Department of Basic Science
Master Degree
2017

Author	**:**	**Ahmed farouk elsayed mohamed**
Title	**:**	**Effect of snags mulligan technique on chronic cervical radiculopathy**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Wadida H. Elsayed**
	2.	**Hassan Hussien Ahmed**
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Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	

Background: Cervical radiculopathy is a disease induces pain and/or sensorimotor deficits due to compression of a cervical nerve root and it can be a debilitating disease that can cause significant impairment for patients. Purpose: The main purpose was to investigate the effect of Sustained Natural Accessory Apophyseal Glides (SNAGS) on, dermatomal somatosensory evoked potential (DSEP); latency and amplitude, pain and neck disability level in chronic unilateral cervical radiculopathy patients. Subjects: Fifty patients of both genders with chronic unilateral cervical radiculopathy their ages ranged from 40 to 55 years old, recruited from Abo-Queir Health Insurance Association Hospital. They were assigned randomly to two equal groups; control group received conventional physical therapy program and study group received the same conventional physical therapy program in addition to SNAGS Mulligan technique. For both groups, treatment conducted for 4 weeks, 3 sessions/week. Measurement of pain intensity by Numeric Pain Rating Scale (NPRS), DSEP (latency and amplitude) by computerized electromyography and functional disability level by Neck disability index (NDI) were reported before and at the end of the treatment. Results: There was a significant reduction of DSEP latency with significant increase of DSEP amplitude, and significant decreased pain and NDI, in both groups (P<0.05). Comparison between post treatment values of DSEP amplitude, NPRS and NDI showed significant difference with more improvement in study group. Conclusion: Mulligan SNAGS is an effective technique in treatment of chronic cervical radiculopathy patients, as it improves DSEP (latency and amplitude), pain and functional disability.

Key words	**1.**	**Sustained Natural Accessory Apophyseal Glides**
	2.	**snags mulligan technique SNAGS,**
	3.	**cervical radiculopathy.**
	4.	**Dermatomal Somatosensory Evoked Potential**
	5.	**mulligan on cervical radiculopathy**
Classification number	**:**	**000.000.**
Pagination	**:**	**125 p.**
Arabic Title Page	**:**	**تأثير تقنية موليجان علي اعتلال الجذور العنقية المزمن.**
Library register number	**:**	**5285-5286.**

Author	**:**	**Ahmed Raafat Omar Saad Eldin**
Title	**:**	**Kinesiotaping versus mcconnell taping in management of knee osteoarthritis**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ragia Mohamed Kamel**
	2.	**Ashraf Nihad Moharram**
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Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	

Background: Knee osteoarthritis (OA), a major health problem, is the most common chronic degenerative joint disorder; it is characterized by increasing joint pain, stiffness and limitations in range of motion. Taping is a physiotherapy treatment strategy recommended in the management of knee OA. Aim of the study: This study was designed to compare between the effect of Kinesiotaping and McConnell taping on Knee Osteoarthritis Outcome Score (KOOS) and active range of motion of patients with knee OA. Subjects and Procedure : Forty five subjects of both sexes suffering from unilateral primary knee OA. Their ages were ranged from (40 to 50 years) and body mass index (BMI) was ranged from (25 to 29.9 kg/m^2). They were randomly divided into three equal groups, Group (A) their (x± SD) for age (44.73±3.5) year, weight (79.8±6.19) Kg, height (1.70±0.05) m and BMI (27.44±1.5) Kg/m^2 received conventional physical therapy management program for knee OA(ultrasound therapy, transcutaneous electrical neuromuscular stimulation and quadriceps set exercise) and Kinesiotaping, Group (B) their (x ± SD) for age (43.87±2.83) year, weight (78.53±5.22) Kg, height (1.69±0.05) m and BMI (27.45±1.36) Kg/m^2 received the same conventional physical therapy management program and McConnell taping and Group (C) their (x ± SD) for age (45.4±3.16) year, weight (79.4±7.48) Kg, height (1.7±0.05) m and BMI (27.67±1.70) Kg/m^2 received only conventional physical therapy management program. All patients received treatment three times per week for four weeks. Health-Related Quality of Life was measured using Knee Osteoarthritis Outcome Score and active range of motion was measured using universal goniometer pre and post treatment. Results: There was a signifieant difference between Groups (A) and (B) in symptoms, pain and Quality of Life parts of Knee Osteoarthritis Outcome Score (p=0.003, 0.012 and 0.031 respectively) and active knee flexion (p=0.008). There was a significant difference between Groups (A) and (C) in pain, Activities of Daily Living, sport/ recreation and Quality of Life parts of Knee Osteoarthritis Outcome Score (p=0.0001, 0.004, 0.002, 0.0001 respectively) and active knee flexion (p=0.019). Conclusions: Kinesiotaping was more effective than McConnell taping on symptoms, pain and Quality of Life parts of Knee Osteoarthritis Outcome Score and active range of motion of knee flexion in patients with knee osteoarthritis, so it might be used as a part of physical therapy management program of knee osteoarthritis.

Key words	**1.**	**Knee osteoarthritis**
	2.	**McConnell taping**
	3.	**Kinesiotaping**
	4.	**mcconnell taping**
Classification number	**:**	**000.000.**
Pagination	**:**	**142 p.**
Arabic Title Page	**:**	**شريط كينيسيو اللاصق مقابل شريط ماكونيل فى علاج الالتهاب المفصلى العظمى للركبة.**
Library register number	**:**	**5731-5732.**

Author	**:**	**Al Shaimaa Mohamed GalaL**
Title	**:**	**Effect of intradialytic aerobic exercise on patients with diabetic nephropathy**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Neveen Abdel Latif**
	2.	**Nadia kamal marae**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: The most common diabetic micro vascular complications is diabetic nephropathy. It is considered a serious complication of diabetes because of its detrimental effects on numerous systems on the body. Exercise could ameliorate or prevent complications such as chronic kidney disease. Exercise session for renal patients can be taken either intradialytic or interdialytic. Intradialytic type of exercise has fewer dropout rate and improves removal of toxins during dialysis session. Aim of this study: was to investigate the effect of intradialytic aerobic exercise on renal function tests in patients with kidney disease secondary to diabetic nephropathy. Methodology: Thirty patients of both genders (19 males, 11 females) under renal haemodialysis, age ranged between 40 to 60 years, from the renal rehabilitation unit of Edfou General Hospital were assigned randomly into two equal in number groups. Group A (study group) received a program of moderate intensity intradialytic aerobic exercise (12-13 RPE) on a pedal ergometer, Group B (control group) did not receive any exercise program during dialysis. The treatment program continued for 8 weeks (3 sessions of exercise per week). Laboratory investigations for serum calcium, serum creatinine, urine creatinine, urine albumin and estimated GFR were measured at the beginning and after the end of program for all patients of the two groups. Results revealed a significant increase in serum calcium, significant decrease in serum creatinine and significant decrease in urine creatinine in group (A).There were no significant change in urine albumin and estimated GFR between the two groups. Conclusion: Moderate intensity intradialytic aerobic exercise (12-13 RPE) was beneficial in modulating serum calcium, serum creatinine and urine creatinine in diabetic nephropathy patients

Key words	**1.**	**Diabetic nephropathy**
	2.	**Renal functions**
	3.	**Intradialytic exercise**
Classification number	**:**	**000.000.**
Pagination	**:**	**98 p.**
Arabic Title Page	**:**	**تاثير التمرينات الرياضية الهوائية على مرضى اعتلال الكلية السكرى.**
Library register number	**:**	**5561-5562.**

Author	**:**	**Amal EL Shenawy El Sheikh**
Title	**:**	**Influence of aerobic exercise and resistance training in management of obese females**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Mohammed Hussien EL Genndy**
	2.	**Amir Nazih Wadea**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	

Introduction: Metabolic complications of obesity are rising not only in developed countries but also in non developing countries. In fact, obesity can be presented as (new world syndrome) the greatest health problem in the modern industrial world. Purpose: to investigate the influence of aerobic exercise and resistance training in management of obese females. Methods: Forty-five obese females participated in this study .obese females were divided randomly into three groups; group (A) , (B), and (C) , fifteen obese females in each group. Group (A) received aerobic exercise only, group (B) received resistance exercise only, and group (C) received combined (aerobic and resistance) exercise. The study lasted for four weeks, Fasting lipid profile was measured before and at the end of the study for the three groups. Results: statistical analysis revealed that there was a significant improvement in blood lipid profile in the three groups with a greatest improvement to group (c), Total serum cholesterol showed a statistical significant decrease after the program in group (A) with change percentage 2.45%, group (B)with change percentage 4.99 % and group (C) with change percentage 8.13 %. Serum triglyceride showed a statistical significant decrease after program in group (A) with change percentage 5.16 %, group (B) 7.49 and group (C) 11.98% . Low density lipoprotein showed a statistical significant decrease after program in group (A) with change percentage 5.17 % , group (B) 21.4% and group (C)19.53%.High density lipoprotein showed a statistical significant increase after program in group (A) with change percentage 8.78 %, group (B) with change percentage 22.3 % and group (C) with change percentage 35.46 %. Conclusion: Aerobic, resistance and combined training are effective methods for improving lipid profile in obese females.

Key words	**1.**	**Metabolic complications**
	2.	**resistance training**
	3.	**lipid profile**
	4.	**Obesity.**
	5.	**Aerobic exercise**
	6.	**Females - obese**
Classification number	**:**	**000.000.**
Pagination	**:**	**99 p.**
Arabic Title Page	**:**	**تأثير التمرينات الهوائية وتدريبات المقاومة فى علاج السمنة لدي الاناث البدينات.**
Library register number	**:**	**5287-5288.**

Author	**:**	**Amany Ismail Selem**
Title	**:**	**Influence of ultrasound combined with premodulated interferential current in discogenic sciatica.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Haytham M. Elhafez**
	2.	**Hassan Ahmed Alshatoury**
	3.	**Ghada Ismail Mohamed**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Sciatica is a common clinical condition that can be extremely painful, disabling and life changing. An important component of conservative treatment is physiotherapy, which aims to promote physical and psychological health for the patient. Purpose of this study: This study aims to find out the effectiveness of adding interferential current therapy to conventional physiotherapy treatment and to compare with conventional physiotherapy treatment only in patients with chronic discogenic sciatica. Subjects and methods: Sixty patients (22 males and 38 females). Their mean age, height, weight and body mass index were (36.23±3.82) years, (171.43±6.93) cm, (76.6±6.86) kg and (26.1±2.49) kg/m^2 respectively participated in this study. They were classified randomly into two groups of equal number. Experimental Group received interferential current therapy combined with conventional physiotherapy program while Control Group received conventional physiotherapy program only, 3 times/ week for 4 weeks. Outcome measures: back and leg pain intensity, functional disability, range of motion of hip flexion and H-reflex, assessment done before and after treatment program. Results: Statistical interpretation of results for both groups showed significant improvement in all variables in both groups for best results for experimental group. Conclusion: Adding interferential current therapy to conventional physiotherapy has a positive effect on treating sciatic patients.

Key words	**1.**	**Disc herniation**
	2.	**Interferential Therapy**
	3.	**Sciatica**
	4.	**ultrasound**
	5.	**discogenic sciatica.**
Classification number	**:**	**000.000.**
Pagination	**:**	**146 p.**
Arabic Title Page	**:**	**فاعلية الموجات فوق الصوتية المصاحبة للتيارات المتداخلة المعدلة مسبقاً في علاج التهاب عصب النسا غضروفي المنشأ.**
Library register number	**:**	**5455-5456.**

Author	**:**	**Amira Gebril Sayed**
Title	**:**	**Effect of pulsed magnetic field on platelets count and coagulation process in healthy subjects**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Soheir Shehata Rezkallah**
	2.	**Yasser Ramzy Lasheen**
	3.	**Laila Ahmed Rashid**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Magnetic field is now recognized by the 21st century medicine as real physical entities that promise the healing of various health problems. In the last few decades, various studies refer to biological effect of magnetic field exposure have been in progress. Most of studies carried out on mice, rabbits and little on human showed that magnetic fields induced changes in hematological parameters in these organisms. Purpose: To investigate the effect of pulsed magnetic field on platelets count and coagulation process in healthy subjects. Methods: Forty- three healthy subjects divided into two groups, a study group (A) consists of (23 subjects) 11 females and 12 males, and a control group (B) consists of (20 subjects) 10 females and 10 males. Their ages ranged from 25-40 years. They were selected randomly from the staff members working at department of physical therapy of police authority hospital El-Agouza. They were free from any health problems and not previously treated by magnetic field. Group (A) (Study group) received magnetic field for 12 sessions successively over one month by the rate of 3 sessions per week, with low frequency (10 HZ), low intensity (10 G) and for 20 minutes, While Group (B) (control group) didn't be exposed to magnetic field just placement in the device as a placebo. The subjects were evaluated pre and post exposure for both platelet count and international normalized ratio (INR). Results: Time-by-group statistically significant effects (mixed design MANOVS) of platelet count and INR were found for the 2 groups. The effect of the tested group on platelets count revealed that there was *a significant* differences of the mean values of the "post" treatment between both groups and this significant increase in favor to study group. Considering the effect of the tested group on INR revealed that there were *a significant* differences of the mean values of the "post" treatment between both groups and this significant reduction in favor to the study group. Conclusion: The findings of the study revealed that there was a significant effect of pulsed magnetic field on platelets count and coagulation process in healthy subjects.

Key words	**1.**	**Magnetic field**
	2.	**Platelets (thrombocytes)**
	3.	**blood coagulation**
	4.	**coagulation process**
	5.	**healthy subjects**
	6.	**INR.**
Classification number	**:**	**000.000.**
Pagination	**:**	**94 p.**
Arabic Title Page	**:**	**تاثير المجال المغناطيسي المتقطع علي الصفائح الدموية وعملية التجلط الدموي في الأشخاص الأصحاء.**
Library register number	**:**	**5697-5698.**

Author	**:**	**Aya Allah Gamal Ahmed Mahmoud**
Title	**:**	**Influence of Bilateral Hamstrings Muscles Shortening on Some Radiological Parameters of Lumbosacral Spine**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Neveen Abdel Latif Abdel Raoof**
	2.	**Yasser Ramzy Lasheen**
	3.	**Ramy Edward**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Bilateral Hamstrings muscles shortening is a common condition found in symptomatic and asymptomatic subjects. Tightness of this muscle can play a role in cases of low back pain, postural deficits, lumbar spine disorders and sport related injuries. Purpose of this study: was to investigate the influence of bilateral hamstrings muscles shortening on some radiological parameters of lumbosacral spine. Materials and Methods: Thirty healthy volunteers of both genders participated in this study. Subjects were classified into two equal groups; Group A: (Control group): was consisted of fifteen healthy subjects without hamstring shortening with mean age, weight, height and BMI were 26.8 ± 4.34 years, 74.6 ± 17.45 kg, 174 ± 15.5 cm , and 24.28 ±2.67 kg/m^2 respectively. Group B: (Study group): was consisted of fifteen subjects with bilateral shortening of the hamstrings with mean age, weight, height and BMI were 25.8 ±3.91 years, 66 ± 9.69 kg, 164.2 ±7.43 cm and 24.38± 2.81 kg/m^2 respectively. The shortening of the hamstrings was assessed with Active Knee Extension Test, and radiological parameters of lumbosacral spine were assessed from X-Ray image using Paxera Viewer Software. Results: This study showed that there was a statistical significant difference in some radiological parameters of lumbosacral spine (Lumbar lordosis angle, Lumbosacral angle and Sacral inclination angle) in cases of bilateral hamstrings muscle shortening as p value was <0.05. Conclusion: Bilateral hamstrings muscle shortening has significant influence on lumbosacral spine angles (Lumbar Lordosis Angle, Lumbosacral Angle and Sacral Inclination Angle) and therefore treatment of bilateral hamstrings muscle shortening should be taken into account during preventing and setting up a rehabilitation program for low back pain, postural deficits and gait abnormalities.

Key words	**1.**	**Hamstring flexibility**
	2.	**Lumbosacral spine**
	3.	**Sacral Inclination Angle**
	4.	**Lumbar Lordosis Angle**
	5.	**Lumbosacral Angle.**
	6.	**Bilateral Hamstrings**
	7.	**Radiological Parameters of Lumbosacral Spine**
	8.	**Muscles Shortening**
Classification number	**:**	**000.000.**
Pagination	**:**	**113 p.**
Arabic Title Page	**:**	**تأثير القصر الثنائي لعضلات أوتار الركبة علي بعض القياسات الإشعاعية للعمود الفقري القطني العجزي.**
Library register number	**:**	**5471-5472.**

Author	**:**	**Aya Ashraf Mohamed Zaghlol**
Title	**:**	**Aerobic Versus Resisted Exercise On Glycated Hemoglobin (HbA1c) In Normal Subjects**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**SoheirShehataRezk Allah**
	2.	**Olfat Ibrahim**
	3.	**Ayman El baany**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Prediabetesis a condition that comes before type 2 diabetes with Glycated hemoglobin(A1C) of 5.7% – 6.4%,Fasting blood glucose of 100 – 125 mg/dl, without intervention is likely to become type 2 diabetes in 10 years or less. Exerciseintervention was generally found to reduce glycated hemoglobin and prevent or delay type 2 diabetesPurpose: The purpose of this study was to investigate and compare the effectiveness ofaerobic versus resistedexercise on Glycatedhemoglobin (HbA1c) inprediabetics. Subjects: Thirty subjects with HbA1C (5.7-6.4) were selected from the out clinic of Damietta specialized hospital with age ranging from (25-45years). They were randomly divided into 3 equal groups; Aerobic group (A), Resisted group (B) and Control group (C).Procedure: Group A received Aerobic exercise with intensity 60-75% of Maximum Heart Rate, 30 -40 min duration.Group B received resisted exercise withmoderate intensity 60-75% of Repetition Maximum. Group C control group. For all groups treatment conducted for 3 months, 3times per week, day after day. HbA1c and Fasting blood glucose(FBG) were measured before and after 3 months of the treatment.The Results: Results revealed that, there was a significant reduction ofGlycated hemoglobin and Fasting Blood Glucose in both groups (A and B) (P<0.05). Comparison between groups post treatment showed that there was no significant difference of the mean values Fasting Blood Glucose andHbA1cbetween (group A and B) with (p=1.00) (p=0.29). While, there was significant difference among (group A versus C), and (group B versus C) with (P=0.03 and P=0.004) (P=0.002 and P=0.000) in favor for group (B).Conclusion: It could be concluded that, both aerobic and resisted exercise could be effective in prevention or delaying of type 2 diabetic but resisted may be more effective.

Key words	**1.**	**Pre diabetes**
	2.	**Aerobic**
	3.	**Resisted**
	4.	**Glycated hemoglobin (HbA1c)**
	5.	**FBG**
	6.	**Normal Subjects**
Classification number	**:**	**000.000.**
Pagination	**:**	**101 p.**
Arabic Title Page	**:**	**التمرينات الهوائيه مقابل المقاومه علي الهيموجلوبين السكري في الأصحاء.**
Library register number	**:**	**5357-5358.**

Author	**:**	**Christina Sabry Ayoub**
Title	**:**	**Efficacy of Diode Cluster Laser Versus Complete Decongestive Therapy on Post mastectomy Lymphedema**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Maher Ahmed El Keblawy**
	2.	**Soheir Shehata Rezkallaah**
	3.	**Samy Ramzy Shehata**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	

***Background*: Secondary upper limb lymphedema is a chronic disease that affects patient's quality of life or even a life threatening case. *Propose of the study*: to investigate the effectiveness of Diode Cluster Laser (DCL) versus Complete Decongestive Therapy (CDT) in the treatment of secondary post mastectomy lymphedema. *Methods*: 45 female patients with upper limb lymphedema (stage II, according to Foldi classification) were included in current study, their age ranged from 40 to 60 years. They were divided randamly into 3 groups 15 patients for each group. *Procedures*: Study group A (n=15) received DCL with conventional traditional program of physical therapy including; cryotherapy, manual massage, and range of motion exercise. Study Group B (n=15) received CDT including manual lymph drainage, short stretch bandage, free active exercises and skin care program with the conventional traditional program. Control Group C (n=15) received the conventional traditional program only. Treatment program was given with the frequency of 3 sessions per week for 2 months. The measurements of the upper limb were done by round measurements with tape at three points; wrist joint, elbow joint and at the end of the arm just below the axillary fold and water displacement by the volumetry were taken before, at the mid (after a month) and at the end of treatment (2 months). *Results*: Comparison between groups A & B revealed a significant difference of tape measurement at *wrist* (P=0.014), a significant difference between groups B & C (P=0.001), and no significant difference between A & C (P=0.154). Comparison between groups A & B revealed a significant difference at *Elbow* (P=0.003), a significant difference between groups B & C (P=0.001), and no significant difference between A & C (P=0.422).Comparison between groups A & B revealed a significant difference at *End of arm* (P=0.043), a significant difference between groups B & C (P=0.003), and no significant difference between A & C (P=0. 307). Comparison between groups A & B revealed a significant improvement of volumetric measurement (P=0.001), a significant difference between groups B & C (P=0.001), and no significant difference between A & C (P=0.380). *Conclusion*: CDT with conventional therapy has a significant effect more than DCL with conventional therapy in controlling the hallmark signs and symptoms of secondary upper limb lymphedema post mastectomy.**

Key words	**1.**	**Complete decongestive therapy**
	2.	**Diode cluster laser**
	3.	**Post mastectomy**
	4.	**Secondary lymphedema**
Classification number	**:**	**000.000.**
Pagination	**:**	**139 p.**
Arabic Title Page	**:**	**المقارنه بين تأثير الليزرال ثنائى المجمع وبرنامج مختار من العلاج الطبيعى لعلاج الإحتقان على التورم الليمفاوي بعد استئصال الثدى**
Library register number	**:**	**5247-5248.**

Author	**:**	**Doaa Mohamed Abdul Hadi Mahmoud Kafafi**
Title	**:**	**The efficacy of therapeutic exercise and supplementary rest-breaks on neck Discomfort and functional Performance in Computer users**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Neveen Abd El Latif Abd El Raoof**
	2.	**Kaya Hosny Battecha**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Neck pain and forward head posture in computer users is believed to occur as a consequence of adopting a sustained non-neutral posture, Cranio-cervical Flexion Training targeting deep cervical flexors muscles as well as frequent rest breaks are thought to have a positive effect on neck pain for computer users without negatively affecting workers' functional performance (productivity and accuracy). Literature supports workstation changes should be made on-site, accompanied with frequent rest breaks and exercise. Purpose: This study was done to investigate the possible effect of craniocervical flexion training and supplemental rest breaks on neck discomfort and work accuracy in computer users. Material and methods: 24 data entry computer users working in Wadi Elneel Hospital, from both genders were randomly assigned into 2 groups of equal number ("A" control & "B" study) each contains (9 males and 3 females) using computers for a minimum of 6 h/day; 5 days/week, aged between 21 to 35 years old. Both groups received a lecture on proper posture during work, workstation set up assessment and modification but only group "B" received craniocervical flexion training and supplementary rest breaks daily throughout the course of six weeks of the study. Pain intensity, functional neck disability, workstation setup, work habitual posture, and productivity were measured before and after intervention using Visual Analogue Scale, Neck Disability Index, ergonomic self-assessment checklist, Digital Imaging for Postural Assessment method (DIPA) and error rate, respectively. Variables were assessed between groups at baseline and 6 weeks later post-intervention. Results: For the control group (A), the results showed that there was a significant decrease in pain, head flexion; neck flexion angles and deep cervical flexors muscles strength while there was a significant increase in Craniocervical Flexion angle and neck functional performance (P-value <0.05), while there was no significant difference in error rate percentage and Gaze angle (P-value = 0.3782, 0.5965, 0.996) respectively. However, the study group (B) results showed that there was a more significant decrease in pain, neck functional performance, head flexion; neck flexion; craniocervical flexion; Gaze angles, and deep cervical flexors muscles strength (P-value <0.05), while there was no significant difference in error rate % (P-value =0.1276). Conclusion: the study revealed that 6 weeks of repeated micro rest breaks and deep cervical flexors muscles training improves habitual cervical angles toward upright posture and deep cervical flexors strength thus enhance neck postural control. This exercise could be used as preventive measure against the development of neck dysfunctions in risky population.

Key words	**1.**	**Mechanical neck pain**
	2.	**functional performance**
	3.	**craniocervical flexion**
	4.	**computer users**
	5.	**rest breaks**
	6.	**therapeutic exercise**
	7.	**neck Discomfort of Computer users**
Classification number	**:**	**000.000.**
Pagination	**:**	**130 p.**
Arabic Title Page	**:**	**كفاءة استخدام التمارين العلاجية والاستراحات المتعددة على آلام الرقبة والأداء الوظيفي لمستخدمي الحاسب الآلي.**
Library register number	**:**	**5317-5318.**

Author	**:**	**Doha Hamed Moustafa Al – AFify.**
Title	**:**	**Effect of Segmental and Global Sagittal Cervical Alignment On Intervertebral Movement in asymptomatic Individuals**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ibrahim Moustafa Moustafa Abu Amer**
	2.	**Eman Ahmed Abdel Moez**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	

Background: The abnormal or excessive translations between vertebrae in the sagittal plane are clinically important clues to dysfunction or instability. The insufficient exploration of intervertebral translation during flexion and extension prevents the further understanding of the cervical biomechanics and treating the cervical related dysfunction. The Purpose: To examine and correlate the effect of segmental and global sagittal cervical alignment on intervertebral movements in asymptomatic individuals with normal and abnormal cervical curvature. Methods: Thirty four asymptomatic individuals were recruited; they were divided into two groups based on the degree of their cervical lordosis represented by the absolute rotatory angle and anterior head translation distance that were measured from lateral view of cervical spine x-ray. All the individuals underwent plain lateral cervical radiograph with neck in neutral position and end range of flexion and end range of extension. Intervertebral movements were measured through measuring intervertebral rotational and translational movement. Results: Our study revealed that there was significant difference between both groups regarding the intervertebral kinematic movement (P<0.05). These findings were further supported by the significant correlation between the cervical sagittal alignment and intervertebral kinematic movement (P<0.05). Conclusion: The biomechanical response of the vertebrae to the cervical posture and alignment is different in normal and abnormal individuals. Further, the study showed the important role of the upper cervical spine in global spinal posture and movement.

Key words	**1.**	**cervical spine**
	2.	**sagittal alignment**
	3.	**intervertebral movement**
	4.	**x-ray**
	5.	**asymptomatic Individuals**
Classification number	**:**	**000.000.**
Pagination	**:**	**110 p.**
Arabic Title Page	**:**	**تأثير الاعتدال الجانبي الجزئي والكلي للفقرات العنقية علي حركة ما بين الفقرات في الأشخاص الأصحاء.**
Library register number	**:**	**5243-5244.**

Author	**:**	**Eman Ahmed Helal**
Title	**:**	**The Effect Of Positional Release Technique On Mechanical Cervical Dysfunction**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Amir Mohamed Saleh**
	2.	**Hatem Ashraf Abd-Elrhman**
	3.	**Olfat Ibrahim Ali**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background and Purpose: Chronic mechanical neck dysfunction (CMND) is a common problem that affect two thirds of the populations at some point in their life. Positional release technique (PRT) is a manual therapy technique commonly used in the treatment of painful movement restrictions of the cervical spine. The purpose of this study was to investigate the effect PRT on management of patients with CMND. Patients: Thirty patients from both sexes were diagnosed as CMND participated in this study. Their age ranged from 30 - 48 years. Materials and Methods: Pain, cervical range of motion and functional activities were measured pre-treatment and post 6 weeks of the treatment using visual analogue scale (VAS), smart phone clinometer and neck disability index (NDI). Measurements were obtained pre- and post-treatment. Results: There was statistically significant difference between groups (A) and (B) in pain severity after treatment where P value was (0.040). There was no statistically significant difference between groups (A) and (B) after treatment in cervical flexion, extension, right side bending, left side bending, right rotation and left rotation ROM where p value was (0.848), (>0.999), (0.269), (0.156), (0.834) and (0.983) respectively. Concerning to functional disability index, there was no statistically significant difference between groups (A) and (B) after treatment where P value was (0.126). Conclusion: Addition of PRT to traditional physical therapy program showed to be effective in reducing pain of patients with chronic mechanical neck dysfunction.

Key words	**1.**	**Chronic mechanical neck dysfunction.**
	2.	**visual analogue scale**
	3.	**smart phone clinometer**
	4.	**neck disability index.**
	5.	**positional release technique**
	6.	**Release Technique On Cervical**
Classification number	**:**	**000.000.**
Pagination	**:**	**145 p.**
Arabic Title Page	**:**	**تأثيرتقنية الأوضاع الانفراجية على الخلل الوظيفي الميكانيكى من الفقرات العنقية.**
Library register number	**:**	**5635-5636.**

Author	**:**	**Esraa Adel Anwar Ahmed**
Title	**:**	**Effect Of Forward Head Posture On Shoulder Proprioception In Young Adults**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Fatma Sedeek Amin**
	2.	**Rania Nagy Karkousha**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**
Background Forward head posture (FHP) is considered a widely spread postural disorder related to abnormalities in musculoskeletal balance. Purpose: This study was conducted to investigate the effect of forward head posture on shoulder proprioception in young adults. Participants and methods: Thirty subjects of both genders of ages ranging from 18 to 26 were assigned into two equal groups, Group A; subjects having forward head posture with craniovertebral angle <50° and Group B; subjects having normal posture with craniovertebral angle >50°; photographic analysis measured the craniovertebral angle while isokinetic biodex system was used for measuring shoulder propioception. Result: The study showed that there were no significant differences between the two groups in shoulder proprioception. Conclusion: forward head posture has no effect on shoulder proprioception.		
Key words	**1.**	**Forward head posture**
	2.	**Isokinetic biodex system**
	3.	**Photographic analysis**
	4.	**Shoulder proprioception**
	5.	**Young Adults - head posture**
Classification number	**:**	**000.000.**
Pagination	**:**	**62 p.**
Arabic Title Page	**:**	**تاثير الوضع الامامي للرأس علي الاستقبال الحسي العميق لمفصل الكتف للشباب البالغين.**
Library register number	**:**	**5589-5590.**

Author	**:**	**Esraa Saeed Elnady Mohamed**
Title	**:**	**Effect of core stability exercises on dynamic balaance in patients with multiple sclerosis**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Wadida H.ElSayed**
	2.	**Soheir S. Rezk-Allah**
	3.	**Nirmeen A. Kishk**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**
Background: Multiple sclerosis (MS) is a chronic disease characterized by degradation of the central nervous system myelin which may impair the balance of patients .Core stability exercises have been the focus of attention for improving the stability of MS patients. Purpose: To investigate the effect of core stability exercises on dynamic balance in patients with MS. Methods: Forty patients with MS with Expanded Disability Status Scale ranging from 3.0–5.0 were recruited from MS unit in Kasralainy Hospital, and they assigned into two main groups; a control group (A) and a study group (B). Group (A): twenty patients received only conventional physiotherapy program. Group (B): twenty patients received core stability exercises and conventional physiotherapy program. Patient received 12 sessions for 4 weeks, 3 sessions/week, day after day. Patients were assessed by overall Stability index using BIODEX stability system which is used to assess dynamic balance and fall risk status scale which is fall risk screening tool. Assessment was done before the first session and after last session of treatment. Results: There was no significant statistical difference between two groups (p>.05) in pretreatment assessment using overall stability index and fall risk status scale, in post treatment assessment there was a significant improvement in score of overall stability index in both groups (A) and (B), while there was a significant improvement in fall risk status scale score in group (B) and not in group (A). Conclusion: Core stability is similar to conventional physiotherapy program in improving dynamic balance in patients with MS.		
Key words	**1.**	**Multiple sclerosis**
	2.	**core stability**
	3.	**balance**
	4.	**stability**
	5.	**multiple sclerosis exercises**
Classification number	**:**	**000.000.**
Pagination	**:**	**131 p.**
Arabic Title Page	**:**	**تأثير تمرينات الثبات المحوري علي الاتزان الديناميكي لمرضي التصلب المتعدد.**
Library register number	**:**	**5389-5390.**

Author	**:**	**Ghareeb Mohamed Kamel**
Title	**:**	**Quality Assurance and Patients' Satisfaction in Accredited and non-Accredited Physical Therapy Departments**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Amir Mohamed Saleh**
	2.	**Yasser Mohamed Anis**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: 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 patients' quality of life. The purpose: to investigate the difference in the patients' satisfaction between accredited (Dar El Shefaa and Nasser Institute) and non accredited (Omm El masryeen, Boulak El Dakror and Imbaba) hospitals in order to assess areas of weakness as well as areas of strengths to improve the quality of physical therapists practice. Subjects The study was done in march 2015 till august 2015, 400 patients participated in this study where their ages ranged from 17 to 82 years old and were taken from 5 hospitals from both sexes divided into two groups, group (A) included 200 patients from accredited hospitals, and group (B) included 200 patients from non accredited Hospitals. Methods: the patients' satisfaction was assessed by the questionnaire of the American physical therapy association. Results: of this study revealed that chi-square values are significant in all 19 item, chi-square value between (119.853 - 333.945). Conclusions: from the findings of the current study it was concluded that the patients' satisfaction in departments of physical therapy in accredited hospitals exhibits higher level of satisfaction than a non accredited hospitals.

Key words	**1.**	**Patients' satisfaction**
	2.	**Non Accredited Hospital.**
	3.	**Accredited hospitals**
	4.	**Quality Assurance and Patients' Satisfaction**
Classification number	**:**	**000.000.**
Pagination	**:**	**120 p.**
Arabic Title Page	**:**	توكيد الجودة ورضاء المرضي في أقسام العلاج الطبيعي المعتمدة وغير المعتمدة.
Library register number	**:**	**5299-5300.**

Author	**:**	**Hanaa Samir Mohamed**
Title	**:**	**The effect of body mass index on the level of fatigue in young adolescent**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Neveen Abd El Latif**
	2.	**Marwa Shafiek Mustafa**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Although fatigue is one of the most common complaints that impacts quality of life, no study have investigated the effect of Body Mass Index (BMI) on the level of fatigue. Purpose: To investigate the effect of body mass index on the level of fatigue in young adolescent. Subjects: Two huned and twenty normal subjects from both sexes, their age ranged from 12 to 18 years old and their body mass index varied between 13 to 39.9kg/m^2. Subjects were divided into five equal groups according to their body mass index; each group consists of forty four subjects, Group 1(underweight) BMI <18.5 kg/m^2 , Group 2(ideal weight) with BMI between 18.5-24.9 kg/m$^{2.}$ Group 3 (over weight) with BMI between 25-29.9 kg/m$^{2.}$ Group 4 (obesity class1) with BMI between 30-34.9 kg/m$^{2.}$ Group5 (obesity class 2) with BMI between 35-39.9 kg/m$^{2.}$ Methods: An Arabic version of the fatigue severity scale (FSS) was used to measure the level of fatigue in the five groups. Results: There was A negative significant correlation between BMI and FSS score in underweight and ideal weight groups (r = −0.571, p = 0.000) and (r = −0.708, p = 0.000) respectively, while there was A positive significant correlation between BMI and FSS score in overweight, obesity class1 and obesity class 2 groups (r = 0.671, p = 0.000), (r = 0.390, p = 0.000) and (r = 0.946, p = 0.000) respectively, which indicate that group 1 with the lowest BMI value and group 5 with the highest BMI value show the highest level of fatigue than other groups. Conclusion: there was an effect and positive relationship between the body mass index and the level of fatigue in young adolescent.

Key words	**1.**	**Body mass index**
	2.	**Fatigue severity scale**
	3.	**Underweight**
	4.	**fatigue in young adolescent**
	5.	**adolescent**
Classification number	**:**	**000.000.**
Pagination	**:**	**87 p.**
Arabic Title Page	**:**	**تأثير معدل كتلة الجسم علي مستوي الارهاق في المراهقين.**
Library register number	**:**	**5463-5464.**

Author	**:**	**Hisham Mohamed Abdel Raheem Hussien**
Title	**:**	**Effect of Mulligan`s lumbar SNAG on chronic non-specific low back pain**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Neveen Abdellatif Abdel Raoof**
	2.	**Omaima Mohamed Kattabie,**
	3.	**Hassan Hussien Ahmed**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Objective: To investigate the effectiveness of adding Mulligan's lumbar "SNAG" to a conventional program on chronic nonspecific low back pain (CNSLBP). Methods: 42 participants with CNSLBP were randomly allocated into two groups. The study group (n= 23) received a selected physical therapy program consisted of stretching and strengthening exercises plus "SNAG" on the affected lumbar level (s), and the control group (n=19) received the selected program only. The selected program was performed 3 times / week for 1 month. Outcome measures were repositioning error (the primary outcome), pain level, and functional level, measured by a Biodex Isokinetic Dynamometer, visual analogue scale (VAS), and Oswestry disability index (ODI), respectively. Measurements were recorded before and immediately after the end of the program. Results: pre- and post- test scores revealed that both groups showed significant improvement in all dependant variables (p <.001). However, adding lumbar "SNAG" to the selected program resulted in higher improvement in terms of repositioning error, pain level, and functional level (p = .02, .002, .008) respectively. Conclusions: Mulligan's lumbar "SNAG" can be a valuable addition to the selected physical therapy program used with CNSLBP patients, SNAG may have physiological effects beside its mechanical effect.

Key words	**1.**	**SNAG Mulligan`s lumbar**
	2.	**proprioception.**
	3.	**repositioning error**
	4.	**Mulligan`s lumbar SNAG**
		chronic non-specific low back pain
		low back pain
Classification number	**:**	**00.0.**
Pagination	**:**	**99 p.**
Arabic Title Page	**:**	**تأثير موليجان سناج للفقرات القطنية علي ألم اسفل الظهر الغير محدد.**
Library register number	**:**	**5485-5486.**

Author	**:**	**Ibrahim Yousef Ibrahim Zidane**
Title	**:**	**Effect of Combined Kinesiotape and Therapeutic Ultrasound in The Treatment Of Carpal Tunnel Synome**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Haytham El-Hafez**
	2.	**Hassan Ahmed Alshatoury**
	3.	**Rania Reffat Ali**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Carpal tunnel synome is the most common neuropathy of the upper limb and a significant contributor to hand functional impairment and disability. Hand is an important part of body to perform the complex daily living activities. Purpose: To investigate effect of combined kinesiotape and therapeutic ultrasound in the treatment of carpal tunnel synome. Material and Methods: Thirty Carpal Tunnel Synome female patients with positive electro diagnostic findings (MMDL >4.2 ms) participated in this study, their ages ranged between 40 to 50 years. Design of study: They were randomly assigned into two equal groups. Group (A) received kinesiotape application on the affected wrist for 3 days, then day off and then another three days each week for 4 weeks combined with a program of 12 sessions of continuous ultrasound, 3 sessions per week for 5 minute per session in addition nerve and tendon gliding exercise while, Group (B) received a program of 12 sessions of continuous ultrasound, 3 sessions per week for 5 minute per session in addition tendon and nerve gliding exercise. The treatment program continued for 4 weeks. Boston carpal tunnel questionnaire and median motor distal latency, visual analogue scale and hand grip dynamometer were performed before and after the treatment program for all patients of the two groups. Results: The obtained results showed a highly statistically significant (P< 0.0001) improvement in both groups (A&B) concerning Boston carpal tunnel questionnaire, visual analogue scale and hand grip dynamometer but there was significant improvement in group (A) only concerning median motor distal latency. The improvement was highly significant (P< 0.0001) in group (A) when compared with group (B). Conclusion: Using of combined kinesiotape and therapeutic ultrasound in the treatment of carpal tunnel synome appeared to be effective. The combined effect of kinesiotape with therapeutic ultrasound was found to be more effective and superior in comparing with therapeutic ultrasound only in the treatment of carpal tunnel synome.

Key words	**1.**	**Kinesiotape**
	2.	**Carpal tunnel synome**
	3.	**Therapeutic ultrasound**
	4.	**Kinesiotape and Ultrasound of Carpal Tunnel Synome**
Classification number	**:**	**000.000.**
Pagination	**:**	**115 p.**
Arabic Title Page	**:**	**فاعلية الاستخدام المشترك لشريط الكينسيو و الموجات فوق الصوتية في علاج متلازمة النفق الرسغي.**
Library register number	**:**	**5459-5460.**

Author	**:**	**Mahmoud Gaber Nagdi Mohamed**
Title	**:**	**Influence of different head positions on postural stability in normal subjects**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Fatma Seddik Amin**
	2.	**Kadrya Mohamed Battecha**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	

Background: Head positioning is crucial to a wide range of activities, including visual and auditory orientation, feeding and vestibular function. Neck muscles produce head movements, maintain posture and resist undesired perturbations. Balance is an underrated principle of everyday functioning. It keeps body upright, allows to walk without assistance and helps prevent injury, maintaining balance requires coordination of input from multiple sensory systems including the vestibular, somatosensory, and visual systems. The purpose of this study was to investigate the effect of different head positions on postural stability in normal subjects. Subjects: one hundred normal subjects (54 females and 46 males) their age ranged from 20 to 35 years, and with BMI "Body Mass Index" ranged from 20.04 to 24.98 Kg/m² were assessed for postural stability from five different head positions. Method: subjects were in one group and assessed as one shot for postural stability by BIODEX Balance System from five different head positions (neutral position, 20° of head flexion, 40° of head flexion, 20° of head extension, and 30° of head extension), test applied for twenty seconds with feet supported on platform and head stabilized by a collar in each certain degree which detected by Cervical Range of Motion Device. Results: there was statistical significant effect of different head positions on postural stability and extension head position had the higher stability index which mean postural stability decrease with extension head position. Conclusion: different head positions have great impact on postural stability which should be considered in assessment and rehabilitation for patients with cervical and balance disorders.

Key words	**1.**	**Posture**
	2.	**Head position**
	3.	**Biodex Balance System.**
	4.	**Postural control**
	5.	**Postural stability**
	6.	**normal subjects - head positions**
Classification number	**:**	**00.0.**
Pagination	**:**	**86 p.**
Arabic Title Page	**:**	**تأثير اوضاع الدماغ المختلفه على الاتزان في الاشخاص الاصحاء.**
Library register number	**:**	**5283-5284.**

Author	**:**	**Mahmoud Mohammed Adel Elqazaz**
Title	**:**	**Measurement of Electric and Magnetic Fields Surrounding Selective Electrotherapy Equipment**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Maher Ahmed El-Keblawy**
	2.	**Abeer Mahmoud Yousef**
	3.	**Haitham Shraf El-Din**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Interferential and diadynamic currents were commonly used electro therapy modalities in treatment of different cases. During operation of such devices, there were electric and magnetic field exposures to the physiotherapist. Objective: The purpose of this study was to assess the strength of electric and magnetic field that the physiotherapist is exposed to at different distances during application of selective electrotherapy equipment and to provide the appropriate advice for safe handling of these equipment. Materials and Methods: Both of electric and magnetic fields were measured at different distances around the apparatus operating in interferential current "quaipolar and bipolar modes" and diadynamic current "fixed mono phase and diphase modes" using Hand held Gauss/Tesla Meter and Narda EMR-200. That was applied in two conditions: without earthing of the apparatus and with earthing of the apparatus. Results: There was considerable high magnetic field surrounding the electrotherapy apparatus which markedly decreased when the equipment was earthed and there was permissible electric field surrounding the equipment with and without earthing. Conclusion: The measured values of magnetic field surrounding the apparatus used for treatment of patient in electrotherapy and used in the current study were higher than the permissible levels identified by international organizations concerned with non-ionizing radiation protection, but the values of electric field were lower than the permissible levels identified by international organizations concerned with non-ionizing radiation protection Also it was concluded that the magnetic field and electric field were markedly decreased to the safe limits around the apparatus when it was earthed.

Key words	**1.**	**Electric field**
	2.	**Magnetic field**
	3.	**Electrotherapy equipment**
	4.	**Measurements.**
Classification number	**:**	**000.000.**
Pagination	**:**	**114 p.**
Arabic Title Page	**:**	**قياس المجال الكهربي و المغناطيسي المحيط بأجهزة العلاج الطبيعي المنتقاة.**
Library register number	**:**	**5490-5489.**

Author	**:**	**Marco Zakaria Lamey**
Title	**:**	**The effect of forearm rotation on strength of elbow muscles at different shoulder positions**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Neveen Abdel Latif Abdel Raoof**
	2.	**Magda Gaid Sedhom**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**
Introduction: Elbow is a critical element for a functional upper extremity. The primary functions of the elbow are to position the hand in space, act as a fulcrum for the forearm, and allow for powerful grasping and fine motions of the hand and wrist. Loss of elbow function can cause significant disability and affect activities of daily living, work-related tasks, and recreational activities. Purpose: The purpose of this study was to determine the difference between anatomical zero handgrip and 90° pronated hand grip positions on elbow muscle performance at 45° and 80° shoulder abduction. Subjects and Method: Eighty subjects (Males and Females), their age ranged from 20 to 30 years participated in this study, were classified randomly into four equal groups. Group I and Group II were tested at anatomical zero hand grip position with shoulder abduction 45° and 80° respectively. Group III and Group IV were tested at 90 degree pronated handgrip position with shoulder abduction 45° and 80°respectively.All the participants were assessed by using Biodex 3 to measure peak torque to body weight and the agonist antagonist ratio of elbow flexor and extensor muscles at angular velocity 60° / second. Results: ANOVA test showed that there were no statistically significant differences between anatomical zero handgrip and 90° pronated hand grip positions on elbow muscle performance at 45° and 80° shoulder abduction. Conclusion: There was no effect of the four positions on peak torque per body weight and agonist antagonist ratio of elbow flexors and extensors muscles so strengthening exercises of elbow flexors and extensors muscles can be performed from any position from these four positions		
Key words	**1.**	**Anatomical zero handgrip**
	2.	**Peak torque**
	3.	**Isokinetic**
	4.	**forearm rotation on strength**
	5.	**Shoulder abduction.**
	6.	**elbow muscles**
	7.	**shoulder positions**
Classification number	**:**	**000.000.**
Pagination	**:**	**78 p.**
Arabic Title Page	**:**	**تأثير دوران الساعد على قوة عضلات مفصل المرفق في الاوضاع المختلفة لمفصل الكتف.**
Library register number	**:**	**5545-5546.**

Author	**:**	**Marwa Mohamed Sayed Mohamed Saleh**
Title	**:**	**Low level laser Versus Ultrasound on Myofascial Trigger Points of Planter Fasciitis**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ragia Mohamed Kamel**
	2.	**Hassan Hussain Ahmed**
	3.	**Marwa Shafiek Mustafa**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Planter fasciitis is the most common cause of pain in the inferior heel , it is estimated to account for 11 to 15 % of all foot symptoms requiring professional care among adults .Purpose: To investigate the effect of low level laser versus ultrasound on Myofascial Trigger points of planter fasciitis. Subjects and Methods : 45 patients with Myofascial Trigger points of planter fasciitis of both sexes with age ranged from (30 to 45) years old selected from outpatient clinics of Kasr Al Ainy hospital and Faculty of physical therapy, Cairo University were participated in the present study. Patients They are arranged randomly into 3 equal groups; Group (A): received ultrasound on trigger points of planter fasciitis with therapeutic exercises, with (15) patients were included in this group. Their mean ± SD of age, weight, height, and BMI were (33.6 ± 2.64) years, (91.06 ± 5.11) kg, (167.4 ± 5.53) cm, and (32.5 ± 1.25) kg/m² Group (B): received low level laser on trigger points of planter fasciitis with therapeutic exercises with (15) patients were included in this group. Their mean ± SD of age, weight, height, and BMI were (31.6 ± 4.62) years, (89.86 ± 3.73) kg, (168.13 ± 6.16) cm, and (31.88 ± 2.36) kg/m² and Group (C): received only therapeutic exercises (stretching exercises &deep transverse friction massage) with (15) patients were included in this group. Their mean ± SD of age, weight, height, and BMI were (30.46 ± 4.32) years, (92.46 ± 5.26) kg, (169.06 ± 4.19) cm, and (32.35 ± 1.64) kg/m² , All groups received its therapeutic program about (3 sessions / weeks for 6 weeks). Pain intensity level was measured by visual analogue scale and pain pressure threshold of trigger points was measured by manual algometer. All variables was measured pre and post treatment Results: showed that there was a significant increase in Pain pressure threshold of group (B) compared with group (A) and (C) ($p < 0.05$) , and there was a significant decrease in VAS of group B compared with group A and C ($p < 0.05$).Conclusion: pain pressure threshold and pain intensity level have significantly improved by using low level laser therapy than using ultrasound which indicated that treatment with low level laser was more effective than treatment with ultrasound in decreasing pain intensity and increasing PPT of Trps for patients suffering from planter fasciitis.

Key words	**1.**	**Planter fasciitis**
	2.	**Ultrasound.**
	3.	**Trigger poin**
	4.	**Low level laser therapy**
	5.	**Myofascial Trigger Points**
Classification number	**:**	**000.000.**
Pagination	**:**	**94 p.**
Arabic Title Page	**:**	**الليزر منخفض الشدة مقابل الموجات الصوتيه على نقاط الألم العضلي الليفي لحالات التهاب اللفافة الأخمصية.**
Library register number	**:**	**5805-5806.**

Author	**:**	**Marwa Mostafa Ahmed**
Title	**:**	**Effect Of Obesity On Hip Joint Proprioception In Adult Subjects**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Fatma Sadeek Amin**
	2.	**Magda Gaid Sedhom**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Obesity is a medical condition in which excess body fat has accumulated to the extent that it may have a negative effect on health. Obesity is accompanied with reduced postural control and stability that could hinder the ability to adapt to changes in terrain during walking . Poor proprioception of the hip may diminish neuromuscular control of the leg and is related to decreased control of hip joint stability that is a part of Core stability. Purpose of this study: was to investigate the effect of obesity on hip joint proprioception. Subjects and Methods: Sixty adult subjects of both genders with their ages ranged from 18 to 35 years participated in this study. Subjects were classified into three equal groups according to body mass index. group A: was consisted of twenty subjects of normal weight (BMI:18-24.9). Group B: was consisted of twenty subjects who had mild obesiy (BMI:30-34.9).Group C:was consisted of twenty subjects who had moderate obesity (BMI:35-39.9). Methods: The hip proprioception was assessed with active repositioning test of hip abduction using Biodex isokinetic dynamometer 3 pro system. Results: showed that there was a significant decrease in the active repositioning absolute error of the right and left hip joint of group A compared with that of group B and C .($p<0.05$) Also, there was a significant decrease in the active repositioning absolute error of the right and left hip joints of group B compared with that of group C ($p<0.05$). there was a significant decrease in the active repositioning absolute error of the right hip compared with that of left hip joint in the three groups ($p<0.05$). Conclusion: It was concluded that an increase in BMI will decrease hip joint proprioception which may affect hip joint stability.

Key words	**1.**	**Hip proprioception**
	2.	**Obesity**
	3.	**body mass index**
	4.	**active repositioning test**
	5.	**Adult Subjects**
Classification number	**:**	**000.000.**
Pagination	**:**	**91 p.**
Arabic Title Page	**:**	**تاثير السمنة علي المستقبلات الحسية العميقة لمفصل الفخذ في الاشخاص البالغين.**
Library register number	**:**	**5443-5444.**

Author	**:**	**Mennat Allah Mohamed Abdellatif Mohamed**
Title	**:**	**Effect of Lumbar Stabilization Exercises versus Kinesiotaping on Chronic Mechanical Low Back Pain**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Prof. Dr. Ragia Mohamed Kamel**
	2.	**Prof. Dr. Hassan Hussein Ahmed**
	3.	**Dr. Reham Hussein Diab**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	

Background: Low back pain is one of the most common musculoskeletal problems in modern society. Lumbar stabilization exercise is a therapeutic technique that uses a progressive sequence of training in coordination, balance, endurance and strengthening. Kinesiotape is an adhesive tape (100%) cotton fibers which provide support and protection to soft tissues and joints, to decrease swelling and pain after injury, prompting improvement of blood circulation and lymphatic fluids drainage in the taped area. Both decrease pain, increase range of motion and improve activities of daily living. Purpose: This study was conducted to compare effect of lumbar stabilization exercises and kinesiotape in patients with chronic mechanical low back pain. Design of the Study: Thirty patients were divided randomly into two equal groups. Group A received lumbar stabilization exercises and infrared radiation and Group B received kinesiotape and infrared radiation. Method: Visual analogue scale was used to measure the pain intensity level and dual inclinometer was used to measure range of motion the lumbar spine. Results: There was a high significant decrease in pain level in both groups; group A was p<0.0001 and group B was p<0.0001. There was a high significant improvement in lumbar range of motion in both groups A and B. In group A; flexion, extension, lateral flexion and rotation probabilities' values were p<0.0001. In group B; flexion, extension, lateral flexion and rotation probabilities' values were p<0.0001. Conclusion: There was no significant difference between the lumbar stabilization exercises and kinesiotaping for the patients with chronic mechanical low back pain in increasing lumbar range of motion and pain relief after treatment and during the follow up after one month. Also, the lumbar stabilization exercise is more effective in its level of improvement than the kinesiotaping in chronic mechanical low back pain.

Key words	**1.**	**Infrared Radiation**
	2.	**Kinesiotape**
	3.	**Visual Analogue Scale.**
	4.	**Lumbar Stabilization Exercises on Back Pain**
	5.	**chronic mechanical low back pain**
	6.	**Range of Motion**
	7.	**Lumbar Stabilization exercises**
Classification number	**:**	**000.000.**
Pagination	**:**	**102 p.**
Arabic Title Page	**:**	**تأثير تمارين التثبيت القطنى مقابل الشريط اللاصق الكاينسيو على آلام أسفل الظهر الميكانيكية المزمنة.**
Library register number	**:**	**5277-5278.**

Author	**:**	**Mohamed Essa Abdulalim Ibrahim Alshafei**
Title	**:**	**Effect of Sustained Natural Apophyseal Glides versus Kinesiotape on Non Specific Neck Pain**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ragia Mohamed Kamel**
	2.	**Salah Eldin Bassit Ahmed**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	

Background: Non specific neck pain is neck pain with no particular precise illness being identified. It is characterized as mechanical pain that located between the occiput and the 3rd thoracic vertebra and encompassing muscles with no particular etiology. Sustained natural apophyseal glides described as involving the application of an accessory passive glide to the cervical vertebrae while the patient simultaneously performs an active movement. Kinesiotape is an adhesive tape (100%) cotton fibers which provide support and protection to soft tissues and joints, to decrease swelling and pain after injury, prompting improvement of blood circulation and lymphatic fluids drainage in the taped area. Both decrease pain, increase active range of motion and improve activities of daily living. Purpose of the study: This study was conducted to compare effect of sustained natural apophyseal glides and kinesiotape in subjects with non specific neck pain. Design of the Study: Pre-test and post-test design. Materials and Methods: Thirty subjects with non specific neck pain ages between 19-32 years old. They were divided randomly into two equal groups. Group A received sustained natural apophyseal glides, infrared radiation and isometric exercises for neck muscles and their age was (26.93 ± 3) years, weight was (70.8 ± 3.2) kg, height was (169.87 ± 3.2) cm, and body mass index was (24.46 ± 0.45) kg/m². Group B received kinesiotape infrared radiation and isometric exercises for neck muscles and their age was (27.4 ± 2.72) years, weight was (72.33 ± 2) kg, height was (170.6 ± 2.5) cm, and body mass index was (25 ± 0.52) kg/m² and the period of the treatment was twice per week for 6 weeks. Visual analogue scale was used to measure the pain intensity level and the inclinometer was used to measure active range of motion of the cervical spine before and after the treatment. Results: There was a high significant decrease in pain level in Group A and Group B ($p<0.0001$). There was a high significant improvement in cervical active range of motion in both groups A and B. In Group A and Group B; flexion, extension, lateral flexion and rotation probabilities' values were ($p<0.0001$). Conclusion: There was no significant difference between the sustained natural apophyseal glides and kinesiotape for the subjects with non specific neck pain in increasing cervical active range of motion and pain relief after treatment, but the sustained natural apophyseal glides has more percent of improvement than the kinesiotape in non specific neck pain treatment.

Key words	**1.**	**Infrared Radiation**
	2.	**Non Specific Neck Pain**
	3.	**Active Range of Motion**
	4.	**Visual Analogue Scale**
	5.	**Isometric Exercises**
	6.	**Sustained Natural Apophyseal Glides**
	7.	**Kinesiotape**
	8.	**Neck Pain - Non Specific**
Classification number	**:**	**000.000.**
Pagination	**:**	**139 p.**
Arabic Title Page	**:**	**تأثير التحريك الطبيعي المستمر للمفاصل المسطحة مقابل الشريط الكينسيو اللاصق على ألم الرقبة غير محدد السبب.**
Library register number	**:**	**5625-5626.**

Author	**:**	**Mohamed Mahmoud Eldesoky**
Title	**:**	**Validity of Using Smart Phone Sway Balance Application in Measuring Dynamic Balance**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Neveen Abd ElLatif Abdel Raoof**
	2.	**Khaled Elsayed Ayad**
	3.	**Enas Elsayed Mohamed Abutaleb**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**
Background: The ability to provide quantitative measures of dynamic balance is the benefit of objective tools. There is an essential need for developing an objective, easy use, portable and cost effective tool to measure the personal dynamic balance and with the huge spread of the smart phone which in our life using it in the assessment of balance will meet the needed features. Purpose: To investigate the validity of Sway Balance Software loaded on Iphone device in measuring the dynamic balance by comparing it with Biodex Balance System which is a valid and reliable device in this issue. Subjects: Thirty healthy non-athletic subjects (8 females and 22 males; age= 23.9 ± 3.38years; BMI=22.53±1.64 kg/m^2) were selected from the under and postgraduate students of Faculty of Physical Therapy, Cairo University. Methods: Subjects were recruited in one group and were tested their dynamic balance by both Sway balance software mobile application and the Biodex balance system at the same time throw four condition (foot together, semi tandem, tandem and single leg stance) with eyes opened. Each participant performed two experimental trials of the four conditions one at level 8 and other at level 4 Biodex balance system difficulty with a familiarization trail prior to both. Results: At level 8, there was a negative significant correlation between the overall postural sway and overall stability index in all conditions except the semi tandem position which show no significance correlation. While at level 4 all the four condition show negative significant correlation. Conclusion: According to the finding of this study, Sway balance software mobile application could be used in clinics and other fields as a valid objective tool to measure dynamic balance.		
Key words	**1.**	**Dynamic balance**
	2.	**Sway balance software**
	3.	**Validity of Using Smart Phone**
	4.	**Measuring Dynamic Balance**
	5.	**Sway Balance Application**
Classification number	**:**	**000.000.**
Pagination	**:**	**84 p.**
Arabic Title Page	**:**	**صلاحية استخدام برنامج الهاتف المحمول سواي بلانس في قياس الأتزان الحركي**
Library register number	**:**	**5685-5686.**

Author	**:**	**Mohamed Tarek Mohamed Hefnawy**
Title	**:**	**Assessment of knee proprioception post different treatment approaches of anterior cruciate ligament tear in police academy students**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Maher Ahmed El-Kablawy**
	2.	**Yasser M. Aneis**
	3.	**Ashraf El-Sedawy**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: The anterior cruciate ligament (ACL) is the most commonly injured ligament in the body. Knee proprioception deficit often occurs after ACL injury. Current treatment choices for ACL tear incorporate both surgical reconstruction and conservative management. However, there was insufficient evidence to determine whether surgical or conservative management was superior for the treatment of ACL partial tear with regard to knee proprioception restoration. Objective: determine whether is there any difference between reconstructive surgery and conservative treatments with regard to knee proprioception in subjects with partial ACL tear. Study Design: comparative study. Subjects: 45 subjects (male only) of police academy students were participated in the study, 30 patients with partial ACL tear (experimental group) were selected post different treatment protocols, with ages ranging from 20 to30 years without any other associated knee injuries. In addition to 15 subjects (control group) served as normal control matched for age and sex. Methods: Subjects were divided into three groups; group (A) Include 15 patients with partial ACL post-rehabilitation after surgical reconstruction through an arthroscopic procedure, group (B) Include 15 patients with partial ACL tear post-conservative management , and group (C); control group. Knee proprioception was evaluated through Biodex Isokinetic Dynamometer by an active mode at two knee angles; 30°, 60°, the experimental groups underwent Proprioceptive evaluation post the end of 20weeks of rehabilitation. Results: There were no significant differences between the experimental groups with regard to knee proprioception. Conclusion: within the limitation of this study, both reconstructive surgery and conservative management of ACL partial tear were effective and nearly equivalent with regard to knee proprioception restoration in police academy students.

Key words	**1.**	**anterior cruciate ligament**
	2.	**ACL Tear**
	3.	**Knee proprioception**
	4.	**Isokinetic dynamometer**
	5.	**police academy students**
Classification number	**:**	**000.000.**
Pagination	**:**	**106 p.**
Arabic Title Page	**:**	**تقييم المستقبلات الحسية العميقة للركبة بعد الطرق العلاجية المختلفة لمزق الرباط الصليبي الأمامي لطلاب أكادمية الشرطة.**
Library register number	**:**	**5523-5524.**

Author	**:**	**Mustafa Awad Ali**
Title	**:**	**Efficacy of Ultrasonic Lipolysis on Blood Cholesterol Level in Centrally obese Women**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Mohamed Hussein El Gendy**
	2.	**Yasser Ramzy Lashen**
	3.	**Abir Zakaria Mohamed**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**
Background & purpose: fat located within the abdominal cavity; is the best correlate of most of metabolic complications , that accounts to a large extent for the increased risk of cardiovascular disease. Ultrasonic Lipolysis is a well-recognized and a successful treatment method in a management of localized fat removal, hence the purpose of this study was to investigate the effect of Ultrasonic Lipolysis on BMI, waist circumference, WHR and blood cholesterol level in centerally obese women. Subjects: Fourty obese Women with cenerally obesity, aged 30 to 40 years , with Bmi from 30 -40Kg/m2; waist circumference ≥ 88 cm and waist hip ratio ≥ 0.9 participated in the study. Method: subjects were randomly assigned into 2 groups; study with 20 women received ultrasonic lipolysis two times per week, at an eight week interval, as well as low caloric low fat diet (1200-1500 cal/day) & abdominal exercise (3 times per week) for eight consecutive weeks. The control group with 20 women received only low caloric, low fat diet (1200-1500 calories/day) & abdominal exercise (3 times per week) for eight consecutive weeks. Weight height scale was used to measure body weight & height, a tape measurement was used to determine the waist and hip circumference. A blood sample was taken to determine blood cholesterol levels. All measurements were obtained in the first intervention session (pre-intervention) and after the last session (post-intervention). Results: When comparing both groups post-test; there was no significant difference for body weight and BMI, where t and p values were (.58),(0.56)and (-.91),(0.36). However, waist circumference , waist hip ratio and blood cholesterol levels showed significant differences with t and p value (4.44) (0.0001) , (-16.07) (0.0001) and (-2.71) (.01) respectively. Conclusion: Ultrasonic lipolysis had a significant effect on reducing abdominal fat by its significant decrease in waist circumference ; waist hip ratio; and blood cholesterol levels in obese centrally women.		
Key words	**1.**	**Ultrasonic lipolysis**
	2.	**Waist to hip ratio.**
	3.	**body mass index**
	4.	**Blood Cholesterol Level**
	5.	**Centrally obese Women.**
Classification number	**:**	**000.000.**
Pagination	**:**	**97 p.**
Arabic Title Page	**:**	**فاعلية إذابة الدهون بالموجات فوق الصوتية على مستوي كوليستيرول الدم لدي السيدات ذوات السمنة المركزية.**
Library register number	**:**	**5655-5656.**

Author	**:**	**Nada Mohamed El-Missery**
Title	**:**	**Effect of high intensity laser on cubital tunnel syndrome.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Maher A. Elkeblawy**
	2.	**Mohamed Ahmed El Shaik**
	3.	**Ghada Ismail Mohamed**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Cubital tunnel syndrome is the second most common peripheral entrapment neuropathy after carpal tunnel syndrome. whether conservative or surgical treatment for cubital tunnel syndrome is most effective is still much debated. An important component of conservative treatment is physiotherapy , which aims to promote physical and psychological health for the patient. purpose of the study : the purpose of the current study was to find out the effectiveness of high intensity laser on pain intensity level and ulnar nerve motor conduction velocity across the elbow in cubital tunnel syndrome . Subjects and methods : thirty patients (18 females and 12 males)their age ranged from 20 to 40 years suffering from mild to moderate unilateral cubital tunnel syndrome were conducted in the present study. They were assigned randomly into two equal studies groups. Group A consisted of 15 patients (9 females and 6 males) with mean age and body mass index (BMI) values of 28.06±2.28 years and 23.26±0.40 kg/m2 respectively. Group B consisted of 15 patients (9 females and 6 males) with mean age and BMI values of 28.4±3.20 years and 23.11±0.44 kg/m2 respectively . Study group: group A received high intensity laser while control group: group B recieved placebo high intensity laser , 5 times\ week for 4 weeks . Both groups were received same regular medical treatment. They were assessed using visual analogue scale for pain intensity level and nerve conduction studies for ulnar nerve motor conduction velocity . The assessment was performed twice for every subject (pre and post program). Results: statistical interpretation of both groups showed significant improvement , but in case of study group(G,A) the amount of improvement was higher in reduction of pain intensity level and increase in ulnar nerve motor conduction velocity across the elbow when compared with control group(G,B)with a p value 0.0001 in group A. Conclusion : High Intensity laser represents a significant effective therapy modality on suppression of pain intensity level and increase in ulnar nerve motor conduction velocity across the elbow.

Key words	**1.**	**Cubital Tunnel Syndrome**
	2.	**Nerve Conduction Studies**
	3.	**Visual Analogue Scale**
	4.	**High Intensity laser**
	5.	**5707-5708**
Classification number	**:**	**000.000.**
Pagination	**:**	**101 p.**
Arabic Title Page	**:**	**تاثير الليزر عالي الشدة على متلازمة النفق المرفقي .**
Library register number	**:**	**5707-5708.**

Author	**:**	**Nancy Shehta Ali Ahmed**
Title	**:**	**Effect of Shoulder versus Forearm Extensors Kinesio taping on Hand Grip Strength in Normal Subjects**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Prof. Dr.Mohamed Hussein El Gendy**
	2.	**Dr.Rania Reffat Ali**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	

Background: Kinesio tape is a novel and effective therapeutic technique believed to facilitate muscle contraction through stimulating mechanoreceptors and increasing the sensory feedback around the taped region. The human hand is the most important and complex structure of the upper extremity due to its extensive mobility and sensitive capabilities of its surrounding tissues and one of its essential function is gripping. Purpose of this study: to investigate the best region (shoulder versus forearm extensors) and the best time interval (immediate, 30, 60, and 120 minutes) after Kinesio tape to obtain the maximum improvement in hand grip strength in normal subjects. Subjects and methods: Forty five normal subjects from both genders participated in this study. They were classified randomly into two groups. Group (A) Shoulder Kinesio tape while Group (B) Forearm extensors Kinesio tape. Group A consisted of 24 participants (12 females and 12 males) with mean age, height, body mass, and BMI values of 23.37±3.22 years, 168.95±8.68 cm, 64.08±7.24 kg, and 22.41±1.84 kg/m2 respectively. Group B consisted of 21 participants (11 females and 10 males) with mean age, height, body mass, and BMI values of 23.61±3.33 years, 167.57±8.81 cm, 64.52±9.13 kg, and 22.84±1.65 kg/m2 respyectively. A Hand Grip dynamometer was used to measure grip strength before and (immediate, 30, 60, and 120 minutes) after I-shaped application of Kinesio taping (with 50% stretch) to the shoulder and forearm extensors muscles. Results: There was no significant difference between Group A and Group B on hand grip strength, and the best time interval for group A was at 30 minutes while in group B at 60 minutes. Conclusion: There was no difference between shoulder and forearm extensors Kinesio tape on hand grip strength in normal subjects, and the best time interval was at 30 minutes for the shoulder group and at 60 minutes for the forearm extensors group.

Key words	**1.**	**Kinesio tape**
	2.	**Hand Grip Dynamometer**
	3.	**Shoulder**
	4.	**Forearm extensors**
	5.	**Hand Grip strength**
	6.	**Normal Subjects - Hand Grip Strength**
Classification number	**:**	**000.000.**
Pagination	**:**	**134 p.**
Arabic Title Page	**:**	**تأثير شريط الكاينزيو على الكتف مقابل الساعد على قوة قبضة اليد في الأشخاص الأصحاء.**
Library register number	**:**	**5271-5272.**

Author	**:**	**Omar Mohamed Ali Mabrouk**
Title	**:**	**Tripollar Radiofrequency Lipolysis, Ualtrsound Cavitation and Combination Therapy on Abdominal Adiposity**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Medhat Araby Khalil**
	2.	**Rabab Ali Mohamed,**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Central obesity or increased intra abdominal fat is associated with a statistically higher risk of heart disease, hypertension, insulin resistance, and diabetes mellitus type 2. Purpose: This study was conducted to investigate and compare the effectiveness of tripollar radiofrequency lipolysis (RF), ultrasound (US) cavitation and their combination on abdominal subcutaneous fat thickness and waist circumference (WC) in patients with abdominal adiposity. Subjects: Thirty subjects suffering from localized fat deposits at the abdominal area with age ranged from 25-45 years old, BMI ranged from 30-35 kg/m^2 assigned randomly into three equal groups: Group (A) consisted of 10 subjects with mean age and BMI were 38.7±6.63 years and 33.55±1.31 kg/m^2 respectively. Group (B) consisted of 10 subjects with mean age and BMI were 34.3±7.76 years and 33.57±1.57kg/m^2 respectively. Group (C) consisted of 10 subjects with mean age and BMI were 34.3±7.76 years and 32.99±3.73 kg/m^2 respectively. Methods: Group (A) received US cavitation (AC 220 Volt. 40 KHz) twice weekly for 10 sessions. Group (B) received tripollar RF (AC 220 Volt .1MHZ. 50 Watts) twice weekly for 10 sessions. Group (C) received combination therapy (both tripollar RF and US cavitation) twice weekly for 10 sessions. Subjects in all groups were assessed using ultrasonography and tape measurement before treatment then after treatment after 10 sessions to measure subcutaneous fat thickness and WC. Results: Showed that there was statistical significant difference between pre and post treatment within each group (A, B and C) for abdominal subcutaneous fat thickness and WC. But there was a non-statistical significant difference between group A and group C; also, there was no statistical significant difference between group A and group B, while, there was a statistical significant difference between group B and group C in management of abdominal adiposity. Conclusion: Ultrasound cavitation, tripollar RF and their combination were effective methods for management of abdominal adiposity, but combination therapy and US cavitation were the most effective.

Key words	**1.**	**Abdominal Adiposity**
	2.	**Tripollar Radiofrequency**
	3.	**Waist Circumference**
	4.	**Combination therapy**
	5.	**Ultrasound Cavitation**
Classification number	**:**	**000.000.**
Pagination	**:**	**92 p.**
Arabic Title Page	**:**	**موجات راديو ثلاثية الأقطاب, الموجات فوق الصوتية التجويفية والجمع بينهما على انسجه البطن الدهنيه.**
Library register number	**:**	**5458-5457.**

Author	**:**	**Reham Abdelmoneim Mahmoud Gomaa**
Title	**:**	**Effect of different amplitudes of conventional tens on pain of upper fiber of trapezius.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Haytham Mohamed Elhafez**
	2.	**Hatem Abdel-Rahman**
	3.	**Yasser Ramzi Lasheen**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: TENS current had been used in a wide range for pain management with cases of myofascial pain synome. Purpose of this study was to investigate if fixed versus different TENS amplitudes are more effective for pain management with cases of myofascial pain at upper trapezius muscle. Methods: Thirty patients from out clinic at faculty of physical therapy, Cairo University have been participated in the study. They were divided into two groups fifteen patients at each group according to type of TENS amplitudes that had been received. First group "Group (A)" had the patients who received fixed TENS amplitude, second group "Group (B)" had the patients that received different TENS amplitudes and both groups receive the same type of exercise. Results: there is a great effect of TENS in management of myofascial pain synome for upper fibers of trapezius while there is no significant difference between fixed versus different pulse amplitude of TENS in management of pain at upper fibers of trapezius. Conclusion: TENS is effective in management of myofascial pain synome at upper fibers of trapezius with no difference between fixed and adjusted pulse amplitude.

Key words	**1.**	**TENS on upper fiber of trapezius.**
	2.	**myofascial pain synome.**
	3.	**amplitudes**
	4.	**trapezius.**
Classification number	**:**	**000.000.**
Pagination	**:**	**134 p.**
Arabic Title Page	**:**	**تأثير التيارالتقليدى مختلف الشدة من التنبيه الكهربى للأعصاب الحسيه عبر الجلد فى علاج ألم العضلة شبه المنحرفة بالرقبة.**
Library register number	**:**	**5465-5466.**

Author	**:**	**Samah Abd El Fattah Ali Ahmed**
Title	**:**	**Efficacy of Shock Wave Therapy in Treatment of Myofascial Trigger Points of Rotator Cuff Muscle Dysfunction**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ragia Mohamed Kamel**
	2.	**Ahmed FathiGenaidy**
	3.	**Yasser RamzyLasheen**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

The purpose: of this study was to examine the effect of shock wave therapy in treatment of myofascial trigger points of rotator cuff muscle dysfunction. Subjects: Thirty patients diagnosed as shoulder pain (Including cases of rotator cuff tendinitis).Methods: Patients were randomly distributed into two equal groups. The first(control) group consisted of 15 patients with a mean age of 34.67(± 5.95)years and body mass index 30.83(±6.36) received traditional therapy (ultrasound (1 MHZ, Continuous Pulse for 5 minute) and ischaemic pressure) for 12 sessions, 3 session /week. The second(study)group consisted of 15 patients with a mean age of 34.07 (± 4.51) years and body mass index 27.67(±2.95)received traditional therapy in addition shock wave therapy(6000 shocks, 2000 shock/ session, 3 session one week apart , energy flux density 0.38 mJ/mm^2, 1.6 bar and 10HZ) . Subjects were evaluated pre-treatment and post-treatment for shoulder pain intensity, pressure pain threshold of myofascial trigger points, shoulder flexion, extension, abduction, external and internal rotation motions. Results: Subjects of both groups showed significant improvement in all the measured variables. Between groups difference the shock wave group showed a significant improvement in decreasing pain intensity, increasing pressure pain threshold and improving shoulder range of motion than control group. Conclusion: Both shock wave therapy and the traditional treatment had a significant effect on decreasing shoulder pain intensity, increasing pressure pain threshold and increasing in shoulder flexion, extension ,abduction, external and internal rotation motions. However, the shockwave therapy was more effective than traditional therapy in treatment of myofascial trigger points of rotator cuff muscle dysfunction.

Key words	**1.**	**Myofascial trigger points**
	2.	**shock wave therapy**
	3.	**rotator cuff muscle dysfunction**
	4.	**Shock Wave of Myofascial of Rotator Cuff Muscle Dysfunction**
Classification number	**:**	**000.000.**
Pagination	**:**	**154 p.**
Arabic Title Page	**:**	**تأثير استخدام الموجات التصادمية فى علاج نقاط الآلم لاعتلال عضلة الحزام الدائري.**
Library register number	**:**	**5467-5468.**

Author	**:**	**Sarah Ahmed Monir**
Title	**:**	**Effect of Muscle Energy Technique on Lumbar Hyperlordosis in Asymptomatic Adults**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Wadida H. EL Sayed**
	2.	**Hanaa Kenawy**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Excessive lordosis is one of the most common postural abnormalities of the lumbar region, it involves muscle imbalance in which iliopsoas and erector spinae group of the trunk tighten and shorten, while abdominal and gluteal muscles weaken. The result of this imbalance is lumbar hyperlordosis. This common pattern is corrected by stretching shortened muscles followed by correction of posture. Purpose: This study was conducted to investigate the effect of muscle energy technique (MET) on degree lumbar hyperlordosis in asymptomatic adults. Subjects: Forty-six subjects aged from 18-30 years from both sexes randomly divided into two groups. Material: control group (A) received postural correction only, while study group (B) received postural correction exercises and post isometric relaxation for hip flexors and back extensors,. The treatment was applied for twelve weeks; three sessions per week with the total of 36 sessions. Outcome; Absolute rotatory angle (ARA), pelvic inclination angle and lumbar flexion and extension range of motion (ROM) were measured pre-treatment and post-treatment. Results: overall effect; Statistical analysis using 2x2 mixed design MANOVA indicated that there were significant effects of the treatment (postural correction exercises and post isometric relaxation for hip flexors and back extensor; the first independent variable) on the all tested dependent variables; absolute rotatory angle, pelvic tilting angle, ROM of lumbar flexion, and extension (F=8.152, P=0.0001) and this significant difference in favor of group (B) than group (A). Conclusion: MET is considered as an effective manual therapy technique in improving excessive lumbar lordosis.

Key words	**1.**	**muscle energy technique**
	2.	**absolute rotatory angle**
	3.	**lumbar hyperlordosis**
	4.	**Asymptomatic Adults**
Classification number	**:**	**000.000.**
Pagination	**:**	**78 p.**
Arabic Title Page	**:**	**تاثير اسلوب الطاقة العضلية على التقوس المفرط للفقرات القطنية فى البالغين الاصحاء.**
Library register number	**:**	**5321-5322.**

Author	**:**	**Sarah Wagih Ali Mohamed**
Title	**:**	**Laser acupuncture versus positive expiratory pressure therapy in chilen with bronchiectasis**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Faten Hassan Abd El Azim**
	2.	**AzaaFekry**
	3.	**Wegdan Ahmed FouadAmer**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**
Background: Bronchiectasis is one of the most important cause of respiratory morbidity in developing countries and is increasingly being recognized in indigenous people of affluent countries .Purpose: The aim of this study was to compare between the effects of laser acupuncture and positive expiratory pressure therapy in management of chilen with bronchiectasis. Material and Methods: Sixty out of eighty two chilen with bronchiectasis their age ranged between 7 to 10 years and were divided randomly into 3 equal groups, chilen in all groups received the selected chest physiotherapy program in addition to medical treatment at a frequency of 3 sessions a week for three months. One control group received the previous treatment, in addition study group I received to laser acupuncture therapy and study group II received positive expiratory pressure therapy. Assessment measurements were include systemic inflammatory markers, Bhalla scoring of computed tomography and evaluation of quality of life for all groups before treatment and after three months at the end of the treatment program. Results: There were significant improvement in all investigated parameters pre and post treatment in all groups P value=0.05, with highly significant improvement in favor of laser acupuncture group. Conclusion: Laser acupuncture therapy added to active cycle breathing combined with postural ainage is of value in management of chilen with bronchiectasis.		
Key words	**1.**	**chest physiotherapy**
	2.	**Magnetic field**
	3.	**positive expiratory pressure therapy**
	4.	**Laser acupuncture**
	5.	**chilen with bronchiectasis**
Classification number	**:**	**000.000.**
Pagination	**:**	**p.**
Arabic Title Page	**:**	**الليزر على نقاط الوخز بالإبرة الصينية مقابل ضغط الزفير الايجابىلدى الأطفال المصابين بتمدد القصيبات الهوائية.**
Library register number	**:**	**5487-5488.**

Author	**:**	**Shaza Samir Abdel Wahab**
Title	**:**	**Effect of prayer (salat) positions versus specific stretching exercises on electromyographic activity of erector spinae muscle**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Neveen Abdel Latif**
	2.	**Dalia Mohamed Mohamed Mosaad**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	

Background: salat is the prayer practiced by most of Muslims for five times a day and it involves several physical motions, namely standing, bowing and prostration. Benefits of salat from the spiritual point of view have been discussed at length by religious scholars. However, there is still little discussion on the salat's benefit from science perspective even though it can be seen that performing salat is like performing slow and moderate exercise. The purpose: this study was conducted to investigate the effect of salat movements versus specific stretching exercises on electromyographic activity of erector spinae muscle. Material and methods: Thirty subjects of both gender (17 males and 13 females) with age ranging from 19 to 25 years voluntarily participated in this study. They were assigned in one group, each subject was asked to assume five different positions,1) 45 degrees bowing), 2) bowing 3) prostration 4) long sitting bent-over back stretch and 5) double knee to chest stretch. The myoelectric activity of right and left erector spinae muscle was recorded and analyzed. Results: The univariate tests of repeated measure MANOVA revealed that there were significant differences in the mean values of electromyographic activity of Right and Left erecter spinea muscle among different positions ($F_{=}77.322$, $P_{=}0.0001$) and ($F_{=}77.170$, $P_{=}0.0001$) respectively. Conclusion: Salat movements (Bowing and Prostration) are more advantageous than specific stretching exercises on decreasing erector spinae muscle myoelectrical activities. This indicates that subjects performing everyday prayer has the benefit of stretching effect on their erector spinae muscle. It may improve musculoskeletal system in both normal and subjects with non-specific low back pain receives stretching exercises as part of their rehabilitation program.

Key words	**1.**	**prayer (salat) positions**
	2.	**Electromyography**
	3.	**Stretching exercises**
	4.	**electromyographic activity**
	5.	**erector spinae muscle**
Classification number	**:**	**000.000.**
Pagination	**:**	**74 p.**
Arabic Title Page	**:**	**تأثير أوضاع الصلاة مقابل تمارين استطاله محدده على النشاط الكهربائي للعضله الناصبه للعمود الفقري.**
Library register number	**:**	**5275-5276.**

Author	**:**	**Walid Mohamed Mohamed Hassan**
Title	**:**	**The effect of flexibility exercises versus rigid tape on dorsal kyphosis**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Prof. Dr. Fatma Sedeek Amin**
	2.	**Ass. Prof. Magda Gaid Sedhom**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	

Background: Kyphosis refers to the abnormally excessive convex kyphotic curvature of the spine as it occurs in the thoracic and sacral regions and disturb the physical condition and cause serious psychological disorders, Purpose: To investigate the effect of flexibility exercises and rigid tape on dorsal kyphotic angle and pain, and to provide a base line in rehabilitation program of dorsal kyphosis. Subjects: Thirty subjects from both sexes, aged from 25 to 45 years, diagnosed as mild kyphosis with kyphotic angle from 45 to 55 degrees divided into to two groups: Group (I): 15 patients (7 females, 8 males) performed flexibility exercises three times per week for six weeks and Group (II): 15 patients (6 females, 9 males) received rigid tape applied every four days followed by two days off for six weeks. Methods: Surgimap software of X_ Ray image used to assess dorsal kyphotic angle, and VAS used for pain assessment. Results: There was significant difference between flexibility exercises and rigid tape on angle of dorsal kyphosis in Group (I) more than Group (II) and there was significant difference on pain in Group (II) more than Group (I). Conclusion: Both Flexibility exercises and rigid tape reduced the angle of kyphosis and pain. Flexibility exercises reduced the angle of kyphosis more than rigid tape, and rigid tape reduced pain more than flexibility exercises. So that flexibility exercises and rigid tape were effective in rehabilitation intervention in treatment of dorsal kyphosis and postural defects.

Key words	**1.**	**Kyphosis**
	2.	**Rigid Tape**
	3.	**Flexibility Exercises**
	4.	**dorsal kyphosis**
Classification number	**:**	**00.0.**
Pagination	**:**	**113 p.**
Arabic Title Page	**:**	**تأثير تمرينات المرونة مقابل الشريط اللاصق (الغير قابل للشد) فى الحداب الظهري.**
Library register number	**:**	**5597-5598.**

Author	**:**	**Yasmin Abou Bakr Abd El Halem**
Title	**:**	**Efficacy of laser on acupuncture points in knee osteoarthritis**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ragia Mohamed Kamel**
	2.	**Hussein Abd El Rahman Hussein**
	3.	**Rania Reffat Ali**
Degree	**:**	**Master.**
Year	**:**	**2017.**
Abstract	**:**	**Master.**

Background: Knee osteoarthritis is reported to be a major health problem worldwide and a main source of disability and handicap, which leads to considerable socioeconomic costs. Purpose: to investigate the efficacy of Laser on Acupuncture Points in management of knee Osteoarthritis. Design: pre and posttest design. Participants: Thirty patients with moderate knee osteoarthritis from both sexes were selected, aged between 40- 60 years old. All patients were referred from the outpatient clinic of Mounira General Hospital in Cairo and were divided randomly into two equal groups. Methods: Group (A) 15 patients received low level laser on acupuncture points and conventional exercises. Group (B) 15 Patients received placebo laser and conventional exercises. Treatment was done 3 times a week for 4 weeks. Pain level, range of motion and functional performance were measured before and after treatment by Visual analogue scale, digital goniometer and WOMAC questionnaire respectively. Results: There were significant statistical differences within the two groups before and after treatment. Active laser group (A) demonstrated high significant improvement in pain, knee ROM and function ability compared with Placebo laser group (B). Conclusion: The study revealed that application of Low level Laser on acupuncture points was effective modality for managing chronic knee osteoarthritis.

Key words	**1.**	**knee osteoarthritis**
	2.	**low level laser**
	3.	**acupuncture points**
	4.	**laser on acupuncture**
	5.	**laser on knee osteoarthritis**
Classification number	**:**	**000.000.**
Pagination	**:**	**176 p.**
Arabic Title Page	**:**	**فعالية الليزر علي نقاط وخز الأبر الصينية في خشونة الركبة.**
Library register number	**:**	**5593-5594.**