increase in sacral angle in patients with low back pain as a result of lumbar spondylosis.

Key words	**1.**	**Lumbar spondylosis**
	2.	**Sacral angle**
	3.	**Postural stability**
Classification number	**:**	**000.000.**
Pagination	**:**	**100 p.**
Arabic Title Page	**:**	خشونة الفقرات القطنية، علاقتها بالزاوية العجزية وخلل اتزان القوام.
Library register number	**:**	**4547-4548.**

Author	**:**	**Rania Abd Ei- Moniem Badawy**
Title	**:**	**Balance Assessment In Patients With Multiple Sclerosis**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Abd El Aleem Abd El Fatah Ateya**
	2.	**Abeer Abo Bakr El Wishy**
	3.	**Nirmeen Adel Kishk**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	

Objectives: The objectives of this study were designed to assess the postural balance in people with multiple sclerosis (MS) by using clinical and instrumental techniques and specify the most direction in the balance instability in the MS patients. Subjects and methods: Fifty patients diagnosed as multiple sclerosis with both types RRMS and SPMS, and twenty healthy volunteers were recruited for postural balance assessment. Assessment was done by using the Timed Up and Go test (TUG) & Berg Balance Scale (BBS) as clinical tools in measuring the postural balance, as well as the instrumental assessment by using the Biodex Stability System (BSS) to determine the correlations between these methods. Results: there were significant differences between patient and control groups in detecting balance instability by using BBS and BSS, while there was no significant difference between both groups by using TUG test. BSS determined the direction of tilt of the patients. It was found that the mediolateral direction revealed more balance instability than the antroposterior direction. Conclusion: Biodex Stability System is an effective screening tool for identifying the fallers from non-fallers in MS patients. It enables the identification of the most direction of tilt of patients with MS.

Key words	**1.**	**Multiple sclerosis.**
	2.	**Timed Up and Go test.**
	3.	**Berg Balance Scale.**
	4.	**Biodex Stability System.**
	5.	**Balance Assessment**
Classification number	**:**	**000.000.**
Pagination	**:**	Viii**, 134p.**
Arabic Title Page	**:**	**تقييم الاتزان في مرضي التصلب المتناثر للجهاز العصبي.**
Library register number	**:**	**4139-4140.**

Author	**:**	**Rasha Mohammed Mahmoud El Rewainy**
Title	**:**	**Efficacy of cognitive training on patients at early stage of alzheimer's disease**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Nawal Abd El-Raouf Abou Shady**
	2.	**Amira El-Gohary**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	

Background: The purpose of this study was to investigate if cognitive training by using Rehacom system is effective for patients at early stage of Alzheimer's disease. Methods: Thirty patients all aged from 60-75 years were selected. The patients were classified into two equal groups: Study group A (Alzheimer's disease patients) (n=15) and study group B (Mild cognitive impairment patients) (n=15). Both groups received cognitive training via Rehacom system. All patients were selected from unit of memory and cognition in Kasr AL Ainy hospital, Faculty of Medicine, Cairo University. The patients were assessed via Addenbrooke's Cognitive Examination-Revised (ACER), Event-Related Potentials (the P300 Wave) ,Trail Making Test (TMT) and Rehacom system (attention concentration-figural memory –reaction behavior- logical thinking) before and after twelve weeks of training Cognitive function outcome was measured before and after twelve weeks of training program. **Results:** There was highly significant improvement ($P < 0.001$) in cognitive functions of both patients with Alzheimer's disease (GA) and those with mild cognitive impairment (GB). **Conclusion:** It can be concluded that cognitive training is effective and valid method for improving cognitive functions of Alzheimer's patients at early stage.

Key words	**1.**	**Cognitive training**
	2.	**Alzheimer's disease**
	3.	**Rehacom training**
	4.	**Mild cognitive impairment - P300 wave**
Classification number	**:**	**000.000.**
Pagination	**:**	**196 p.**
Arabic Title Page	**:**	كفاءة التدريبات الادراكية على المرضى في المرحلة المبكرة لمرض الزهايمر .
Library register number	**:**	**4399-4400.**

Author	**:**	**Sara Ibrahim Mohamed Kabbash**
Title	**:**	**Transcranial Magnetic Stimulation Versus Transcutaneous Electrical Nerve Stimulation For Neuropathic Pain In Diabetic Patients**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Gehan Mousa Ahmed**
	2.	**Hayam Mahmoud Sayed**
	3.	**Eman Ahmed Maher**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	
Background: Diabetes mellitus is a clinical syndrome characterized by hyperglycemia caused by relative or absolute deficiency of insulin in the body. Painful neuropathy is common in the diabetic population, affecting approximately 50% of patients with chronic diabetes. Objective: The purpose of this study was conducted to investigate the effects of transcranial magnetic stimulation (TMS) versus transcutaneous electrical nerve stimulation (TENS) on neuropathic pain in diabetic patients. Subjects and Methods: Thirty diabetic patients from both sexes with peripheral neuropathy from Outpatient Clinic of Faculty of Physical Therapy, Cairo University and Kaser Al-Aini Hospitals, Cairo University participated in this study. The patients were randomly assigned in two equal groups; group A (TMS group), group B (TENS group). The patient's age ranged from 40 to 60 years. Group A received TMS in addition to aerobic exercises in the form of stationary bicycle. Group B received TENS in addition to the same aerobic exercises as in group A. Both groups received treatment program for five consecutive days for one week. Neuropathic pain intensity was measured by using visual analogue scale (VAS) and blood beta (β) endorphin level pre and post treatment program. Results: the results revealed that there was no significant difference between TMS and TENS on VAS but there is significant difference between TMS and TENS on blood β-endorphin level that greater improvement in TENS group. Conclusion: Both TMS and TENS were shown to be effective in reducing neuropathic pain in patients with diabetes while TENS has more effect.		
Key words	**1.**	**Transcranial Magnetic Stimulation (TMS)**
	2.	**Transcutaneous Electrical Nerve Stimulation (TENS)**
	3.	**neuropathic pain**
	4.	**Diabetic Patients**
Classification number	**:**	**000.000.**
Pagination	**:**	**113 p.**
Arabic Title Page	**:**	**التنبيه المغناطيسي عبر الجمجمة مقابل التنبيه الكهربائي العصبي عبر الجلد لألم إلتهاب الأعصاب في مرضى البوال السكري.**
Library register number	**:**	**4449-4450.**

Author	**:**	**Sarah Gaber Mohammed Abd El-Wahab**
Title	**:**	**The effect of vibratory insoles on gait parameters and feet planter pressure in diabetic neuropathy patients**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Gehan Mousa Ahmed**
	2.	**Gehan Mahmoud Ramzy**
	3.	**Ahmed Fathy Mohammed Genedy**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	
Objective: The purpose of this study was to investigate the influence of vibration stimulation of soles using vibratory insoles on gait parameters and feet planter pressure distribution in diabetic neuropathy patients. Subjects: Thirty male patients suffering from diabetic neuropathy participated in this study. Methods: patients were randomly divided into two groups; Group A received gait training using vibratory insoles and selected physical therapy program (aerobic and proprioceptive training). Group B received the same selected physical therapy program only. The patients received the sessions three times per week every other day for eight succeed weeks. Results: There were statistically significant increase in step length, stride length, velocity and cadency. And significant decrease of maximum peak planter feet pressure with increase at heel contact timing in both groups post treatment. The improvement was significantly higher in the study group compared to the control group. Conclusion: vibratory insoles were effective in improving selected kinematics gait parameters and feet planter pressure in diabetic neuropathy patients.		
Key words	**1.**	**Diabetes mellitus**
	2.	**diabetic peripheral neuropathy**
	3.	**vibratory insoles**
	4.	**gait parameters**
	5.	**feet planter pressure**
Classification number	**:**	**000.000.**
Pagination	**:**	**128 p.**
Arabic Title Page	**:**	**تأثير النعل الأهتزازى على قياسات المشى وضغط أسفل القدمين فى مرضى الاعتلال العصبى السكرى.**
Library register number	**:**	**4053-4054.**

Author	**:**	**Sherif Abd Elmoneim Mohamed**
Title	**:**	**Kinesiotaping Versus Rhythmic Stabilization In Stroke Patients With Shoulder Subluxation**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Nawal Abu Shady**
	2.	**Amira Mohamed El Gohary**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	

BACKGROUND: Glenohumeral joint (GHJ) subluxation is reported to be present in 17 – 81% percent of patients with hemiplegia following stroke.Shoulder subluxation is a commonly reported cause of shoulder pain resulting in functional loss, contracture and disability. Previous researches have led to the recommendation of exercises for training of the shoulder muscles to improve subluxation. Tape is commonly used as an adjunct for treatment and prevention of musculoskeletal and joints injuries. OBJECTIVE: The study compared the effect of Kinesio taping to correct shoulder subluxation in post stroke patients versus rhythmic stabilization. METHODS: Thirty patients had participated in this study; were assigned randomly into two study groups. The first study group (A) consisted of 15 patients with a mean age (44.8±5.67) years; received combined program of shoulder kinesio taping and conventional physical therapy program. The second study group (B) which consisted of 15 patients with a mean age (46.53±5.27) years; received the same physical therapy program as group (A) with rhythmic stabilization. Treatment was given 3 times per week, each other day, for six consecutive weeks. Patients were evaluated pre-treatment and post-treatment for shoulder pain and functional disability subacromion space (x-ray) motricity index and finger bridth. RESULTS: Using repeated measures multivariate analysis of variance (MANOVA) test, patients showed significant improvement in the combined dependant variables in both groups but between groups difference there is no significant deference in the combined dependant variables. CONCLUSION: Both of the shoulder Kinesio taping and rhythmic stabilization exercises had a significant effect on finger breadth, Subacromion space, shoulder pain and disability scale, and motricity index. Therefore, the rhythmic stabilization exercises and shoulder kinesio taping are very effective for the treatment of shoulder subluxation in stroke patients.

Key words	**1.**	**strok**
	2.	**Kinesio taping**
	3.	**rhythmic stabilization**
	4.	**Shoulder Subluxation**
Classification number	**:**	**000.000.**
Pagination	**:**	**80 p.**
Arabic Title Page	**:**	**لاصق الكنسيو مقابل تمارين الثبات المنتظم علي الكتف المخلوع في مرضي السكته الدماغيه.**
Library register number	**:**	**4355-4356.**

Author	**:**	**Shorouk Abd Elhameed Osouly Mostafa**
Title	**:**	**Effect Of Mirror Therapy On Hand Function In Patients With Stroke**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Hussain Shaker**
	2.	**Ebtesam Fahmy**
	3.	**Ayman Anwar**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	

Background and Objective: More than 60% of stroke survivors suffer from persistent neurological deficits that impair activities of daily living the functions of the hands are some of the most important function for performing daily living and working activities. Mirror therapy may be effective in improving hand functional recovery in stroke patients. The goal of this study was to determine the effect of mirror therapy on improving hand function in stroke patients. Patients and Methodology: This study was conducted on thirty ischemic stroke patients from both sexes, their ages ranged from 45 to 65 years. They were randomly assigned into two equal groups. Study Group (I) received a selected physical therapy program in addition to a mirror therapy for three sessions per week for eight weeks, Control Group (II) received the same selected designed physical therapy program given to study group but without a mirror. Spasticity grades, ROM of wrist extension, ROM of forearm supination, hand grip strength and time of Jebson Hand Function Test were measured before and after the treatment program. Results: there was no significant difference as regards post treatment spasticity grades between patients groups. There was a statistically significant increase in: ROM of wrist extension, ROM of forearm supination and hand grip strength post treatment in the patients groups with greater improvement in the study group. There was a statistically significant decrease in total time of JHFT in patients groups with greater improvement in group (I) post treatment. Conclusion: Mirror therapy had a positive effect on improving functional hand motor skills in chronic stroke patients.

Key words	**1.**	**Stroke**
	2.	**Hand function**
	3.	**Mirror therapy**
Classification number	**:**	**000.000.**
Pagination	**:**	**122 p.**
Arabic Title Page	**:**	**تأثير العلاج بالمرآة علي وظيفة اليد في مرضى السكتة الدماغية.**
Library register number	**:**	**4353-4354.**

Author	**:**	**Zeyad Hemdan Abu Elazm**
Title	**:**	**Role Of Kinesiotaping On Plantar Flexors Spasticity In Patients With Stroke**
Dept.	**:**	**Physical Therapy Department for Neuromuscular and Neurosurgical Disorder and its Surgery.**
Supervisors	**1.**	**Nawal A. Abo Shady**
	2.	**Neveen M. El-Fayoumy**
Degree	**:**	**Master.**
Year	**:**	**2015.**
Abstract	**:**	

Background: Plantar flexors spasticity is a disabling condition frequently occurring after stroke people with plantar flexors spasticity suffer from various deficits in several modalities, which in many cases impair everyday functioning. Purpose: To investigate the effect of applying kinesiotaping on plantar flexors of stroke patients. and its benefits in physical therapy rehabilitation program. Subjects: thirty patients experiencing plantar flexors spasticity after stroke. Methods: patients were randomly assigned into two equal groups; a study group and control group. The study group received kinesio taping with daily conventional physical therapy program for one weeks and control group receive daily conventional physical therapy program only , and they assessed by H/M Ratio pre and post maneuver. Results: there was no significant difference between study and control groups in spite of that study group showed some clinical improvement more than control group. Conclusion: this study revealed that one week of applying kinesio tape for every patient was not a beneficial therapeutic technique on plantar flexors spasticity in stroke patient.

Key words	**1.**	**Stroke**
	2.	**Spasticity**
	3.	**Kinesio tape**
	4.	**Plantar Flexors Spasticity**
Classification number	**:**	**000.000.**
Pagination	**:**	**101 p.**
Arabic Title Page	**:**	**تأثير شريط كينسيو على ال شلل التشنجي للعضلات القابض ة للكاحل في حالات السكتة الدماغية**
Library register number	**:**	**4069-4070.**