ELECTRONIC GUIDE TO THESES APPROVED BY DEPARTMENT OF BASIC SCIENCE PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED Department of Basic Science

Master Degree 2012

Author	:	Abdelrhman Ismail Abdelghany.
Title	:	Correlation Between Cobb's Angle and Three
		Dimensional Posture Changes In Adolescent Idiopathic
		Scoliosis.
Dept.	:	Department of Basic Science.
Supervisors	1.	Omaima Mohamed Ali Kattabie.
	2.	Fathi Hussin Ali.
	3.	Ibrahim Moustafa Moustafa Abu Amer.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background: Scoliosis is a condition that involves a lateral curvature and rotation of the spine that could cause noticeable posture deformities. There were several trials to assess the posture deformities that may associated with scoliosis. The purpose: to investigate the correlation between Cobb's angle and three dimensional changes of the head, rib cage and pelvis in adolescent idiopathic scoliotic patients .Subjects: Thirty patients, their age ranged from (11 - 15 years) with a mean (12.63 ± 1.326) years participated in this study. Method: Rotation around x,y,z axes, translation around x,z axes were measured by postureprint soft ware for head, rib cage, and pelvis regions and full spine radiograph were taken for every patients. Results: There was significant correlation between Cobb's angle and 3D head changes ($P \le 0.05$) except changes around translation z axis (p=0.979). There was significant correlation between Cobb's angle and 3D pelvis changes ($P \le 0.05$) except changes around rotation y axis (p=0.267). There was significant correlation between Cobb's angle and 3D pelvis changes ($P \le 0.05$) except changes around rotation y and z axes (p=0.668, 0.382). Conclusion: There is a correlation between Cobb's angle and 3D posture changes of head, rib cage, and pelvis.

Key words	1.	Adolescent idiopathic scoliosis.
	2.	3D.
	3.	Cobb's angle.
	4.	Three Dimensional Posture.
	5.	Posture Changes.
	6.	Idiopathic Scoliosis.
Arabic Title Page	:	علاقه زاويه كوب بالتغيرات ثلاثية الابعاد في القوام في حالات الانحناء الجانبي الغير
		معروف السبب للعمود الفقري في فتره المراهقه.
Library register number	:	2889-2890.

Author	:	Abdulmonam A. Adeeb.
Title	:	Prognostic value of recovery phase of cardiopulmonary
		exercise test in Heart failure patients.
Dept.	:	Department of Basic Science.
Supervisors	1.	Naguib Mohamed Salem.
	2.	Mostafa Hussein Ahmed Gad.
	3.	Fatma Aboel-maged M. Hamid.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background: chronic heart failure (CHF) is associated with blunted HR recovery after exercise. The aim of this study: was to investigate the clinical correlation of HR recovery with the prognostic parameters of CPET. Methods: 30 male patients with HF, their mean of age was 53 ± 4.3 years from NHI performed symptoms-limited CPET, HR recovery was calculated as the difference between heart rate at peak exercise and at 1 min into recovery period. Results: there were a direct significant correlation between V02/t-slop and HRRlbpm (r=.0762). Also there were a highly significant direct correlation between V02/tslop with each the V02/KG (r =0.436;), VE/C02(at AT) (r= 0.708;), A T(r=0.534), O₂/HR (r =0.649), CR% (r=0.436), and also OVES (r=0.436), and there was indirect high significant correlation with VENC02(r= 0.526). Conclusion: measurements of recovery phase of CPET provide a reliable, safe method to stratify HF patients.

III patients.	And an and a second	
Key words	1.	cardiopulmonary exercise test.
THES	2.	recovery phase.
	3.	chronic heart failure.
	4.	Prognostic value.
Arabic Title Page	:	القيمة التنبؤية لمرحلة التعافي من أختبار كفاءة الجهاز الدوري التنفسي في مرضى
8		الفَشْلِ القلبي.
Library register number	:	2723-2724.

:	Ahmed Mohamed Mostafa Abo Eleneen.
:	Effect of Lumbar Paraspinal Muscle Fatigue on Knee
	Proprioception.
:	Department of Basic Science.
1.	Mohamed Hussien El Gendy.
2.	Azza Mohamed Atya.
3.	Amira Hussin Draz.
:	Master.
:	2012.
:	
	· · · · · · · · · · · · · · · · · · ·

Background: Proprioception is critical to the maintenance of joint stability and for protecting joints from excessive force during dynamic activities such as walking and running. Purposes: To investigate the effect of lumbar paraspinal muscle fatigue on knee joint proprioception in healthy subjects. Study Design: A pre test post test design. Materials and methods: 100 healthy subjects of both sexes, aging from 18 – 22 years and body mass index from 20-25 kg/ m² were participated in this study. The subjects were divided into two equal groups; group A included 50 male subjects and group B included 50 female subjects. Active angle reproduction test was used to assess the proprioceptive accuracy of the nondominant knee joint by Biodex system 3 pro isokinetic dynamometer pre and immediately after lumbar paraspinal muscle fatigue. Results: the proprioceptive accuracy of the knee joint was significantly decreased after fatiguing exercise of the lumbar paraspinal muscle for both male and female subjects and there was no significant difference between male and female subjects in knee proprioception accuracy after lumbar paraspinal muscle fatigue. Conclusion: Knee proprioception was affected by fatiguing of the lumbar paraspinal muscle.

Key words	1.	lumbar muscle fatigue.
	2.	knee proprioception.
Arabic Title Page	:	تأثير إجهاد عضلات جانبى المنطقة القطنية على المستقبلات الحسية العميقة لمفصل
		الركبة.
Library register number	:	2947-2948.

Author	:	Alaa Abd El.Raheem Mohammad.
Title	:	Effect of Age And Gender on Electromyographic Activity of
		Vastus Medialis Oblique Compared to Vastus Lateralis in
		Healthy Subject.
Dept.	:	Department of Basic Science.
Supervisors	1.	Mohammad Hussien Elgendy.
	2.	Osama Ahmad Khaled.
	3.	Anwar Mohammad Ali.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Purposes: To investigate whether there was age and a gender difference in the intensity of electromyographic (EMG) activity in vastus medialis oblique (VMO) compared to vastus lateralis (VL), so as to determine the basic data for predicting the risk of patellofemoral pain syndrome occurrence. Materials and methods: Sixty healthy subjects from both sexes (30 males and 30 females) ages 10 to 40, Subjects were divided equally into 3 groups(according to age),and 2 groups (according to gender) group (A)for males and group (B)for females, Surface EMG activity was recorded from VMO muscle and VL muscle of the dominant limb during three repetitions of a step down activity and three repetitions of a straight leg raising exercise. The average intensity of the rectified and smoothed EMG activity from each activity was normalised to that elicited in a maximal quadriceps setting exercise. The ratio of normalised VMO:VL EMG intensity levels was calculated. Results: The results of this study showed that the differences between age groups in the VMO:VL EMG ratio were not statistically significant, during straight leg raising exercise (Pvalue was 0.31) and during step down(P- value was 0.65), and between males and females in the VMO:VL EMG ratio were not statistically significant during straight leg raising exercise (Pvalue was 0.78) and step down (P-value was 0.17), and also, there was no significant interaction between different age and gender on VMO/VL ratio during straight leg raising exercise and during step down. Conclusion: This study found that the difference in incidence of patellofemoral pain syndrome in adolescent and young adult and between genders is not influenced by quadriceps ratios, when participants are asymptomatic.

Key words	1.	Electromyography.
	2.	Vastus medialis oblique.
	3.	Vastus lateralis.
	4.	patellofemoral pain syndrome.
	5.	Gender.
	6.	Age.
Arabic Title Page	:	تأثير العمر والجنس على النشاط العضلي الكهربائي للعضلة المنحنية الوسطية مقارنة
		بالعضلة الخارجية في الأشخاص الأصحاء.
Library register number	:	3135-3136.

Author	:	Amal Abd El Moneim Mostafa.
Title	:	Effect of prophylactic knee braces on knee joint stability.
Dept.	:	Department of Basic Science.
Supervisors	1.	Mohamed El-Gendy.
	2.	Amir Nazih Wadee.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background: prophylactic knee braces play an important role in protecting knee joint from injuries. Purposes: to investigate the effect of prophylactic knee braces on knee proprioception and quadriceps muscle torque. Design: A pre test post test design. Materials and methods: Thirty subjects were conviniently selected from Faculty of Physical Therapy, Cairo University participated in this study their mean age (22.17±1.984)years. They were assigned in one group. All of the participants were tested for knee proprioception in 15°,30° and 75° of knee extension, and quadriceps muscle torque under two conditions with and without knee braces using Biodex system 3 isokinetic dynamometer. Results: As regard to knee proprioception there was insignificant decrease in knee proprioception in 30° of knee extension while there was significant decrease in knee proprioception in 15° and 75° of knee extension between with and without brace. As regard to quadriceps muscle torque there was a significant increase in peak torque with brace more than without brace. Conclusion: prophylactic knee braces proved to have insignificant decrease on knee proprioception in 30° of knee extension between with and without brace while it proved to have a significant decrease on knee proprioception in 15° and 75° of knee extension and an increasing effect in quadriceps peak torque with brace more than without brace.

Key words	1.	prophylactic knee braces.
	2.	Proprioception.
	3.	peak torque.
	4.	knee joint stability.
Arabic Title Page	:	تأثير ساند الركبه الوقائي علي ثبات مفصل الركبه.
Library register number	:	3029-3030.

		den addel salam addel kadek ammed
Author	:	Amira Mahmoud Galal.
Title	:	Assessment of Physical Therapists Performance in Hospitals of
		Ministry Health and Medical Institutes.
Dept.	:	Department of Basic Science.
Supervisors	1.	Omaima Kattabei.
	2.	Dalai Mosaad.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Back ground: The quality of service delivery has become an important focus of attention for every one employed in health care. This has led to improving services delivery and the patient's quality of life. Purpose: To assess the performance of physical therapists in ministry health Hospitals and Medical Institutes in different regions in Egypt in order to assess areas of weakness as well as areas of strengths to improve the quality of physical therapists practice. Methods: performance assessment was measured by comparing it with European Core Standards of physiotherapy practice. Two tools of European Core Standards of physiotherapy practice was used. Core Standards patient record questionnaire and patient feedback questionnaire. Results: There were a statistical significant difference in the levels of performance between the studied hospitals, level of education, and the marital status of the physical therapists; also there was significant difference in levels of performance between married and single physical therapists. As related to patient feedback questionnaire, there was great significance difference of physical therapists performance between outpatients and inpatients. Conclusions: The performance level of physical therapists at physical therapy department of DarElshefaa Hospital exhibits higher level than other hospitals this due to achieving higher level of quality and take the Egyptian accreditation, explain the strength area and weak area in the physical therapists assessment to improve the quality of physical therapists practice.

K <mark>ey words</mark>	1.	performance of physical therapists.
	2.	Egyptian accreditation.
	3.	Hospitals of Ministry Health.
	4.	Medical Institutes.
	5.	Assessment of Physical Therapists.
Arabic Title Page	:	تقييم أخصائي العلاج الطبيعي بالمستشفيات والمؤسسات العلاجية التابعة لوزارة الصحة.
Library register number	:	2719-2720.

	I KUI KIKUU DI NUKVUM KUU KUU KUU KUU KUUUK KIKUUU		
Author	:	Ayman Abdallah Mahmoud Mohammed.	
Title	:	Effect of scapular proprioception restoration program on patients with frozen shoulder .	
Dept.	:	Department of Basic Science.	
Supervisors	1.	Wadida H. El Sayed.	
	2.	Mohammed E. Abd El Wanis.	
	3.	Abeer A. Mohammed.	
Degree	:	Master.	
Year	:	2012.	
Abstract	:		

Background: Frozen shoulder is controversial by definition and diagnostic criteria that are not sufficiently understood. It is defined as an insidious and progressive loss of active and passive mobility in the glenohumeral joint presumably due to capsular contracture. Purpose of this study: was to investigate the effects of the scapular proprioception restoration program on active shoulder range of motion of flexion, abduction and external rotation, level of pain, disability level in frozen shoulder patients. Thirty patients (age: 40-60 years old) of both sexes participated in this study; all subjects had stage II unilateral frozen shoulder. Patients were classified into two equal groups Control group: was consisted of fifteen subjects. They were received infrared radiation and ultrasound and traditional physical therapy. Study group: was consisted of fifteen patients. They were subjected to the same protocol as control group in addition to scapular proprioception restoration program. The affected shoulder range of motion was assessed clinically by electrical goniometer and pain and disability level by shoulder pain and disability index (SPADI) at the beginning of the treatment and after four weeks at the end of treatment. Results: showed that there was significant difference in active shoulder range of motion of flexion, abduction and external rotation, level of pain, disability level in frozen shoulder patients between both groups in favors of experimental group. Conclusion: scapular proprioception restoration program had significant effects on frozen shoulder patients regarding active shoulder range of motion of flexion, abduction and external rotation, pain level and disability level.

Key words	1.	scapular proprioception restoration program.
	2.	frozen shoulder ultrasound, infrared.
	3.	electrical goniometer.
	4.	shoulder pain.
	5.	disability index.
Arabic Title Page	:	تأثير برنامج استعاده الادراك الحسى الداخلي لوضع لوح الكتف على مرضى تيبس
		الكتف.
Library register number	:	2873-2874.

Ayman Suleiman El-Naggar.	
Technique with Wrist Extensors Glide on Lat	eral
Epicondylitis.	
Department of Basic Science.	
Wadida Hassan Abdel Kader.	
Ragia Mohamed Kamel.	
Master.	
2012.	
•	. Wadida Hassan Abdel Kader.

Background: Lateral epicondylitis (LE), is a common complication of elbow problems related to overuse, which can cause serious long-term disability in both working and nonworking adults. The disorder is characterized by pain and tenderness over the lateral epicondyle of the humeurs at its origin of the wrist extensor tendons. Treating this problem can be a difficult, timeconsuming, and costly challenge. Purpose: This study investigated the effect of a combined taping technique with wrist extensors glide on LE. The applied techniques were aimed to reduce pain, increase grip strength, and improve hand function. Methods: This study was conducted during the period from January 2011 to September 2011.forty patients aged from 30 to 50 years old selected randomly from department of physical therapy of Mabara hospital into control group(n = 20, 9 males and 11 females) and experimental group (n = 20, 13 males and 7 females). Both groups received 12 sessions day after day for one month a conventional physical therapy tr<mark>eatment program in the form of continuous ultrasound plu</mark>s a hotpack. The experimental group received additional program in the form of taping with wrist extensors glide. They were evaluated before the treatment, and after 4 weeks of treatment. Visual analogue scale was used to measure pain intensity level, hand dynamometer was used to measure hand grip strength, and Michigan Hand Outcomes Questionnaire to measure over all hand function. Results: Analysis showed statistically significant improvement in all outcomes in outcome measures for both control and experimental groups. But the post treatment values of measured variables (visual analogue scale, maximum grip strength and hand function) of the experimental group revealed higher significant improvement when compared with control group. Conclusion: This study showed that the combination of taping technique with wrist extensor glide and conventional treatment leads to better outcomes in treatment of LE than traditional treatment alone.

Key words	1.	lateral epicondylitis.
	2.	Taping.
	3.	wrist extensors glide.
Arabic Title Page	:	تأثير تقنية الأشرطة اللاصقة الطبية مع التحرك العضلى للعضلات الباسطة للرسغ
		على التهاب فوق العظمة الوحشية.
Library register number	:	3107-3108.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED		
Author	:	Basma Mohammed Ibraheem.
Title	:	Effect of shoe inserts on balance in normal subjects.
Dept.	:	Department of Basic Science.
Supervisors	1.	Mohamed El-Gendy.
	2.	Azza Mohamed Atya.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background:Shoe inserts and insoles play an important role as shock absorbers and protect the feet by reducing pain and provide support, that may affect the balance of the body, but its effect on balance remain unclear. Purpose: to investigate the effect of shoe inserts on balance in normal subjects.Study Design: Apre test post test research design.Materials and methods: Thirty subjects participated in this study. Their mean age (36.7 ± 6.45) years, mean weight (64.35 ± 3.64) kilograms, and mean height (170.5 ± 6.12) centimeters. They were represented in one group. All of the participants were tested for (medio-lateral stability index (MLSI), anterio-posterior stability index (APSI) and overall stability index (OSI)) under four conditions (without shoe insert, with heel cup, arch support and metatarsal pad) over 20sec for each condition using Biodex Balance System. Result: There was no significant difference in MLSI and APSI among the four tested conditions (p<0.025). Conclusion: As shoe inserts proved to have no significant effect on balance in normal subject this was better than had bad effect on balance.

Key words PHYSICA	1.	shoe inserts.
LTB	2.	balance.
Arabic Title Page		تاثير فرشات الحذاء على التوازن في الاشخاص ال <mark>اصحاء.</mark>
Library register number	:	2731-2732.

:	Dalia Mahmoud Zaki Mohammed.
:	Effect of Pneumatic Compression Modes on Pain and Blood
	Flow in Varicose Veins Patients.
:	Department of Basic Science.
1.	Wadida H. ElSayed.
2.	Samia A. Elkady.
3.	Abeer A. Mohamed.
:	Master.
:	2012.
:	
	· · · · · · · · · · · · · · · · · · ·

Background: Varicose veins are not only a cosmetic annoyance; they can lead to complications that result in loss of time from work. Treatment has improved to reduce recovery time and complications. Purpose of the study was to study the effect of each different cycle setting of intermittent pneumatic compression (rapid and slow deflation) on maximal blood flow velocity, mean blood flow velocity, refilling time and pain intensity level in varicose veins patients and also to compare the effect of two different cycle settings (rapid versus slow deflation) of intermittent pneumatic compression on varicose vein patients. Methods Thirty female patients complaining from symptomatic varicose veins. Their ages ranged between 35 to 50 years old. They were divided into two groups, Group (A) was consisted of 15 patients who received exercise program and IPC with rapid deflation three seconds for 30 minutes, five times per week for four weeks. Group (B) was consisted of 15 patients who received exercise program and IPC with slow deflation 60 seconds for 30 minutes, five times per week for four weeks. Blood flow was measured by duplex and pain intensity level by visual analogue scale (VAS) for all patients in both groups before and after treatment program. Results of this study indicated that there were statistical significant improvement of the maximum blood flow, mean blood flow; and pain intensity level in favor of group (A). Also there were statistical significant improvement of the refilling time but in favor of group (B). It was concluded from this study that both modes of IPC have beneficial effects on the maximal blood flow velocity, mean blood flow velocity, refilling time and pain intensity level in varicose veins patients, and that there is significance difference between the effects of both modes.

Key words	1.	Intermittent Pneumatic Compression.
	2.	varicose veins.
	3.	Pain.
	4.	Blood Flow.
Arabic Title Page	:	تأثير طرق ضغط الهواء على الألم وتدفق الدم على مرضى الدوالي.
Library register number	:	2897-2898

FREFARED DI NERVEEN ADD EE SALAM ADD EE RADER ALMED		
Author	:	Dina Reda Nassief Gaid El Dairy
Title	:	Effect of resistance exercises on bone density for elderly men
		and women: a systematic review.
Dept.	:	Department of Basic Science.
Supervisors	1.	Omaima M. Ali Kattabei.
	2.	Amal Fawzy Ahmed.
	3.	Shimaa N. Abo El Azm.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Objective: The purpose of this study was to systematically review the randomized controlled studies which investigated the effect of the resistance exercise on bone density. Methods: Systematic review of randomized control trails published studies. A research was made in Medline, Cochrane library and PEDro; from 2000 to 2011. Intervention: Resistance exercises applied for the elderly men and women with age more than 55 years old. Outcomes measures: Bone mineral density measurement by DEXA. Results: Only 12 studies met the inclusion criteria. Meta analysis was done between 8 studies and descriptive analysis was done for 4 studies due to heterogeneity of the studies. There is conflicting evidence on whether resistance exercises can increase the bone mineral density for elderly men and women. Most studies showed no difference after applying the exercises, but few studies showed some improvement in the bone mineral density measurements in specific body regions. The studies are of high and moderate methodological quality. Conclusion: The current level of evidence to support the effectiveness of resistance exercises on bone density for elderly men and women is weak.

Key words	1.	Systematic review.
	2.	Resistance exercises.
	3.	Bone density.
	4.	Elderly men and women.
Arabic Title Page	:	تأثير تمرينات المقاومة على كثافة العظام لكبار السن من الرجال والنساء: فحص
		منهجى.
Library register number	:	2943-2944.

Author	:	Doaa Sayed Mostafa Mohamed.
Title	:	Fatigue rate of lower leg muscles following stationary standing
		versus dynamic standing.
Dept.	:	Department of Basic Science.
Supervisors	1.	Wadida H. El Sayed.
	2.	Soheir S. Rezk Allah.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background: Standing is a common working position, which cause muscluskeletal disorder *Purpose:* This study was conducted to compare the pain intensity level, and fatigue rate parameters of lower leg muscles following stationary standing versus those following dynamic standing Subjects: Thirty untrained healthy subjects aged from 18-25 years from both sexes with mean age of 21.1±2.32 years mean height of 165.6±7.88 cm, and mean BMI of 22.81 ±1.43 Kg/m² Materials and Methods: Each subject was asked to stand stationary for one hour, then asked to express their pain intensity level using Visual Analogue Scale (VAS), then the electromyographic (EMG) signals were recorded from soleus, lateral gastrocnemius ,medial gasrtocnemius and tibialis anterior muscles from each subject dominant side in the last 300 sec of stationary standing, then they were asked to have a rest 30 min of sitting, after which he or she was asked to stand dynamically by interrupt standing with walking 4 minutes each 15 minutes standing for one hour. Then he\she was asked to express their pain intensity level using VAS again and the EMG signals had recorded again in the last 300 sec of dynamic standing from the same muscles to calculate the RMS and MF as measurements of fatigue, *Results*: Thers was more significant fatigue following stationary standing versus dynamic standing. This explained by VAS scores, RMS and MF of soleus, lateral gastrocnemius, medial gastrocnemius, and tibialis anterior muscles. *Conclusion:* Dynamic standing is an ergonomic posture that cause lower pain intensity level and minimizes fatigue rate.

Key words	1.	Stationary standing.
	2.	Dynamic standing.
	3.	Electromyography Root mean square.
	4.	Median frequency.
	5.	Fatigue rate.
	6.	lower leg muscles.
Arabic Title Page	:	معدل الاجهاد في عضلات الساق السفلي بعد الوقوف الثابت مقابل الوقوف الديناميكي.
Library register number	:	2997-2998.

PREPARED BY NE	RV	EEN ABD EL SALAM ABD EL KADER AHMED
Author	:	Ehab Tantawy Hafez.
Title	:	Relationship of different psychosocial factors on human performance of smokers.
Dept.	:	Department of Basic Science.
Supervisors	1.	Awatef Mohamed Labib.
	2.	Aisha Alsayed Sharaf Eldin Roshdy.
	3.	Soheir Shehata Rezk-Allah.
Degree	:	Master.
Year	:	2012.
Abstract	:	
	-	

PURPOSE: The aim of this study was to find the relationship of different psychosocial factors on human performance of smokers. SUBJECTS: the study was conducted on 200 subjects students and employee, their ages ranged between 20-30 years and they were divided into two equal groups(100 smokers and 100 non-smokers) METHODS: all subjects were assessed by three questionnaires (stressful life events questionnaire-health locus of control questionnaire-coping strategies questionnaire)after the questionnaire they were all assessed by cardiopulmonary function test. RESULTS: For the psychological factors, there was significant difference between groups of positive coping, passive coping(a), internal and external locus of control, chance locus of control, mild, and moderate stressful life events. For the physical performance, there was significant difference between groups of Vo2 max and time of fatigue, $p \le 0.5$. CONCLUSION: smoking has a significant negative effect on psychological behavior which in consequence affect physical performance.

Key words	1.	Smoking.
THES	2.	Stressful life events.
	3.	health locus of control.
	4.	coping strategies.
	5.	human performance .
Arabic Title Page	:	العلاقه بين العوامل النفسيه المختلفه و تاثيرها علي الاداء الانساني للمدخنين.
Library register number	:	3067-3068.

Author	:	Fayrouz Hatem Mohammed Ameen Hussain.	
Title	:	Effect of low level laser therapy on carpal tunnel syndrome A systematic review.	
Dept.	:	Department of Basic Science.	
Supervisors	1.	Omaima Mohamed Ali Kattabie.	
	2.	Amal Fawzy Ahmed.	
Degree	:	Master.	
Year	:	2012.	
Abstract	:		

Carpal tunnel syndrome (CTS) is a common disorder, for which one of its treatment options is the low level laser therapy (LLLT). The objective of this study is to determine the efficacy of LLLT in treating various symptoms of the CTS. Methods: Detailed searching of the electronic data base from the year 1990 till 2010 was conducted and only randomized controlled trials (RCT) studying the effect of LLLT on mild and moderate CTS and where the inclusion criteria are applicable were selected. After excluding the invalid studies only six trials were included in this review. Assessment of methodological quality of the studies was performed using PEDro scale and the data was extracted from them. According to PEDro scale five trials was of high quality as they scored more than 7 out of 10 and one was of lower quality as it scored 6 out of 10. Results: Meta-analysis was performed in order to pool together the results of the studies. The effect of LLLT was found statistically significant on the hand grip strength, symptom severity scale scores, the functional status scale scores and the visual analogue scale scores, where as for the electrophysiological studies no significant effects was found. Conclusion: LLLT was found to have statistically significant effects on hand grip strength, symptoms, functional ability and pain, and no remarkable effect on the nerve conduction studies or other outcome measure. The results might be dependent on the dosages, wavelength or point of application, though further investigations are critically needed to establish stronger evidence based knowledge.

K <mark>ey words</mark>	1.	Systematic review.
	2.	Randomized controlled trials.
	3.	Evidence based practice.
	4.	Low level laser therapy.
	5.	Carpal tunnel syndrome.
Arabic Title Page	:	تأثير العلاج بالليزر على متلازمة إحتباس العصب الأوسط عند رسغ اليد (فحص
		منهجى).
Library register number	:	2911-2912.

		LEN ADD EL SALAM ADD EL RADER AMMED
Author	:	Fayrouz Magdy Mohammed.
Title	:	Effect of Mental Relaxation Technique and Aerobic Exercise
		Versus Aerobic Exercise on Hypertensive Patients.
Dept.	:	Department of Basic Science.
Supervisors	1.	Amir Mohamed Saleh.
	2.	Ragia Mohammed Kamel.
	3.	Naema Ali El Melegy.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Back ground: Hypertension is one of the most common worldwide diseases affecting humans because of the associated morbidity and mortality and cost to society. Purpose: the purpose of the study is to investigate the effect of mental relaxation and aerobic exercise versus aerobic exercise on hypertensive patients. Study Design: pre test post test control group design. Martials and Methods: thirty patients with essential hypertension, from both sexes (male and female) were involved aged between 35-55 years old. The patients were divided randomly into three equal group, ten patients each. Patients in group A control group received medication only. Patients in group B received medication and aerobic exercise. Patients in group C received medication, aerobic exercise and mental relaxation exercise. Treatment was done three times per week for ten weeks, blood pressure were measured before and after treatment .Results: there were a significant decrease in blood pressure measurement in the three groups after treatment, with the superior effect of mental and aerobic exercise on decreasing blood pressure , there were significant differences among groups A, B and C as systolic blood pressure decreased but no significant difference in diastolic. Conclusion: mental relaxation and aerobic exercise proved to be more effective than aerobic exercise only on hypertensive patient.

K <mark>ey words</mark>	1.	Hypertension.
	2.	Aerobic Exercise.
	3.	Mental Relaxation Technique.
Arabic Title Page	:	تأير الاسترخاء الذهنى مع التمرينات الهوائية ضد التمرينات الهوائية فقط على
_		مرضى ضغط الدم المرتفع.
Library register number	:	3051-3052.

Author	:	Fatma Mohamed Alfiky.
Title	:	Ankle Proprioception In Knee Osteoarthritic Patients.
Dept.	:	Department of Basic Science.
Supervisors	1.	Amal Fawzy Ahmed.
	2.	Hassan Mahmoqd Barakah.
	3.	Amira Hussin Draz.
Degree	:	Master.
Year	:	2012.
Abstract	•	

Background: Knee osteoarthritis (OA) is a common chronic disease affecting weight bearing joints. It alters kinetics and kinematics of all lower limb joints. Purpose: The purpose of this study was to measure ankle proprioception and ankle dorsiflexion to plantarllexion strength ratio (DF/PF S R) in patients with chronic knee osteoarthritis. Methods: Fourty subjects (both gendeFs) were participated in the study, I'heir age were ranged between 40 and 60 years. The subjects were assigned into two equal groups; Study group (A): It included of 20 chronic unilateral grade II knee osteoarthritic patients, Control group (B): It included of 20 healthy subjects matched for age, sex, weight and height to the OA participants. Ankle proprioception and ankle DFIPF S R at angular velocities 60C'/sec and 120c/sec were measured by Biodex system III. Results: There was a significant decrease III ankle proprioception and ankle DF/PF S R in the study group compared to control group where the level of significance was (P<0.05).Conclusion: Ankle proprioception and ankle DF/PF S R was decreased with increased velocity.

Key words	1.	ankle proprioception.
	2.	Knee Osteoarthritic.
	3.	Arthritis.
	4.	Isokinetic.
	5.	ankle strength ratio.
Arabic Title Page	:	المستقبلات الحسية العميقة لمفصل الكاحل في مرضى خشونة الركبة.
Library register number	:	2725-2726.

Author	:	Heba Abd El Motaleb Abd El Azziz Nassar.
Title	:	Validity Of Rasterstereography For Measuring Pelvic
		Parameters.
Dept.	:	Department of Basic Science.
Supervisors	1.	Neveen Abd El-Latif Abd El-Raouf.
	2.	Ibrahim Moustafa Moustafa Abu Amer.
Degree	:	Master.
Year	:	2012.
Abstract	•	

Background: Video Rasterstereography device(VRD) has been developed for optical back shape measurement and for biomechanical analysis of spinal and pelvic geometry. Analysis of one single measurement permits 3-dimensional reconstruction of the back surface and calculation of shape parameters including pelvis tilt and torsion. The validity of this device has not previously been examined to pelvic parameters. The purpose: To evaluate the validity and reliability of VRD for measuring pelvic parameters in healthy test subjects. Subjects: 30 normal subjects, their age ranged from (19-35years) with a mean (26.9±4.9) years participated in this study. pelvic parameters of all subjects participated in study measured by X ray and by VRD. Method: Volunteers were examined by VRD by 3 investigators. Each investigator made a series of 3 measurements of each participant in which 3 pelvic parameters including pelvic torsion ,lateral tilting and inclination were measured. Intrclass correlation coefficient (ICC) was calculated to test reliability and comparing VRD measurement by x ray to test validity and pearson coefficient was calculated to measure percentages of differences of two measurement. Results: The ICC for the intra and inter tester-reliability of all pelvic parameters have value >0.95.And pearson correlation of pelvic torsion, lateral tilting and inclination have value(r=0.867, 0.996 and 0.930 respectively) which showing that there is no significant change between rasterstereograph measurement and x-ray measurement. Conclusion: It was concluded that VRD is valid and reliable method in a three dimensional evaluation of pelvis and constitute a valuable additional tool to clinical examination and can reduce the number of radiograph.

Key words	1.	Validity.
	2.	Reliability.
	3.	Pelvis.
	4.	pelvic torsion.
	5.	lateral pelvic tilting.
	6.	pelvic inclination.
	7.	Video Rasterstereography device.
Arabic Title Page	:	مصداقية راسترستيريوجراف لقياس معلمات الحوض.
Library register number	:	2733-2734.

ELECTRONIC GUIDE TO THESES APPROVED BY DEPARTMENT OF BASIC SCIENCE DEPARENT ARD FLAM ARD FLAMPER AND

FREFARED DI NE		den advelsalam advelkavek ammev
Author	:	Hossam Abd AL Rehem Gaballah.
Title	:	Relationship Between Bilateral Knee Osteoarthritis and
		Lumbar Curvature.
Dept.	:	Department of Basic Science.
Supervisors	1.	Ragia Mohamed Kamel.
	2.	Hatem Abd El Rahman Sharaf El Din.
	3.	Sahar Mohamed Adel.
Degree	:	Master.
Year	:	2012.
Abstract	:	

<u>Background</u> : Knee osteoarthritis is reported to be a major health problem world wide that affect lumbar spine, <u>Purpose</u>: to determine the relationship between bilateral knee osteoarthritis and lumbar curvature . <u>Study design</u> two –group post-test design <u>. Materials and methods</u>: Thirty patients complaining of bilateral knee osteoarthritis and low back pain form both sexes were involved , aged between 40-60 years old. The patients were divided into two equal Groups: Group (A)15 patients with grade II knee osteoarthritis from both gender with mean age of (50.66±5.91) years, weight (93.66±5.35) kg, hight (167.73±3.03) cm and BMI (33.31±2.1) kg/m² and Group (B) 15 patients with grade III knee osteoarthritis from both gender with mean age of (52.66±3.82) year, weight (96.2±5.26) kg, hight (169.66±4.63) cm and BMI (33.45±2.03) kg/m². All patients were referred from the out patient clinic of the national institute of the locomotor system in Cairo. A formetric system II was used to examine the lumbar curvature of both groups <u>. Results</u> : There was a high significant correlation between bilateral knee osteoarthritis and lumbar curvature r = (0.05) in subjects of both groups <u>. Conclusion</u> : (Grade III) knee osteoarthritis increase the lumbar lordotic angle more than (Grade II) knee osteoarthritis.

K <mark>ey words</mark>	1.	bilateral knee osteoarthritis
	2.	lumbar curvature.
Arabic Title Page	:	العلاقة ما بين خشونة مفصلي الركبة ومنحني الفقرات القطنية.
Library register number	:	3165-3166.

ELECTRONIC GUIDE TO THESES APPROVED BY DEPARTMENT OF BASIC SCIENCE DEPARTMENT OF BASIC SCIENCE

Author		Jehane Mohsen Osman Mahmoud Azmy.	
Title	:	A comparison between Vodder and Casley-Smith techniques	
		in the management of lymphedema.	
Dept.	••	Department of Basic Science.	
Supervisors	1.	Awatif Mohamed Labib.	
	2.	Sherif Mohamed El Shalakamy.	
	3.	Marzouk Abdel Fattah Ellythy.	
Degree	:	Master.	
Year	:	2012.	
Abstract	:		

Background & Purpose: Breast cancer-related lymphedema is a long-term health problem that often causes pain, disability and interferes with the activities of daily living. A physical treatment program combining manual lymphatic drainage, compression, skin care and exercise is recognized as the best practice in lymphedema management. The purpose of this study was to compare the efficacy of Vodder versus Casley-Smith techniques in terms of circumferential and volumetric measurements in female patients with post mastectomy unilateral upper extremity lymphedema. Subjects: Thirty post-mastectomy females with age range 45-60 years (55.0±5.27), suffering from unilateral lymphedema in the upper extremity participated in the study. *Materials* & Method: Subjects were randomly divided into 2 groups using the lottery method; group (A) fifteen females received Vodder Technique 6 days/week for 3 consecutive weeks. Group (B) fifteen females received Casley-Smith Technique 6 days/week for 3 consecutive weeks. Swelling volume was measured by a volumetric water displacement apparatus, while circumferential measurement was measured by a tape measurement. Measurements were collected at the first visit as a pre-treatment, weekly as during treatment, then after the last session as post-treatment. *Results:* Data obtained was analyzed via independent t-test, repeated measurement ANOVA and Bonferroni post hoc test. There were statistical significant differences between the 2 groups, where the Casley-smith group (B) showed greater decrease in volumetric and circumferential measurement with a p value (P<0.001). *Conclusion:* Casley-Smith Technique was shown to be more effective in reducing the volume and circumference, in post mastectomy unilateral upper extremity lymphedema.

Key words	1.	Lymphedema.
	2.	Manual lymphatic drainage.
	3.	Vodder Technique.
	4.	Casley-Smith Technique.
	5.	Swelling volume.
Arabic Title Page	:	مقارنة بين تقنيتي فودر، و كاسلي- سميث في علاج حالات التورمات الليمفاوية.
Library register number	:	2989-2990.

PREPARED DI NI		den abdel salam abdel kadek ahmed
Author	:	John Wadea Mansor.
Title	:	Intermittent versus continuous bouts of exercise on bone
		density of obese postmenopausal women.
Dept.	:	Department of Basic Science.
Supervisors	1.	Maher Ahmed El Kabalawy.
	2.	Adly Aly Heider Sabbour.
	3.	Sahar Mohamed Adel.
Degree	:	Master.
Year	:	2012.
Abstract	:	

This study was conducted to determine the effect of intermittent versus continuous bouts of exercise on bone density of obese postmenopausal women following low calorie diet. Forty five obese postmenopausal women participated in the study their age ranged from 45-55 years, they were selected from El Sahel Teaching hospital. They were classified into three groups, each group consisted of fifteen subjects the first group followed low calorie diet only, the second followed low calorie diet combined with intermittent treadmill walking for 3 sessions per week over three months, the third group followed low calorie diet combined with continuous treadmill training for 3 sessions per week Over 3 months. Bone mineral density was measured at the beginning of the study and after three months. The results of this study showed a statistically highly significant increase in bone mineral density in the second and third groups by (29.96% and 11.11% respectively) with level of significance (P=0.95) with better results in the second group (The intermittent aerobic training group) while there was statistically significant decrease of bone density by (20.60%) in the first group (Control group), So it is recommended to encourage the obese postmenopausal women who follows low calorie diet to perform intermittent aerobic exercises to preserve and / or increase their bone mineral density.

K <mark>ey words</mark>	1.	Aerobic exercise.
	2.	exercise bout.
	3.	Postmenopausal.
	4.	Bone density.
	5.	recovery period.
	6.	obese postmenopausal women.
Arabic Title Page	:	مقابلة جوله التمرينات المتقطعة بالمستمرة على كثافة عظام السيدات البدينات بعد
		انقطاع الطمث.
Library register number	:	2977-2978.

Author	:	Khalaf Abd Elwahed Mohammed.
Title		Validity of Bioelectrical impedance analysis in determining
		obesity.
Dept.		Department of Basic Science.
Supervisors	1.	Mohammed Hussein El-Gendy.
	2.	Sahar Mohammed Adel.
Degree		Master.
Year		2012.
Abstract	:	

Background: Obesity is an abnormal accumulation of body fat, it is an established risk factor for numerous chronic diseases, and successful treatment will have an important impact on medical resources utilization, health care costs and patient quality of life. The purpose: of this study was to investigate the validity of Bioelectrical impedance analysis in determining obesity compared with Tanita body fat. Methodology: Forty obese subjects, with age ranged from 20 to 40 years old were participated in this study, body mass index>30Kg\m². Design of study: The study was done at one trial (assessment) patients assigned into one group. Each subject was tested by body fat analyzer, and Tanita.Each subject was weighted in light clothes and the height was measured without shoes. BMI was calculated, before the assessment. The results: There was no significant difference between Tanita SC 330 st instrument and Body Fat Analyzer 905BT instrument on Fat percentage, Fat Weight, Fat Free Mass, Fat Free Mass Percentage and Water Percentage, also there was significant correlation between Tanita SC 330 st instrument and Body Fat Analyzer 905BT instrument on Fat percentage, Fat Weight, Fat Free Mass, Fat Free Mass, Fat Free Mass Percentage and Water. Conclusion: The body fat analyzer is valid in measuring bioelectrical impedance for determining obesity.

deter mining obesity.	_	
Key words	1.	Obesity.
	2.	Body fat analyzer.
	3.	Validity.
	4.	Bioelectrical impedance.
	5.	Tanita.
Arabic Title Page	:	صحة محلل الدهون في الجسم في تحديد البدانة.
Library register number	:	2825-2826.

Author	:	Laura Mohammed Mourad.
Title	:	effect of Electroacupuncture on lumbar proprioception.
Dept.	:	Department of Basic Science.
Supervisors	1.	Maher el kablawy.
	2.	Amira Draz.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Purpose: The purpose of this study was to investigate the effect of Electro-acupuncture on lumbar proprioception. Design of the study:pre – post test regiment design. Subjects: Thirty patients with mechanical low back pain (LBP)were included at the starting of the study, Materials and methods: They were divided into two equal groups; Group A (Experimental) which consisted of 15 patients with mean value of age were 42.6 ± 2.8 years, mean values of body weight were 77.2±3.7Kg ,mean value of height were 168.4±4.7, mean value of body mass index(BMI) were 27.2±1.11Kg/m2, and actively participated in the suggested program.Group B (Control)which consisted of 15 patients With mean value of age were 41.3±1.9 years, The mean value of body weight were 76.93 ±3.1 Kg, the mean value of height were 167.7±2.9 cm, the mean value of body mass index(BMI) were 27.3±1.34 Kg/m2.and actively participated their treatment program . Measurement of their proprioception accuracy was conducted before and after treatment period of four weeks by using the Biodex Medical System III using Active Repositioning Accuracy Test (ARAT). Treatment: group A received EA treatment plus traditional treatment, group B received traditional treatment (infra red,ultra sound and exercises)only. Results:Data collected from Biodex system 3 was analysed using descriptive statistics, t-test and T test. Post treatment mean values of lumbar proprioception for group A was (2.52 – 0.71), for group B was (3.64 – 1.47) .There was a significant difference between the two groups where P-value (0.008) <0.05 Conclusion: there was an effect of electroacupuncture on lumbar proprioception.

K <mark>ey words</mark>	1.	Electoacupuncture.
	2.	Proprioception.
	3.	Lumbar.
Arabic Title Page	:	تاثير الوخز بالابر على المستقبلات الحسية العميقة في الفقرات القطنية.
Library register number	:	2773-2774.

FREFARED DI NE		een addelsalam addel kadek ammed
Author	:	Mahmoud Ibrahim Elsayed.
Title	:	Reliability of autoCAD analysis versus three dimensional
		motion analysis in lateral spinal curvature.
Dept.	:	Department of Basic Science.
Supervisors	1.	Fatma Sedik Amin.
	2.	Marzouk Abdel Fattah Ellythy.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background: Idiopathic scoliosis is the most common structural spinal deformity in children and adolescents and affects about 2-3% of the adolescent population. Early identification and intervention has been shown to prevent the need for surgery by halting or slowing the progression of structural scoliotic curve. The reliability of measurement is crucial to treatment of idiopathic scoliosis. The Purpose of this study is to compare the reliability of both AutoCAD (Computer Aided Design) analysis and 3Dimensional (3D) motion analysis in measuring angle of lateral spinal curvature. Subjects: Thirty subjects with Adolescent Idiopathic Scoliosis (18 females, 12 males), age (17.57± 2.66) years, height (163.27±11.58) centimeters, weight (58.8±10.16) kilograms, Body Mass Index (21.93±1.81) were evaluated using both AutoCAD analysis and 3D motion analysis to measure angle of lateral spinal curvature. Results: Intra-Class Correlation (ICC) was (0.94) in the AutoCAD analysis and was (0.47) in the 3D motion analysis in measuring cervicothoracic and thoracic angle, While ICC was (0.99) in the AutoCAD analysis and was (0.44) in the 3D motion analysis in measuring thoracolumbar & lumbar angle. Conclusion: The AutoCAD analysis showed excellent intra-rater and inter-rater reliability in measurements while 3D motion analysis showed good intra-rater reliability and poor inter-rater reliability in measurements; thus there was a statistical significant difference between the reliability of AutoCAD analysis and 3D motion analysis in measuring angle of lateral spinal curvature.

K <mark>ey words</mark>	1.	Reliability.
	2.	Scoliosis.
	3.	AutoCAD analysis.
	4.	3D motion analysis.
	5.	three dimensional motion analysis.
	6.	lateral spinal curvature.
Arabic Title Page	:	مقارنة بين مصداقية برنامج الأوتوكاد التحليلي و مصداقية التحليل الحركي ثلاثي
		الأبعاد في الانحناء الجانبي للعمود الفقري.
Library register number	:	3085-3086.

:	Mahmoud Salah El Deen Hamed.
:	Effect of regular prayer (Salat) movements on postural
	balance.
:	Department of Basic Science.
1.	Amir M. Saleh.
2.	Dalia M. Mossad.
:	Master.
:	2012.
:	
	:

Background: Falls among persons often occur due to the deterioration of the ability to control postural balance when standing and walking .Control of posture is dependent on several systems, all of which are vulnerable to age or disease-related changes. The purpose of this study is to examine the effect of regular prayer movements (Salat movements) on improving the dynamic postural balance Subjects: Thirty subjects were selected according to inclusive criteria from Faculty of Physical Therapy, Cairo University, from workers and patient's relatives, aged from 55 to 67years. Method: Subjects were selected according to inclusive criteria and divided into two groups, fifteen in each group. (Group A: people who regularly pray at least from the age of ten. Group B: people who don't pray). The Biodex Balance System was used to assess dynamic postural stability. Results: The unpaired t-Test revealed that there were significant differences in overall stability index where the P-value = 0.024 < significant level $\alpha = 0.05$, anterior-posterior stability index (MLSI) where the P-value = 0.014 < significant level $\alpha = 0.05$ between group A and B. Conclusion: the regular prayer movements (Salat movements) have a positive effect on improving postural balance of adults.

K <mark>ey words</mark>	1.	Biodex Balance System	
	2.	Dynamic postural balance.	
	3.	Regular prayer movements.	
	4.	Salat movements.	
	5.	postural balance.	
Arabic Title Page	:	تأثير حركات الصلاة المنتظمة علي توازن القوام.	
Library register number	:	3171-3172.	

		hen add el salam add el rader ahmed
Author	:	Marwa Abd El Monem Afify Mohamed.
Title	:	Effect of denneroll traction on restoring normal sagittal
		configuration of cervical spine.
Dept.	:	Department of Basic Science.
Supervisors	1.	Omaima Kattabei.
	2.	Ibrahim Moustafa Moustafa Abo-Amer.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background: Change of sagittal configuration is one of the most common causes for neck pain .Denneroll is an orthotic device designed to passively stretch the cervical lordosis. Purpose: This study was conducted to investigate the effect of denneroll traction on absolute rotatory angle (ARA), anterior head translation (AHT) distance and pain severity in chronic mechanical neck pain. Subjects: Thirty patients aged from 30-40 years with mean (37.46±2.24) from both sexes divided into two groups of equal numbers (study and control group). Material: Both groups received ultra sound(U.S), infra red(I.R) and posture corrective exercise program. Additionally, the study group received denneroll traction. All the treatment procdures were conducted three times per week for 10 weeks. X-ray and visual analogue scale (VAS) were taken at two intervals pre-treatment and post-treatment. *Results:* There was significant difference between both groups post treatment in ARA (P=0.0001), AHT distance (P=0.0001) and VAS (P=0.0001). In favor of the study group, there was significant difference in all previous variables (P<0.0001), for the control group, there was significant difference in AHT distance (P=0.0001), and VAS (P=0.0003), while there was no significant difference in ARA(p=0.0824). Conclusion: Denneroll traction in combination with U.S, I.R and posture corrective exercise program considered as an effective rehabilitation method that correct ARA, AHT distance and decrease pain in chronic mechanical neck pain.

Key words	1.	Cervical spine.
	2.	Pain.
	3.	Lordosis.
	4.	Traction.
	5.	denneroll traction
Arabic Title Page	:	تأثيروساده دنى على استعاده الانحناء الطبيعي للفقرات العنقيه .
Library register number	:	2751-2752.

		LEN ADDEL SALAM ADDEL RADER AHMED
Author	:	Marwa Tantawi Al-Sayed.
Title	:	Manual Therapy Versus Transcutaneous Electrical Nerve
		Stimulation On Myofascial Pain.
Dept.	:	Department of Basic Science.
Supervisors	1.	Awattef Mohammed Labib.
	2.	Marzouk Abdel Fattah Ellythy.
Degree	:	Master.
Year	:	2012.
Abstract	:	

The Purpose: of this study was to compare the effect of conventional TENS and progressive pressure release on pain in myofascial pain syndrome of upper trapezius muscle. Subjects: thirty subjects (both males and females) with myofascial trigger points in the upper trapezius muscle, their age ranges from 25-35 years participated in the study. Methods: subjects were divided into 3 groups: Group A ten subjects were treated with conventional transcutaneous electrical nerve stimulation beside stretching exercise and infrared radiation, Group B ten subjects were treated with progressive pressure release beside stretching exercise and infrared radiation and Group C ten subjects were (control group) treated with stretching exercise and infrared radiation. The pressure pain threshold (PPT) were assessed by an electronic algometer. Measurements were obitained pretreatment and post-treatment. The treatment protocol was 3 days/week for 3 months. Results: there was a significant difference between groups B and C (P= 0.0001) which indicate that groups (A) and (B) show improvement more than group (C). It also indicates that group (B) highly significant than group (A). Conclusion: progressive pressure release on myofasical trigger points was more effective than TENS on pain in myofascial pain syndrome of upper trapezius muscle.

Key words	1.	Myofascial pain syndrome.
	2.	Myofascial tigger points.
	3.	progressive pressure release.
	4.	Digital algometer.
	5.	Transcutaneous electrical nerve stimulation.
Arabic Title Page	:	العلاج الكهربائي واختلاف عن العلاج اليدوي في معالجة الألم.
Library register number	:	2803-2804.

Author	:	Mohamed El-sayed.	
Title	:	Muscle energy versus myofascial release technique in chronic low back dysfunction.	
Dept.	:	Department of Basic Science.	
Supervisors	1.	Wadida H. El Sayed.	
Degree	:	Master.	
Year	:	2012.	
Abstract	:		

Background: Low back dysfunction (LBD) is a common problem which affects the majority of the population. The purpose of this study was to compare the effect of myofascial release (MFR) with the effect of muscle energy technique (MET) on pain intensity level, functional impairment level and spinal mobility in patients with chronic LBD (CLBD).Subjects: Forty two patients from both sexes were diagnosed with CLBD, aged 20 to 40 years. Method: Subjects were randomly divided into three groups; Group (A) (MFR group) received conventional physical therapy program and MFR technique. Group (B) (MET group) received conventional physical therapy program and MET technique. Control group (C) received conventional physical therapy program that include (Infrared and strengthening exercises for back and abdominal muscles). Treatment was applied three days/week for four weeks. Level of pain was measured by Visual Analogue Scale, Lumbar ROM was measured by the modified Schober technique and the finger tip-to-floor technique and finally Functional disability was measured by Oswestry disability scale. Measurements were conducted pre-treatment and post-treatment. Results: There were statistical differences between the three groups, meanwhile MET group showed greater improvement in level of pain, lumbar ROM, and functional disability than MFR group. Conclusion: MET is more effective than MFR technique in reducing pain, increasing the range of motion and functional disability in individuals with CLBD.

1.	Low back dysfunction.
2.	muscle energy technique.
3.	myofascial release technique.
4.	Oswestry disability scale.
5.	chronic low back dysfunction.
:	تقنية الطاقة العضلية مقابل الأنفراج الليفي العضلي في الاختلال المزمن لوظيفة اسفل
	الظهر.
:	3081-3082.
	2. 3. 4. 5. :

Author	:	Mohamed Mashaly.
Title	:	Shockwave therapy versus phonophoresis in shoulder
		impingement syndrome.
Dept.	:	Department of Basic Science.
Supervisors	1.	Mohamed Elgendy.
	2.	Sahar Adel.
	3.	Hatem Abd El-Rahman Ahmed.
Degree	:	Master.
Year	:	2012.
Abstract	:	
Abstract	:	

The purpose: of this study was to investigate the effects of shock wave therapy versus phonphoresis in shoulder impingement syndrome. Subjects: Thirty patients diagnosed as shoulder impingement syndrome stage (II Neer classification) due to mechanical causes. Design: 30 Patients were evaluated pretreatment and post treatment for shoulder pain severity, shoulder functional disability, shoulder flexion, abduction and internal rotation motions. **Methods:** Patients were randomly distributed into two equal groups. The first group consisted of 15 patients with a mean age of 45.33 ± 8.64 years received shockwave therapy (6000 shock, 2000shocks per session, 3 sessions, 1 weeks a part, 022mJ/mm²) and therapeutic exercises (strengthing exercise, stretching exercise and mobilization exercises for shoulder joint) 3 times per week, every other day, for 4 consecutive weeks. The second group consisted of 15 patients with a mean age of 46.26 ± 8.05 years received phonophores is 12 sessions and same therapeutic exercises of first group(3 times per week, every other day, for 4 consecutive weeks). Results: Patients of both groups showed significant improvement in all the measured variables. Comparing both groups the shock wave group showed a significant improvement in decreasing pain severity shoulder disability index and range of motion than phonphoresis group Conclusion: Both shock wave and the phonophoresis had a significant effect on decreasing shoulder pain severity, shoulder functional disability, increasing in shoulder flexion, abductionand internal rotation motions and However, the shockwave therapy was more effective in decreasing pain severity and other measured variables than phonphoresis in treatment of patients with shoulder impingement syndrome.

Key words	1.	shoulder impingement syndrome.
	2.	Shockwave.
	3.	Phonophoresis.
Arabic Title Page	:	العلاج بالموجات التصادمية مقابل انتقال العقاقير بالموجات الفوق الصوتيه في علاج
		متلازمة انحشار الكتف.
Library register number	:	2859-2860.

PREPARED B	PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED		
Author	:	Mohamed Nabil.	
Title	:	Mobilization with movement in chronic low back dysfunction.	
Dept.	:	Department of Basic Science.	
Supervisors	1.	Wadida H. El Sayed.	
	2.	Alla A. Balbaa	
Degree	:	Master.	
Year	:	2012.	
Abstract	:		

Background: Low back dysfunction (LBD) is a common problem which affects the majority of the population. The purpose of this study was to investigate the efficacy of mobilization with movement (MWM) technique on pain level, functional disability, and spinal mobility in patients with chronic LBD. Subjects: Thirty patients from both sexes were diagnosed with chronic LBD, aged 25 to 40 years. Method: Subjects were randomly divided into two groups (fifteen patients each); group A (control group) received conventional physical therapy program that include (Infrared, Ultrasonic and strength exercises for back and abdominal muscles). Group B (experimental group) received infrared, ultrasonic and MWM technique. The treatment was applied three days/week for four weeks. Level of pain was measured by Visual Analogue Scale, Lumbar ROM was measured by Inclinometer and Functional disability was measured by Oswestry disability scale. Measurements were taken at two intervals pre-treatment and posttreatment. Results: There were statistical differences between the two groups, where the treatment group showed greater improvement in level of pain, lumbar flexion ROM, and functional disability. Conclusion: MWM technique is considered as an effective treatment for reducing level of pain, increasing lumbar ROM and improving functional disability in individuals with chronic LBD

with this one LDD.		
Key words	1.	Low back dysfunction.
	2.	mobilization with movement technique.
	3.	Inclinometer.
	4.	Oswestry disability scale.
	5.	movement technique.
Arabic Title Page	:	تليين المفاصل مع الحركة في حالات الخلل الوظيفي المزمن لأسفل الظهر.
Library register number	:	2851-2852.

Author	:	Mohamed Yahia Gamal Eldin.
Title	:	Influence of Laterally Wedged Insole on balance in Knee
		Osteoarthritis.
Dept.	:	Department of Basic Science.
Supervisors	1.	Wadida H. EL Sayed.
	2.	Khaled E. Ayad
Degree	:	Master.
Year		2012.
Abstract	:	

Background: Osteoarthritis (OA) is the most common joint disease of adults worldwide. Its incidence rises with age. Individuals with knee osteoarthritis suffer progressive loss of function and increasing dependency in walking, stair climbing, and other lower extremity tasks. Balance is an important component of these tasks. The purpose: It was to investigate the influence of laterally wedged insoles on balance in patients with medial compartment knee OA. Subjects: Thirty patients from both sexes randomly assigned into 2 equal groups participated in the study. Group A with mean age 54.47 \pm 7.41 years, mean weight 85.6 \pm 6.50 Kg and mean height 161.66 \pm 8.38 cm. Group B with mean age 55.73± 7.18 years, mean weight 82.33± 14.42 Kg and mean height 163.00 ± 7.55 cm . Method: Measurements of dynamic balance indeces befeore and after treatments were conducted in both groups. Group A received conventional treatment program fo<mark>r 4 weeks and group B received the same conventional tr</mark>eatment program combined with 5° laterally wedged insoles. Results: There was significant improvement in mediolateral stability index of dynamic balance in both groups but the improvement of group B was greater than the improvement in group A, where P-value was 0.046 and 0.026 in group A and group B respectively and post treatment between groups the P-value was 0.007. On the other hand there was no significante improvement in overall and anteroposterior stability index of dynamic balance in post treatments in each group and between groups. Conclusion: It was concluded that using the laterally wedged insoles together with the conventional treatment program proves to be more beneficial than using the conventional treatment program only.

Key words	1.	Laterally wedged insoles.
	2.	knee osteoarthritis.
	3.	Dynamic balance.
	4.	balance in Knee Osteoarthritis.
Arabic Title Page	:	تأثير فرشة القدم الخارجيه على الاتزان في حالات خشونة الركبه.
Library register number	:	3139-3140.

Author	:	Naglaa Gadallah Mohammed Gadallah.
Title	:	Restricted Calorie Diet Containing Olive versus Fish Oil Combined With Endurance Training On Blood Lipid in obese
		females.
Dept.	:	Department of Basic Science.
Supervisors	1.	Samy Abd Elsamad Nasef.
	2.	Aml Fawzy Ahmed.
	3.	Safaa Elhussein Tawfik.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Obesity is defined as excessive accumulation of subcutaneous fat, the increasing prevalence of overweight and obesity constitutes a major public health because of the associated risk of major chronic diseases, such as coronary heart disease (CHD), and Dyslipidemia. Lifestyle behaviors, including diet and exercise, are the cornerstone of weight control. The purpose: to compare between the effect of restricted calorie diet containing olive oil or containing fish oil combined with endurance training exercise on lipid profile in obese female .Subjects: Sixty obese females aged 20-40 years are included in the present study. Their body mass index (BMI) ranged between (30 - 34.99kg/m²). They were randomly divided into three groups (A, B and C) each group included twenty subjects. methods : The biochemical changes in serum total cholesterol (TC), Triglyceride (TG), Low Density Lipoproteins cholesterol (LDL_C) and High Density Lipoprotein cholesterol (HDL_C) were measured at the beginning of the study and after twelve weeks. **Results:** The results of the current study showed that restricted calorie diet containing olive oil (was more powerful, favorable and effective in controlling blood lipid profile with increase in TC, LDL-C, and/or decrease in HDL-C (percentages of improvement were 17.13%, 22.92 % and 17.51 %), restricted calorie diet containing fish oil was better in treatment of dyslipedimic patient with increase in TG mainly (percentage of improvement was 26.07 %) and restricted calorie diet only is better in treatment of patient with high body weight and low level of HDL-C only (percentages of improvement were 15.39 % and 17.14 %) coclusion: this study stated that restricted calorie diet combined with olive oil in treatment of Dyslipidemic patient is effective on lowering TC, LDL-C and elevating HDL-C, restricted calorie diet combined with fish oil in treatment of Dyslipidemic patient is effective on lowering TG mainly while restricted calorie diet only is effective on elevating HDL-C mainly and lowering the body weight.

Key words	1.	restricted calorie diet.
	2.	endurance training exercise.
	3.	total Cholesterol.
	4.	Triglyceride.
	5.	Low Density Lipoproteins cholesterol.
	6.	High Density Lipoprotein cholesterol.
Arabic Title Page	:	دراسة مقارنة بين تاثير النظام الغذائي قليل السعرات المحتوي علي زيت الزيتون
		مقابل زيت السمك مع تمرينات التحمل علي مستوي الدهون بالدم في السيدات
		البدينات
Library register number	:	3137-3138.

Author	:	Nashwa Mohamed Abdel-Raheem.
Title	:	Three Dimensional Postural Aberrations In Cercical
		Spondylosis.
Dept.	:	Department of Basic Science.
Supervisors	1.	Omaima Mohamed Ali Kattabie.
	2.	Fathi Hussin Ali.
	3.	Ibrahim Moustafa Moustafa Abu Amer.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background: While the head and cervical region houses the reflexive postural control mechanisms, mechanoreceptors and proprioceptors which have an impact on global body posture, So the standing posture evaluation is recommended as part of the physical examination of cervical, thoracic, and lumbar spines. The purpose: was to quantify the complex 3D nature of cervical spine in case of cervical spondylosis through non invasive method and incorporated this data to determine the relation ship between head posture and whole body posture. Subjects: Thirty patients of both sexes, the patients were diagnosed as having cervical spondylosis, their age ranged from (40-60 years) with a mean (51.23±8.77) years participated in the study. Method: Rotation around x,y,z axes, translation around x,z axes were measured by postureprint soft ware for head, rib cage, and pelvis regions and full spine radiograph were taken for every patient. **Results:** there was a strong correlation between 3D head posture and ribcage posture (r=0.968 – $p \le 0.001$). There was a strong correlation between 3D head posture and pelvis posture (r=0.965 – $p \le 0.001$). There was a strong correlation between 3D head posture and the total body posture $(r=0.991 - p \le 0.001)$. There was a strong correlation between degenerative changes of cervical spine and 3D postural changes(r=0.897-p=0.01). Conclusion: There is a strong correlation between 3D head posture and 3D ribcage, pelvis and total body posture. There is a strong correlation between the grade of cervical spine degeneration (cervical spondylosis) and grade of **3D** postural displacements.

Key words	1.	Cervical spondylosis.
	2.	3D.
	3.	total body posture.
	4.	Three Dimensional.
	5.	Postural Aberrations
Arabic Title Page	:	التغيرات ثلاثية الأبعاد في القوام في حالات خشونة الرقبة.
Library register number	:	2955-2956.

FREFARED DI NE		een add el salam add el kadek ammed
Author	:	Peter Ramzy Naguib.
Title	:	The Effect of Iodine Iontophoresis in Treatment of Post
		traumatic Elbow Stiffness.
Dept.	:	Department of Basic Science.
Supervisors	1.	Mohsen Mohamed El Sayyad.
	2.	Azza Mohamed Atya.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background: Limitation of motion is a common complication of elbow trauma. Restoration of joint range of motion and functional activities in the posttraumatic stiff elbow can be a difficult, time consuming, and costly challenge. The purpose of the study is to investigate the effects of iodine iontopnoresis in post traumatic elbow stiffness for range of motion, functional activities and period of treatment. Methods: 42 patients with posttraumatic elbow stiffness divided into two control groups A₁ (adult n=10) A₂ (children n=11) and two study groups B₁ (adult n=10) B₂ (children n=11). The patients were evaluated by electrogoniometer for active range of motion of healthy and affected elbow and Disability of Arm Shoulder Hand questionnaire for functional activities. The evaluation was applied before and after treatment. Period of achievement was measured in weeks. Control groups received superficial heat, stretching exercises and strengthening exercises (3 session / week) 3 months plus the home exercises. Study groups received the same program of treatment and home exercises plus application iodine iontophoresis 2 mA for 15min.Results: there was statistical difference for study group in post treatment range of motion where B_2 (132.55°±6.83) and A_2 (121.82°±13.08) but there wasn't between B_1 (128.6°±5.96) and A₁ (121.9°±8.93), there was improving in functional activities but there wasn't statistical difference between the control and study groups in post treatment Disability of Arm Shoulder Hand score B_1 (3.08±2.57) A_1 (4.45±2.48) B_2 (3.65 ±1.72) A_2 (3.42 ±1.68).there was statistical difference for study groups in decreasing the period of treatment B_1 (5.5±2.41) B_2 (5.27) \pm 1.104) while A₁ (7.8 \pm 2.09) A₂ (8.45 \pm 3.17). The level of significance for all tests was set as(p \leq 0.05)Conclusion: the improvement in the range of motion and decreasing in the period of treatment may be attributed to jodine jontophoresis application.

Key words	1.	Iodine iontophpresis.
	2.	Posttraumatic elbow stiffness.
	3.	Elbow Stiffness.
Arabic Title Page	:	تأثير إدخال أيونات اليود كهربائيا في علاج تيبس ما بعد رضوض الكوع.
Library register number	:	2933-2934.

Author	:	Rasha Mohamed Samy Mahrous.
Title	:	Kinesio Tape versus ultrasound in tennis elbow.
Dept.	:	Department of Basic Science.
Supervisors	1.	Amir Mohamed Saleh.
	2.	Azza Mohamed Attia.
	3.	Mahmoud Hafez Alam Elden.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background: Tennis elbow is reported to be a major health problem world wide. Purposes: To compare between the effect of kinesio tape and ultrasound on tennis elbow patients. Study Design: A pre-post test experimental design. Materials and Methods: 45 patients with tennis elbow from both sexes were involved; their ages range was 30-55 years. Patients were divided into three equal groups; the first group received kinesio tape, stretching exercise and deep friction massage, the second group received ultrasound, stretching exercise and deep friction massage. The kinesio tape treatment was two times per week and the ultrasound three times per week. All groups were treated for 4 weeks. Pain level and hand grip strength was tested before treatment; after two weeks and at the end of treatment. Results: Group (A) which receive kinesio tape show better results than group (B) which receive ultrasound and group(C) which receive kinesio tape plus ultrasound shows the best results. Conclusion: Kinesio tape is more effective than ultrasound in treatment of tennis elbow as regard to pain reduction and improving hand grip strength.

Strength		
Key words	1.	Tennis elbow.
	2.	Kinesio Tape.
	3.	Ultrasound.
	4.	deep friction massage.
	5.	stretching exercise.
Arabic Title Page	:	الشريط اللاصق الكاينثيو مقارنة بالموجات فوق صوتيه على كوع لاعب التنس.
Library register number	:	2965-2966.

Author	:	Rehab Abdel-Mawgod Mohamed Abdel-Mawgod.
Title	:	Effect Of Exercise On Insulin Resistance In Pre-Diabetic
		Subject.
Dept.	:	Department of Basic Science.
Supervisors	1.	Awettef Mohamed Labib.
	2.	Enas Ahmed Elkermy.
	3.	Ibrahim Moustafa Abo-Amer.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background: Obesity is one of the most common cause of insulin-resistance pre-diabetic subjects. Purpose: This study was conducted to investigate the effect of exercise on the insulin resistance in pre-diabetic subjects Subject: 44 subjects aged from 30–45 years with mean (39.77 ± 2.58) from both sex divided into two equal groups. Material: the study group received aerobic exercise programme in form of walking on treadmail in conjunction with resisted exercise programme .both programme was applied three times weekly for six month. Laboratory investigation with respect to glucose level (fasting glucose test ,oral glucose tolerance test and HBA1c)lipid profile (cholesterol level ,triglycerides, HDL and LDL)and waist circumference was conducted at three time interval (pre-treatment ,at3 month and after 6 month of follow up). Result: The significant changes were monitored at three months and at six months of treatment for all pervious variables. The between group analysis using. ANCOVA reavlead a significant different between study and control group after three month fasting glucose level (p=0,000) oral glucose tolerance test (p=, 038) HBA1C (p=0,019), cholesterol (p=0,002), triglycerides (p=, 016), HDL (p=0,000) LDL (p=0, 04) and waist circumference (p=0,000). Conclusion: Exercise is considered as an effective rehabilitation method that improve insulin resistance in pre-diabetic subject.

Key words	1.	Insulin resistance.
	2.	insulin resistance syndrome.
	3.	Pre-diabetes.
	4.	Exercises.
Arabic Title Page	:	تأثير برنامج التمرينات على مقاومة الأنسولين لدى الأشخاص قابلين التعرض لمرض
		السبكر.
Library register number	:	2767-3768.

Author	:	Reham Mokhtar Abdel Sadek.
Title	:	Effect of mobilization with movement technique on patients
		with shoulder impingement syndrome.
Dept.	:	Department of Basic Science.
Supervisors	1.	Wadida H. Elsayed.
	2.	Khaled Elsayed Ayaad.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background: Shoulder impingement syndrome is one of the most comman disorders of the shoulder that have socioeconomic impact on working ability.SIS is a phenomenon of mechanical compression of the rotator cuff against the anterior under surface of the acromion and CAL particularly during arm elevation. Purpose of this study: to investigate the effects of mobilization with movement technique (MWM) on active shoulder range of motion of flexion, abduction and internal rotation, pain intensity and disability level in shoulder impingement syndrome patients. Thirty patients (age: 25-50 years old) of both sexes participated in this study. All subjects had stage II neer classification unilateral shoulder impingement syndrome .Patients were assigned into two equal groups Control group: consisted of fifteen subjects. They received conventional physical therapy; infrared radiation, ultrasound and therapeutic exercise. Experimental group: consisted of fifteen patients. Subjects received the same protocol as control group in addition to MWM technique. The affected shoulder range of motion was assessed clinically by electrical goniometer and pain intensity and disability level by shoulder pain and disability index (SPADI) at the beginning of the treatment and after four weeks at the end of treatment. Results: showed that there were significant differences in active shoulder range of motion of flexion, abduction and internal rotation, pain intensity and disability level in shoulder impingement syndrome patients between both groups in favor of experimental group. Conclusion: mobilization with movement technique (MWM) had significant effects on shoulder impingement syndrome patients regarding active shoulder range of motion of flexion, abduction and internal rotation, pain intensity and disability level.

Key words	1.	Mobilization with movement technique (MWM).
	2.	shoulder impingement syndrome patients.
	3.	ultrasound, infrared.
	4.	electrical goniometer.
	5.	shoulder pain.
	6.	disability index.
Arabic Title Page	:	تأثير استخدام تقنية التليين مع الحركة علي المرضى الذين يعانون من انحشار مفصل
		الكتف.
Library register number	:	3043-3044.

:	Saied Mohamed Ibrahim Abdel Mageed.
:	Dose effect of low level laser therapy on carpal tunnel syndrome.
•	Department of Basic Science.
1.	Amal Fawzy Ahmed.
2.	Alaa EL din Mohy El din Soliman.
3.	Kadria Hosni Mohamed.
:	Master.
:	2012.
:	
	· · · · · · · · · · · · · · · · · · ·

Carpal tunnel syndrome (CTS) is an entrapment neuropathy of the median nerve at the wrist. It is one of the most common peripheral nerve disorders. The purpose: To compare and determine the effect and optimal dose of low level laser therapy used with energy densities 2, 9, 15 j/cm² on motor and sensory distal latency of median nerve and on hand function in patients with carpal tunnel syndrome (CTS). Subjects: Sixty Female patients with mild to moderate CTS were assigned randomly into four equal groups (group A, B and C study groups and group D control group) with age ranged from 35-55 years. Methods: Measurements included motor and sensory distal latency of median nerve and hand function. The study groups A, B and C received traditional physical therapy program in addition to LLLT at energy density 2, 9, 15 j/cm² respectively while control group D received traditional physical therapy program only. The frequency of treatment was 3 times / week for 4 weeks with total sessions of 12 sessions. Results: The results revealed that there were a significant improvement of all measured parameters in groups B and C (P<0.05) while there were no significant improvement in groups A and D when comparing between groups, group C showed the highest improvement which received laser at (15 j/cm²). Conclusion: Laser dose is an important factor to be considered in management of CTS and that dose (15 J/cm²) is optimal dose in treatment of carpal tunnel syndrome.

Key words	1.	Median nerve.
	2.	Low level laser therapy.
	3.	Carpal tunnel syndrome.
	4.	laser therapy.
	5.	Lasers.
Arabic Title Page	:	تأثير الليزر العلاجي مختلف الشدة على متلازمة ضيق نفق عصب المعصم.
Library register number	:	2831-2832.

Author	:	Shereen Mohamed Said Badawy.
Title	:	A Comparative Study Between Different Frequencies Of
		Interferential Therapy in Patients with Chronic Mechanical
		Low Back Pain.
Dept.	:	Department of Basic Science.
Supervisors	1.	Neveen Abd El-Latif.
	2.	Mohamed Reda M. Awad.
	3.	Enas El Sayed Abu-Taleb.
Degree	:	Master.
Year	:	2012.
Abstract	:	

Background: Chronic mechanical low back pain(CMLBP) is a common problem which affects the majority of the population from younger age due to bad habits, Over weight, Decreased fitness and bad health. The purpose: of this study was to investigate and compare between different frequencies of Interferential therapy(IFT) in patient with CMLBP. Subjects: Forty five patients from both sexes were diagnosed with CMLBP, aged 30 to 50 years and were divided randomly into three equal groups; 15 patients in each group. Method: group A received IFT 50 HZ+ Infrared therapy(IRT), group B, received IFT 100 HZ+ IRT, group C received IRT only; treatment was applied 2 days/week for 3 weeks. Pain was measured by Visual Analogue Scale, Lumbar range of motion was measured by Inclinometer and Functional disability was measured by Oswestry disability scale. Measurements were taken at two intervals pre-treatment and posttreatment. Results: Data obtained was analyzed via one- way multivariant analysis of varience (MANOVA) to compare between the 3 groups. There were statistical differences between the 3 groups, where the treatment group B who received IFT 100 HZ + IRT showed greater improvement in lumbar range of motion, pain and functional disability more than the other groups. *Conclusion:* IFT with 100 Hz frequency is considered as an effective treatment for reducing pain, functional disability and increasing lumbar range of motion in individuals with chronic mechanical low back pain.

Key words	1.	Chronic Mechanical Low Back Pain
	2.	Interferential Therapy.
	3.	Inclinometer.
	4.	Oswestry Disability Scale.
Arabic Title Page	:	مقارنة بين الترددات المختلفة للعلاج بالتيارات المتداخلة لمرضى آلام اسفل الظهر
		الميكانيكي.
Library register number	:	3077-3078.

:	Wael Osama Aly Abd El-Khalek.
:	Shock wave versus laser in management of Diabetic frozen
	shoulder.
:	Department of Basic Science.
1.	Mohamed Hussein El-Gendy.
2.	Azza Mohamed Atya,
3.	Yasser Hassan Samir El-Miligui.
:	Master.
:	2012.
:	
	:

Background: Frozen shoulder is a common painful condition associated with loss of active and passive range of motion, commonly affecting those suffering from diabetes mellitus. Purpose: The purpose of this study was to compare between the effects of shock wave therapy versus LASER therapy in treatment of frozen shoulder in diabetic patients. Subjects: Thirty diabetic patients were diagnosed as frozen shoulder by orthopedic specialists, randomly assigned to two equal groups: Group A (Shock wave group) consisted of 15 patients with a mean age of (50.33 ±3.22) vears, and mean duration of illness of frozen shoulder (4.8 ±1.65) months, Group B (LASER group) consisted of 15 patients with a mean age of (49.93 ±3.91) years, and mean duration of illness of frozen shoulder (4.67 ±1.54) months. Methods: Patients in Group (A) received shockwave therapy (3000 shock, 1500/session, 0.22 mj/mm²) in addition to shoulder mobilization exercises. Patients in Group (B) received 12 sessions of Laser therapy, (14.4 J/session, total energy density 4.5 J/cm², wavelength 904 nm, 5000 Hz) in addition to shoulder mobilization exercises. Patients were evaluated pre-treatment and post-treatment for pain severity, shoulder range of motion, and functional disability of arm, shoulder and hand. Research design: A pre-test – posttest research design was used in this study. Results: Results showed that there was significant statistical difference within the two groups before and after treatment and between both groups, showing significant reduction of pain, increased shoulder range of motion, and increased functional abilities in both groups, in favor of laser group. Conclusion: From the findings we can conclude that each of shock wave therapy and laser therapy showed a significant effect in treatment of frozen shoulder in diabetic patients, but laser have shown to be more effective in decreasing shoulder pain severity, increasing shoulder range of motion, and functional ability of arm, shoulder and hand.

Key words	1.	frozen shoulder.
	2.	Diabetes.
	3.	shock wave.
	4.	lasers.
	5.	shoulder mobilization exercises.
Arabic Title Page	:	الموجات التصادمية مقارنة بالليزر في علاج تيبس الكتف السكري.
Library register number	:	2801-2802.