Physical Therapy Department for Musculoskeletal Disorder and Its Surgery

Master Degree
2006

Author	**:**	**Ahmed Mohamed Fathy El Shewy.**
Title	**:**	**Pulsed Electromagnetic Field Versus Traditional physical Therapy In The Treatment of Chronic Mechanical Low Back Pain.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
Supervisors	**1.**	**Salwa Fadlle Abd EIMajeed.**
	2.	**Yasser Hassan EI Miligui.**
	3.	**Alaa A. Balbaa.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	
The purpose of this study was to examine the effects of pulsed electromagnetic field (PEMF) therapy on patients with chronic mechanical low back pain. Thirty patients were assigned randomly in to 2 groups. Subjects in the experimental group (n=15) received traditional physical therapy program (Infrared radiation, ultrasonic, stretching exercises and strengthening exercises for back and abdominal muscles) as well as pulsed electromagnetic field (PEMF), were as subjects in the control group (n == 15) received traditional physical therapy only. The following parameters including pain severity, functional disability and lumbar rang of motion (flexion, extension, right side bending and left side bending) were measured before and after 4 weeks of treatment. Results: The results showed significant improvement in all parameters in experimental group compared with those at control group. Conclusion: on the basis of the present date, it is possible to conclude that PEMF is effective as a method of treatment for chronic mechanical low back pain (CMLBP) patients with the parameters used in the present study.		
Key words	**1.**	**Pulsed Electromagnetic Field.**
	2.	**Chronic Mechanical Low Back Pain.**
Arabic Title Page	**:**	**المجال الكهرومغناطيسي المتقطع مقابل العلاج الطبيعى التقليدي في علاج ألم أسفل الظهر الميكانيكي المزمن.**
Library register number	**:**	**1333-1334.**

Author	**:**	**Ahmed Samir Mohamed Fathy.**
Title	**:**	**Effect of cervical stabilization exercises in treatment of chronic mechanical neck pain.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
Supervisors	**1.**	**Salwa Fadl.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The purpose of this study was to clarify the importance of cervical stabilization exercises based rehabilitation program in the treatment of chronic mechanical neck pain. A comparison was held between two groups of chronic mechanical neck pain patients (A&B). Both groups received a traditional physical therapy program but group (B) received cervical stabilization exercises based rehabilitation program in addition. Treatment outcome was determined from: 1) scores of Neck Pain and Disability Scale (NPAD) as a self reported measure, 2) cervical range of motion determined by tape measurement to cervical flexion, extension, and right & left side bending and right & left rotation. The results showed a statistically significant decrease in the scores of (NPAD) scale in both groups (A&B) with greater decrease in group (B) (P<0.05). Also a statistically significant increase in cervical range of motion in both groups (A&B) (P<0.05). And there was no statistical difference in range of motion increase in both flexion and left bending between group A and B (P<0.2). While the results showed a statistically significant increase in other cervical range of motion variables in between groups (A&B) with greater increase in group B (P<0.05). Conclusion: The addition of cervical stabilization exercises to the traditional physical therapy program is more effective than traditional physical therapy program in reducing neck pain and functional disability and is more effective in increasing cervical range of motion and is recommended for treating patients with chronic mechanical neck pain.

Key words	**1.**	**neck pain.**
	2.	**cervical stabilization exercises.**
	3.	**Neck Pain and Disability Scale.**
	4.	**range of motion.**
	5.	**assessment.**
Arabic Title Page	**:**	**تأثير تمرينات التثبيت العنقي في علاج آلام العنق الميكانيكية المزمنة.**
Library register number	**:**	**1289-1290.**

Author	**:**	**Ehab Mohamed Kamel.**
Title	**:**	**Lumbar Lordosis and Pelvic Inclination Assessment in Chronic Mechanical Low Back Pain.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
Supervisors	**1.**	**Salwa Fadle.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

Introduction: Physical therapists routinely assess relaxed standing posture to help identify possible problems with the spine. The purpose of the study was to assess any deviation in the lumbar lordosis and pelvic inclination in chronic mechanical low back pain patients. Methods: forty subjects participated in this study were assigned randomly into two groups; group (A) twenty healthy subjects with age ranged from 25-44 years old and group (B) twenty patients were diagnosed as chronic mechanical low back pain (CMLBP) with age ranged from 25-48 years old. The lumbar lordosis and the pelvic inclination angles were determined by the formetric II system. The results: the independent samples t-test was used to identify the difference between the experimental and the control group. The healthy subjects and the CMLBP patients assumed the same lordotic curvature as well as the pelvic inclination angle as there was no significance difference, but the healthy males differed from the CMLBP males for the pelvic inclination angle, the healthy males and the healthy females did not assume the same lordotic curve as well as the pelvic inclination angle and they differed from each other, also the same for the CMLBP males and the CMLBP females. Conclusion: Pelvic tilting exercises can be used to modify lumbar curvature as there is a strong correlation between them.

Key words	**1.**	**Low back pain.**
	2.	**lumbar lordosis.**
	3.	**pelvic inclination.**
	4.	**Assessment.**
	5.	**3D-analysis.**
Arabic Title Page	**:**	**تقييم المنحنى الأمامي للمنطقة القطنية وميل الحوض في حالات الالام الميكانيكية المزمنة في منطقة أسفل الظهر.**
Library register number	**:**	**1325-1326.**

Author	**:**	**Mohamed Abdel Monem Abdel Jayed.**
Title	**:**	**Phonophoresis Versus Ultrasound in the Treatment of Frozen Shoulder.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
Supervisors	**1.**	**Salwa Fadle Abdel Mageed.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The purpose of this study was to determine the effects of phonophoresis and therapeutic exercises, the effects of ultrasound and therapeutic exercises and to compare both effects in the treatment of posttraumatic second stage frozen shoulder through detecting its effects on shoulder pain, shoulder flexion, abduction and external rotation active range of motion. Forty patients suffering from unilateral frozen shoulder participated in this study; they were randomly assigned to either group (A) that received ultrasound and program of therapeutic exercises and group (B) that received phonophoresis and the same program of exercises. Patients in both groups were evaluated pre, mid and post treatment for shoulder pain, shoulder active flexion ROM, shoulder active abduction ROM and shoulder active external rotation ROM. Patients in both groups received 18 sessions (three sessions every week for 6 weeks). Comparison of the results pre and mid treatment showed non significant improvement in group (A) in all measured variables and non significant improvement in group (B) in all measured variables except for pain which improved significantly in the mid treatment assessment. Post treatment assessment of ultrasound group showed significant improvement in pain and active range of motion, significant improvement of phonophoresis group was detected in all variables. On comparing both groups post treatment the results showed significant reduction of pain and significant improvement of shoulder flexion, abduction and external rotation active range of motion for phonophoresis group more than that of .ultrasound group.

Key words	**1.**	**frozen shoulder.**
	2.	**exercises.**
	3.	**Mobilization.**
	4.	**shoulder pain.**
	5.	**Ultrasound.**
	6.	**phonophoresis.**
Arabic Title Page	**:**	**تأثير انتقال العقاقير بالموجات فوق الصوتية مناظرة بتأثير الموجات فوق الصوتية فقط في علاج الكتف المتجمد.**
Library register number	**:**	**1303-1304.**

Author	**:**	**Mohamed Raffat Atteya.**
Title	**:**	**Use of Scoring System to Assess and Classify Carpal Tunnel Syndrome.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
Supervisors	**1.**	**Bassem EI Nahass.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The diagnosis of carpal tunnel syndrome is based on a combination of characteristic symptoms and electro-physiologic abnormalities. Nevertheless, an electrodiagnostic study remains an expensive and time consuming procedure not readily accessible to many physicians who are encountering the disease. The purpose of the study was to suggest and establish a reliable measurement to assess and classify CTS and compare these results with NCV tests. Methods: forty subjects participated in this study were assigned randomly into two groups; group (A) twenty healthy subjects with age ranged from 28 to 58 years and group (B) twenty patients were diagnosed as carpal tunnel syndrome with age ranged from 30 to 60 years. Both groups were assessed by using the suggested new scale and the nerve conduction velocity study (NCVS). The results: the dependent samples t-test was used to identify the difference between the assessment results of the suggested new scale and NCVS for both groups. Conclusion: when compared to the motor NCV test, the new score was effective to assess and diagnose CTS. The new score was also reliable to classify and detect degree of severity of CTS. The new score had more sensitivity and specificity than the motor NCV study.

Key words	**1.**	**Carpal tunnel syndrome.**
	2.	**suggested scoring system.**
	3.	**nerve conduction velocity study.**
Arabic Title Page	**:**	**تقييم وتصنيف اختناق العصب الأوسط حول الرسغ باستخدام نظام النقاط.**
Library register number	**:**	**1327-1328.**

Author	**:**	**Nader Ibrahim El-sayed Ali.**
Title	**:**	**Intermittent Versus Continuous Traction In Treatment Of Lumbar Disc Herniations.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
Supervisors	**1.**	**Ibrahim Magdy Elnaggar.**
	2.	**Enas Fawzy Youssef.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	
The purpose of this study was to compare between the efficacy of intermittent lumbar traction and continuous lumbar traction in back and leg pain severity, ankle dorsiflexores strength, ankle calf muscles strength, and functional disability in patients with lumbar disc herniations L4-L5or L5-S1 level. The results revealed that intermittent lumbar traction produced a significant reduction of back and leg pain with P<0.05, a significant increase of the ankle dorsiflexors strength, with P<0.05, a significant increase of the calf muscles strength with P<0.05 and a significant reduction of functional disability with P<0.05. For the continuous lumbar traction there was non significant reduction of back and leg pain severity, non significant increase of the ankle dorsiflexors strength, non significant increase of the calf muscles strength and non significant reduction of functional disability. There was a significant difference between both types of traction in favor of the intermittent lumbar traction.		
Key words	**1.**	**Lumbar disc herniation.**
	2.	**radiculopathy.**
	3.	**traction.**
	4.	**pain.**
	5.	**Disability.**
	6.	**ankle muscles strength.**
Arabic Title Page	**:**	**مدى تأثير الشد المتقطع مقابل الشد المستمر في علاج الانزلاق الغضروفي القطني.**
Library register number	**:**	**1281-1282.**

Author	**:**	**Remon Wadie Adly Mankarious.**
Title	**:**	**Postural correction rehabilitation program combined with traditional versus sole traditional in chronic mechanical neck pain.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
Supervisors	**1.**	**Ibrhaim Magdy EI nagger.**
	2.	**Abd EL Aziz El Singergy.**
	3.	**Salwa Fadle Abd El Majeed.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	
The purpose of this study was to compare the effect of postural correction rehabilitation program combined with traditional physical therapy program and traditional physical therapy program on reducing neck pain severity and increasing total head excursion angle. Both groups had significantly less neck pain severity after treatment (P < O~O5) but the postural correction rehabilitation program combined with the traditional program was more effective in reducing pain. The posture correction rehabilitation program combined with the traditional had a significant effect in increasing total head excursion angle while the traditional physical therapy program had no effect in increasing the angle. There was 'a negative relationship between neck severity and total head excursion angle.		
Key words	**1.**	**mechanical neck pain.**
	2.	**postural correction.**
	3.	**total head excursions angle.**
Arabic Title Page	**:**	**البرنامج التأهيلي التصحيحي والتقليدي مقابل البرنامج التقليدي في الم العنق الميكانيكي.**
Library register number	**:**	**1297-1298.**