Department of Basic Science

Master Degree

2018

Author	**:**	**Adel Mohamed Ibrahim**
Title	**:**	**Influence of Body Mass Index in Lumbar Proprioception in Adult Subjects**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Dalia Mohamed Mosaad**
	2.	**Olfat Ibrahiem Ali**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Methods: A cross-sectional observational design was conducted in the study. A total of 61 adult subjects (32 males and 29 females) with age ranged from 18 to 30 years, they were assigned into three groups according to BMI, group A was normal with their BMI ranged from (18.5–24.9), group B was overweight with their BMI ranged from (25.0–29.9) and group C was obese with their BMI ranged from (30-34.9). Biodex system 3 proisokinetic dynamometer was used to measure lumbar proprioception deficits through active repositioning test in lumber flexion. Results: One Way Analysis of Variance (ANOVA) test revealed that there was significant difference in lumbar flexion active repositioning error between normal and overweight subjects ($p<0.001$). Also, there was significant difference between normal and obese subjects ($p<0.001$). However there was no significant difference between overweight and obese subjects ($p >0.98$). Conclusion: There was lumbar proprioception deficit in obese and overweight subjects in comparison to normal subjects which may lead to lumbar spine disorders in obese and overweight subjects.

Key words	**1.**	**lumbar proprioception**
	2.	**body mass index (BMI)..**
	3.	**active repositioning error**
	4.	**Adult - Lumbar Proprioception**
Classification number	**:**	**000.000.**
Pagination	**:**	**77 p.**
Arabic Title Page	**:**	**تأثير مؤشر كتلة الجسم علي المستقبلات الحسية العميقة للفقرات القطنية عند الاشخاص البالغين.**
Library register number	**:**	**5807-5808.**

Author	**:**	**Ahmed Mohamed Kamal Galaleldin Kotb**
Title	**:**	**Relationship Between Symmetrical Versus Asymmetrical Bilateral Knee Osteoarthritis And Lumbar Curvature**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Amir Mohamed Saleh**
	2.	**Ashraf Nihad Moharram**
	3.	**Yasser Mohamed Aneis**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Knee osteoarthritis (OA) is a major health problem worldwide that affects lumbar spine. Objective: This study was conducted to determine the relationship between symmetrical versus asymmetrical bilateral knee OA and lumbar curvature in patients with knee OA. Subjects: Sixty male patients with knee OA were selected from outpatient clinic of the Faculty of Physical Therapy, Cairo University. Their ages ranged from 40 to 54 years old, with a mean value of 48 ± 3.59 years old. Methods: Patients were divided into three groups according to severity and symmetry of knee OA as follow; group (A): Twenty patients with symmetrical bilateral knee OA (both knees grade II), group (B): Twenty patients with symmetrical bilateral knee OA (both knees grade IV), and group (C): Twenty patients with asymmetrical bilateral knee OA (one knee grade II and the other knee grade IV). Grades were determined according to Kellgren and Lawrence radiological classification system of OA. A Formetric II system was used to assess the lumbar curvature (lumbar lordotic angle and lateral deviation in the three groups). Results: Regarding lumbar lordotic angle and lateral deviation, there was a statistical significant difference between the three groups (F = 39.588; P = 0.001) and (F = 18.068; P = 0.001) respectively. Regression analysis revealed that there was a statistical significant positive correlation between disease severity of knee OA and both lordotic angle, where (R^2 = 0.559; P = 0.001) and lateral deviation, where (R^2 = 0.377; P = 0.001). Increasing disease severity of OA from the least grade to the next one led to an increase in lordotic angle degree by 4.30 (95% CI = 3.296-5.304) and an increase in lateral deviation by 2.625 mm (95% CI = 1.758-3.492). Conclusion: Patients with symmetrical bilateral knee OA (grade IV) have more lumbar lordotic angle and lateral deviation than those with symmetrical bilateral knee OA (grade II), however regarding symmetry, patients with asymmetrical bilateral knee OA had lumbar lordotic angle and lateral deviation more than those with symmetrical bilateral knee OA.

Key words	**1.**	**Symmetrical**
	2.	**Lumbar Curvature**
	3.	**Formetric II System.**
	4.	**Asymmetrical**
	5.	**Bilateral Knee Osteoarthritis**
Classification number	**:**	**000.000.**
Pagination	**:**	**178 p.**
Arabic Title Page	**:**	العلاقة بين خشونة الركبتين المتماثلة مقابل الغير متماثلة والانحناء القطنى.
Library register number	**:**	**5965-5966.**

Author	**:**	**Ahmed Mohammed Mohammed Ibrahim Elbeltagy**
Title	**:**	**Validity and reliability of Arabic version of Copenhagen neck functional disability scale in patients with neck pain**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Wadida Hassan Abd El Sayed**
	2.	**SohairShehataRezk-Allah**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: The Copenhagen Neck Functional Disability Scale (CNFDS)is a tool for self-assessment of cervical illnesses, originally developed in English, ofwhich there is, no translation into Arabic language. The process involved in thisresearch proved to be relevant to be functional and applicable in Arabic Language. Thus, once this has been carried out, many health professionals will benefit fromthis version in their clinical practice.Purpose: The purpose of this study was to test face and content validity, feasibility, internal consistency and test retest reliability of Arabic-language version of CNFDS that measures the disability level in chronic neck pain. Methods: Two expert panels (each consists of ten experts) and 74 patients with chronic neck pain participated in this study, 135 sheets (including retest sheets) were filled out in this study. Forward translation, development of preliminary initially translated version, backward translation, development of the pre-final version and testing of pre-final version using experts then testing of the final version on patients was done. Clarity index, expert proportion of clearance, index of content validity, expert proportion of relevance, descriptive statistics, missed item index, time taken to answer the scale, Cronbach's coefficient alpha and Spearman's rank correlation coefficients were used for statistical analysis. Results: The study showed that scale index of clarity equals 86.84%, scale index of content validity equals 99.33%, scale-level content validity index universal agreement equals 99.33 %, the scale items were filled by 99.15% in all sheets, the scale needed less than three minutes to answer in about 75% all sheets, Cronbach's alpha equals 0.856 (0.796, 0.905) and all Spearman's correlations between test and retest results were statistically significant. Conclusion: Arabic-language version of the CNFDS has face and content validity, feasibility, internal consistency and test retest reliability enough to measure the disability level in chronic neck pain patients.

Key words	**1.**	**Validity**
	2.	**Reliability**
	3.	**Arabic CNFDS**
	4.	**Neck pain**
	5.	**disability scale in neck pain**
Classification number	**:**	**000.000.**
Pagination	**:**	**105 p.**
Arabic Title Page	**:**	**أختبارصلاحية ومصداقية النسخة العربية من مقياس كوبنهاجن للعجز الوظيفى للرقبة على مرضى الام الرقبة.**
Library register number	**:**	**5933-5934.**

Author	**:**	**Doaa Said Mohamed Ibrahim**
Title	**:**	**Shock Wave Therapy versus Progressive Pressure Release on Myofascial Trigger Points**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Neveen Abd El-Latif Abd El-Raoof**
	2.	**Doaa Ibrahim Amin**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Myofascial trigger points is a highly common condition worldwide having 85% prevalence, it is one of the major health concern. They have a crucial role in causing disability which adversely affects functional activities of the individual, despite being an important physical and economic threat to the society. Purpose: Was to compare the effect of shock wave therapy versus progressive pressure release on both pain pressure threshold of active myofascial trigger points of upper trapezius muscle and on function of the neck. Subjects: Thirty subjects from both genders with two active myofascial trigger points in upper fiber of trapezius muscle, their age ranged from (18 to 35) years old participated in the study, with group (A) mean age (23.69 ±3.94 years) and mean BMI values (23.66 ±0.97 kg/m²), and group (B) mean age (25.50 ±5.46 years), and mean BMI values (24.04 ±0.76 kg/m²). Methods: Subjects were assigned randomly using a random sequence generator to one of the two study groups: Group (A) 16 subjects were treated by shock wave therapy 2 sessions/ week, Group (B) 14 subjects were treated by progressive pressure release technique 3 sessions/ week, treatment period was 2 weeks. Pain pressure threshold was assessed with electronic digital algometer, and function level of the neck was assessed with neck disability index before and after treatment period. Results: There was significant increase of pain pressure threshold in trigger points after treatment in both groups, but there was non-significant difference in mean value of pain pressure threshold in trigger points between both groups before and after treatment. There was significant decrease of neck disability index scores after treatment in both groups, but there was non-significant difference in mean values of neck disability index scores between both groups before and after treatment. Conclusion: Both shock wave therapy and progressive pressure release were beneficial in treatment of active myofascial trigger points. But shock wave therapy has the superiority in increase pain pressure threshold than progressive pressure release technique.

Key words	**1.**	**Shock wave therapy.**
	2.	**myofascial trigger points.**
	3.	**Progressive pressure release technique.**
	4.	**Pressure algometer.**
	5.	**Neck disability index.**
Classification number	**:**	**000.000.**
Pagination	**:**	**136 p.**
Arabic Title Page	**:**	**العلاج بالموجات التصادمية مقابل الضغط الانفراجي التدريجي لنقاط الألم الليفي العضلي.**
Library register number	**:**	**5843-5844.**

Author	**:**	**Doaa Yasser Abd el Fattah.**
Title	**:**	**Effect Of Different Elbow Joint Angles On Ulnar Nerve Conduction Velocity Among Computer Users.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Mohamed Hussein EL_Gendy**
	2.	**Ibrahim Mohamed Ibrahim**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: long duration of computer work could result in pain and weakness associated with decreased nerve conduction velocities (NCV) of peripheral nerves. Purpose: 1) To identify the ulnar nerve conduction velocity at different elbow joint angles in computer users.2)To compare across elbow ulnar nerve motor conduction velocity MNCV between the limited and extensive computer users.3)to identify the ideal elbow positions for computer users during work. Design of the study: ex post facto design. Subjects: Fifty computer users from both sexes, their age ranged from 20 to 40 years. They were assigned into two equal study groups. Group A consisted of limited computer operators who worked a maximum of 2 hours per day while Group B consisted of extensive computer operators who worked on the computer for a minimum of 6 hours per day as a part of regular work for at least 1 year. Subjects were using the computer devices with a position of elbow flexion ranged from 90 to 120 degrees. Methods: NCV was used for measuring ulnar MNCV across elbow at different angles (0º, 45 º, 90º, 120º) in both groups.Results: Mixed design ANOVA was used and revealed that there was a significant difference in ulnar nerve motor conduction velocity at zero elbow flexion (elbow extension)compared with other positions(45, 90, and 120 degrees of elbow flexion) in both groups, as well there was a significant difference in nerve motor conduction velocity at 45 degrees of elbow flexion than 90 and 120 degrees in both groups. Between subject effects multiple pairwise comparisons revealed that there was significant difference in nerve motor conduction velocity of ulnar nerve at all angles in group A compared with group B. Conclusion: 1)There was a significant difference in the ulnar nerve MCV between extensive and limited computer users.2)Prolonged and sustained elbow flexion (from 90º and more) can irritate the ulnar nerve and eventually lead to cubital tunnel syndrome in extensive computer users.

Key words	**1.**	**Ulnar nerve motor conduction velocity**
	2.	**elbow joint angles.**
	3.	**computer users.**
Classification number	**:**	**000.000.**
Pagination	**:**	**71 p.**
Arabic Title Page	**:**	**تأثير زوايا مختلفة لمفصل الكوع على سرعة توصيل العصب الزندى فى مستخدمى الكمبيوتر.**
Library register number	**:**	**6019-6020.**

Author	**:**	**Eman Abdel Khalek EL Siofy Mohamed**
Title	**:**	**Monochromatic Infrared Energy Light Versus Low Level Laser Therapy on Diabetic Foot Neuropathy**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Mohamed Hussein El gendy**
	2.	**Saheir Omar El Khashab**
	3.	**Rabab Ali Mohamed**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Diabetic neuropathy (DN) is long-term complication of Diabetes mellitus (DM) can affect almost half of the diabetic population, and is associated with higher morbidity and mortality. There is no optimal intervention universally accepted by clinicians. Monochromatic infrared photo energy (MIRE) and Low Level Laser Therapy (LLLT) are a relatively new light modality used to improve nerve conduction velocity, reduce pain and increase circulation. Purpose: this study was conducted to investigate and compare the effect of MIRE versus LLLT on nerve conduction velocity, pain intensity and functional activity of daily living in patients with diabetic foot neuropathy (DFN). Study Design: Pre-test post-test design was conducted. Material and Methods: Thirty patients with peripheral neuropathy type 2 diabetes and suffering from neuropathic pain especially in lower limbs, aged from (50-65 yrs.) with main of 56.29 ± SD 2.98 yrs., were recruited from Faculty of Physical Therapy, Cairo University and the Coptic hospital in Cairo. All patients had DM type 2 for more than 10 to 15 years. They were divided into two equal groups: Group (A) (n=15 patients) received MIRE for 40 minutes to each leg. Group (B) (n=15 patients) received LLLT for 20 minutes to each leg. All patients who participated in the study had been subjected to various physical assessment procedures including: Nerve conduction velocity, Pain intensity and Quality of Life that all measured before and after treatment. Results: There were statistically significant improvements in nerve conduction velocity, pain intensity and functional activity (P <0 .05) in each group with percentage of improvement were (10.11%-11.04%), (68.5%-74.2%) and (61%-62%) respectively. However, no significant differences were recorded between the two groups (P > 0.05).Conclusion: The results of this study support the expectation that both monochromatic infrared energy (MIRE) and low level laser therapy (LLLT) were effective in improvement of neuronal activity to deep peroneal nerve, decrease pain intensity and improve functional activity of daily living (ADL) in patients with diabetic neuropathy.

Key words	**1.**	**Diabetic neuropathy.**
	2.	**Monochromatic infrared energy.**
	3.	**Nerve conduction velocity.**
	4.	**Low level laser Therapy.**
Classification number	**:**	**000.000.**
Pagination	**:**	**161 p.**
Arabic Title Page	**:**	**طاقة الضوء اللأحادي للأشعة تحت الحمراء مقابل الليزر منخفض الشدة فى حالات التهاب الأعصاب لمرضي القدم السكرى.**
Library register number	**:**	**5975-5976.**

Author	**:**	**Esraa Mohamed Hamdi Ali Mohamed.**
Title	**:**	**The influence of age and gender on dynamic balance profile.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Abeer Abdul-Rahman Yamany,**
	2.	**Omaima Mohamed Katabea,**
	3.	**Olfat Ibrahim Ali.**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background Aging and gender are known factors to adversely affect postural control, but age-related normative data of balance field tests are rarely reported in peer reviewed journals. These factors could be important when describing recovery of balance in the rehabilitation process. Purposes to determine the effect of age and gender on BMI, Berg balance scale, stability index, A-P stability index, and M-L stability index at level 8 and 3 of Biodex Stability System for young adult normal subjects and to report normative data for the selected tests. Subject and Methods Cross-sectional design was conducted at the Biodex Stability System Lab. 126 normal subjects were selected from students and colleagues of Faculty of Physical Therapy, Cairo University. They were assigned as Group A: age from (20-30) years old and consisted of 79 participants (47 females and 32 males) Group (B): age from (31-40) years old and consisted of 47 Participants (26 females and 21 males). Results there was no significant difference between age and BMI, Berg balance scale, stability index, A-P stability index, and M-L stability index at level 8 and 3. There was significant difference between gender and BMI, Berg balance scale, stability index, A-P stability index, and M-L stability index at level 8 and 3. The normative data of overall stability index was (1.57 - 2.59) for male and (0.98 – 2.58) for female in age group (20-30) years old. The normative data of OSI was (1.52 – 2.38) for male and (1.22 – 2.62) for female in age group (31-40) years old. Conclusion Age has no influence on dynamic balance profile of young adult subjects. Gender has influence on dynamic balance profile of young adult subjects which indicates that the effect of the Age on dynamic balance profile was not influenced by the gender.

Key words	**1.**	**Dynamic balance.**
	2.	**Gender effect.**
	3.	**age.**
	4.	**Berg Balance Scale**
	5.	**dynamic balance profile.**
Classification number	**:**	**000.000.**
Pagination	**:**	**108 p.**
Arabic Title Page	**:**	**تأثيرالعمر والجنس على حالة الإتزان الديناميكي.**
Library register number	**:**	**6039-6040.**

Author	**:**	**Hadeer Ali Morsi Awad**
Title	**:**	**Validity and Reliability of Arabic Version of Cervical Spine Bournemouth Questionnaire for Neck Pain**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ahmed Ebrahim Elerian**
	2.	**Amir Hamza Salama**
	3.	**Mohamed Ibrahim Abdelhay**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Neck pain is the sensation of discomfort in the neck area, with an annual prevalence ranging from 30 to 50% in the adult population Objective: To test the validity and reliability of arabic-language version of cervical spine Bournemouth questionnaire for neck pain patients. Method: seventy patients with neck pain were recruited and 115 sheets (test and retest sheets) were filled out and three expert panels (each consists of ten experts) participated in this study, forward translation, development of preliminary initially translated version, backward translation, development of the pre-final version and testing of pre-final version using experts then testing of the final version on patients was done. Results: The study showed that scale index of clarity equals 100%, scale-level clarity index universal agreement equals 100%, scale index of content validity equals 100%, scale-level content validity index universal agreement equals 100%, the scale items were filled by 96.52% % in all sheets, the scale needed less than or equal five minutes to answer in about 97.4% all sheets, Cronbach's alpha equals 0.891 and all Pearson correlations between test and retest results were statistically significant. Conclusion: Arabic-language version of Bournemouth questionnaire has face and content validity, feasibility and internal consistency and test retest reliability enough to measure cervical pain in neck patients.

Key words	**1.**	**Validity.**
	2.	**Arabic Bournemouth Questionnaire.**
	3.	**Neck Pain Questionnaire.**
	4.	**Cervical Spine Bournemouth Questionnaire.**
Classification number	**:**	**000.000.**
Pagination	**:**	**104 p.**
Arabic Title Page	**:**	**اختبار صلاحية ومصداقية النسخة العربية من مقياس بورنموث على مرضى الام الرقبة.**
Library register number	**:**	**6111-6112.**

Author	**:**	**Hajar Mohammed Edris**
Title	**:**	**Mulligan versus Kinesio Tape in Patients with Mechanical Neck Pain**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Wadida H. El-Sayed**
	2.	**Ghada Ismail Mohamed**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Purpose of this study: To compare the effect of NAGS technique versus KT on pain intensity level, neck functional disability level and cervical range of motion (ROM) in patients with MNP. Subjects and methods: Thirty subjects with MNP were assigned into three equal groups. Group A received conventional physical therapy (CPT), Group B received CPT in addition to NAGS, and Group C received CPT in addition to KT. Inclusion criteria: Thirty patients of both sexes participated in the study and randomly divided into three equal groups. Their Age ranged from 20-40 years old. All subjects referred from orthopedist with mechanical neck pain. Body mass index ranged from 19 to 29.5 Kg/m2. Pain aggravated by movements and last for at least 3 months. The subjects participated in this study after signing approved consent form. The patients randomly and equally divided in to three equal groups Pain intensity level was measured with numerical pain rating scale (NPRS), neck functional disability level measured with neck disability index (NDI), and cervical ROM measured with myrin goniometer (OB). Assessment was done before and after 4 weeks of treatment. Results: The pain intensity level was significantly decreased in all groups P=0.0001. There were significant decrease in NDI scores in all groups P=0.005. There were significant improve in cervical ROM in all groups. Conclusion: Group B has more percent of improvement than Group C and Group A
PEEP). .

Key words	**1.**	**kinesio tape.**
	2.	**Mulligan technique.**
	3.	**Mechanical neck pain**
Classification number	**:**	**000.000.**
Pagination	**:**	**116 p.**
Arabic Title Page	**:**	**تقنية موليجان مقابل شريط الكينيسيو اللاصق في حالات الألم الميكانيكي للرقبة.**
Library register number	**:**	**5817-5818.**

Author	**:**	**Hassan Ahmed Hassan Attia**
Title	**:**	**Effect of Misuse of Tablet on Muscular Performance of Wrist and Elbow in Normal Subjects**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Amir Mohamed Saleh**
	2.	**Salah Eldin Bassit Elsayed**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: The usage of tablet or media tablet computers have become a viable consumer alternative to traditional notebook (laptop) and desktop computing modes. The light weight of the tablet makes it with the users everywhere and the users spend many hours using it. Objective: This study was conducted to investigate the effect of tablet misuse on muscle performance of wrist and elbow. Methods: The current study was conducted on 60 normal subjects. They were assigned randomly into three equal groups (A) non tablet users, (B) using tablet for two hours daily and (C) using tablet more than four hours daily with their mean ages were (23±2.63), (22.8±3.01) and (23.4±2.47) years respectively. Peak torque of wrist extensors and elbow flexors were measured for the three groups using Biodex system 3 isokinetic dynamometer. Results: The results of the study revealed that there was a statistical significance difference in the peak torque of the right wrist extensors between group (A) and group (C) and between group (B) and group (C) at 120°/sec but at 180°/sec there was a statistical significance difference between group (A) and group (C) and there was no a statistical significance difference between group (B) and group (C). For the left wrist at both velocities there was a statistical significance difference between group (A) and group (C) and there was no a statistical significance difference between group (B) and group (C). For the peak torque of right and left elbow flexors there was a statistical significance difference between group (A) and group (C) and between group (B) and group (C) at both velocities. Conclusion: Our study revealed that the peak torque of wrist extensors and elbow flexors of subjects using tablet more than four hours daily were less than those using tablet two hours daily and those not using tablet and this show the effect of misuse of tablet on muscle performance in normal subjects.

Key words	**1.**	**Tablet.**
	2.	**Wrist joint, Elbow joint.**
	3.	**Isokinetic system**
	4.	**Muscle performance**
	5.	**Muscular Performance of Wrist**
	6.	**Elbow in Normal Subjects**
	7.	**Normal Subjects – Elbow.**
Classification number	**:**	**000.000.**
Pagination	**:**	**81 p.**
Arabic Title Page	**:**	**تأثير الاستخدام الخاطئ للحاسب اللوحي علي الاداء العضلي للرسغ والمرفق في الأشخاص الطبيعيين.**
Library register number	**:**	**5861-5862.**

Author	**:**	**Heba Mohamed Farag Elfeky**
Title	**:**	**The Success Rate Of Shock Wave In The Treatment Of Musculoskeletal Conditions "A Systematic Review"**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Haytham Mohammed Elhafez**
	2.	**Doaa Ibrahim Ami**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Extracorporeal shock wave therapy is an effective and safe non-invasive treatment option for tendon and other pathologies of the musculoskeletal system. Purpose: systematically review to provide the physical therapist with an objective guideline about the efficacy of shockwave which can be applied on patients with musculoskeletal conditions. Study design: Systematic review and meta-analysis. Methods: PubMed, PEDro, Cochrane and science direct were searched from January 2007 till September 2017 for studies of any design investigating the effectiveness of shock wave therapy in musculoskeletal conditions. Animal and non–English language studies were excluded. A quality assessment was performed by 2 independent reviewers, and effect size calculations were computed when sufficient data were provided. Results: the meta-analysis of the selected studies revealed significant effects of the shockwave on the ligament, tendon, muscle and joint disorders. Conclusion: The results of this review showed that shock wave therapy is an effective treatment modality for heel pain and plantar fasciitis, pain, osteoarthritis, lateral epicodylosis and shoulder tendinitis, supraspinatus and patellar tendinitis, calcified tendon and myofascial trigger points but the superiority for myofascial trigger points 51.383% followed by calcified tendon 36.391% osteoarthritis 36.243% , tendinopathy 20.491% , different pain 18.871% and finally heel pain and planter fasciitis 16.654%.

Key words	**1.**	**Shockwave therapy.**
	2.	**Musculoskeletal system.**
	3.	**Rate Of Shock Wave**
	4.	**Systematic Review**
	5.	**Shock Wave In Musculoskeletal Conditions**
Classification number	**:**	**000.000.**
Pagination	**:**	**125 p.**
Arabic Title Page	**:**	**معدل نجاح الموجات التصادمية في علاج حالات الجهاز العضلي الهيكلي "مراجعة منهجية".**
Library register number	**:**	**5963-5964.**

Author	**:**	**Ibrahim Mohamed Ibrahim Hassan**
Title	**:**	**Trunk Kinematics And Lumbar Repositioning Error In Patellofemoral Pain Syndrome: A Cross-Sectional Study**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Maher Elkeblawy**
	2.	**Mohammed Abd Elsalam**
	3.	**Eman Abd El-moez**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Patello-Femoral Pain Syndrome (PFPS) is a challenging clinical problem that affects up to 30% of the population. Altered trunk kinematics in the frontal plane was found in males and females with PFPS compared to control participants. Yet, sagittal trunk kinematics during mini squatting and lumbar proprioception has not been extensively studied. Purposes: The purpose of this study was to investigate the differences in sagittal trunk kinematics during mini-squatting and lumbar active repositioning error between individuals with and without PFPS and to determine gender differences in the outcome variables. Methods: A sample of 56 students (age ranged 18-25 years old) were enrolled in current study. They were divided into two groups Group (I) (Study Group) included thirty patients with PFPS; Group (II) (Control Group) included Twenty six participant,. Sagittal trunk excursion during mini-squatting was examined by a 2D photogrammetric analysis using Surgimap software and Isokinetic dynamometer was used to assess lumbar active flexion repositioning error Result: The results of the current study showed that Sagittal trunk excursion was significantly ($p<0.05$) lower in females with PFPS than males during mini-squatting. Regarding lumbar active repositioning error, neither main nor interaction significant ($p>0.05$) effects were found. Conclusion: From the obtained results of this study, it is concluded that females with PFPS exhibited less erect trunk posture than males during mini-squatting.

Key words	**1.**	**Lumbar Proprioception.**
	2.	**Trunk Kinematics**
	3.	**Patellofemoral Pain Syndrome**
	4.	**A Cross-Sectional Study**
Classification number	**:**	**000.000.**
Pagination	**:**	**91 p.**
Arabic Title Page	**:**	**الحركات الوظيفية للظهر والاخطاء الناشئة من اعادة وضع الفقرات القطنية في مرضي متلازمة الم الساق والرضفة – دراسة مقطع عرضي.**
Library register number	**:**	**5835-5836.**

Author	**:**	**Islam Tarek Salem AbuEmira**
Title	**:**	**Influence of Body Mass Index on Lumbar Flexibility and Risk of Falls In Adult Subjects**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Mohammed Hussein Elgendy**
	2.	**Yasser RamzyLasheen**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Increased body mass index (BMI) is recognized as a major health problem in the world; it is accompanied with reduced postural control and stability and could be one cause of the risk of falls and also increase various musculoskeletal disorders including impairment of the spine. Objective: This study was conducted to investigate the effect of BMI and gender on lumber flexibility and on risk of falls in adult subjects. Subjects: 87 adult subjects of both genders. Their ages ranged from 20 to 40 years. Subjects were classified into 3 groups according to BMI. Group A: consisted of 28 subjects of normal weight (BMI: 20 - 24.9 kg/m^2). Group B: consisted of 30 subjects who had overweight (BMI: 25 - 29.9 kg/m^2). Group C: consisted of 29 subjects who had mild obesity (BMI: 30-34.9 kg/m^2). Methods:Lumbar flexibility was measured using back range of motion (BROM) device and risk of falls was evaluated with functional reach test. Results: The studyrevealed that there was no significant difference in lumbar flexibility between the three groups (p> 0.05). Also there was no significant difference between males and females in each group as regard to lumbar flexibility. But there was a significant increase in risk of falls in group (C) when compared with both groups A and B (p= 0.007, 0.015, respectively). Also risk of falls was significantly increased in females than males in each of the three studied groups (p= 0.030;0.008 and 0.022, respectively). Conclusion:The current study revealed that there was no effect of BMI and gender on lumber flexibility. While risk of falls increased in obese subjects than normal and overweight subjects. Also, females had higher risk of falls than males in each of normal, overweight and obese subjects.

Key words	**1.**	**Body mass index (BMI),**
	2.	**lumbar flexibility,**
	3.	**risk of fall.**
	4.	**obesity.**
	5.	**Adult - Risk of Falls**
	6.	**back range of motion (BROM).**
Classification number	**:**	**000.000.**
Pagination	**:**	**101 p.**
Arabic Title Page	**:**	**مدى تأثير مؤشر كتلة الجسم علي مرونة الفقرات القطنية وخطورة السقوط عندالأشخاص البالغين.**
Library register number	**:**	**5897-5898.**

Author	**:**	**Jermeen Emed Abd El-Massih.**
Title	**:**	**Effect of Ultrasound Cavitation on Weight Reduction for Prediabetic Obese Patients.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Maher Ahmed Elkeblawy**
	2.	**Amira Deraz, Assistant**
	3.	**Manar Samir,**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Obesity has received considerable attention as a major health hazard and can be an underlying cause of many disorders such as type 2 diabetes. Purpose: The purpose of present study was to investigate the effects of ultrasound cavitation on weight reduction for prediabetic obese patients. Design: Randomized Control trial design. Subjects: Fifty patients prediabetic obese women were chosen from the out clinic of Faculty of Physical Therapy of Deraya University, Minia, Egypt. They were randomly assigned into two group each group included twenty-five patients. Methodology: -Group I (Control group): twenty-five patients were received aerobic exercises and low caloric diet, three times per week for twelve weeks. Group II (Experimental group): twenty-five patients were received aerobic exercise, ultrasound cavitation and low caloric diet treatment, twice weekly ultrasound cavitation sessions for six weeks, and aerobics exercise three times per weeks for twelve weeks. (body mass index, waist hip ratio, skin fold, fasting blood sugar level, post prandial blood sugar level and glycated hemoglobin level) were measured before treatment (pre-test data), and after the completion of the treatment program, as a post-test measurement. Results: There was a statistical significant effect of ultrasound cavitation in addition to low calorie balanced diet and treadmill exercise on reduction in weight, BMI, WHR, Skin fold, Fasting blood glucose level, Post prandial blood glucose level and HbA1C level in prediabetic obese female patients ,There was a statistical significant difference between the two groups. Conclusions: Adding Ultrasound cavitation to low calorie balanced diet and treadmill exercise has significant effect in treatment to prediabetic obese female patients.

Key words	**1.**	**Ultrasound cavitation,**
	2.	**BMI, $HbA_{1C,}$**
	3.	**Chidren in Obese. .**
	4.	**Prediabetic Obese.**
	5.	**Weight Reduction for Prediabetic Obese.**
Classification number	**:**	**000.000.**
Pagination	**:**	**85 p.**
Arabic Title Page	**:**	**تأثير جهاز التجويف بالموجات فوق الصوتية على انقاص الوزن لمرضى السمنه المعرضين لمرض السكرى.**
Library register number	**:**	**6131-6132.**

Author	**:**	**Kareem Ragab Ahmed Nada**
Title	**:**	**Low level Laser versus Acupuncture-Like Transcutaneous Electrical Nerve Stimulation in Chronic Shoulder Impingement Syndrome**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Maher Ahmed AL- Keblawy**
	2.	**Yasser Ramzy Lasheen**
	3.	**Mohamed Abd ELSalam Gomaa**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background:Shoulder disorders are common musculoskeletal disorders, one every five persons experiences shoulder problems at some time in his / her life.It was a phenomena of mechanical compression of the rotator cuff against the anterior under surface of the acromion and caracoacromial ligament particularly during arm elevation .Objective : This study was conducted to investigate the effect of low level laser therapy(LLLT) versus acupuncture like Transcutenuos electrical nerve stimulation(AL-TENS) in chronic shoulder impingement syndrome (CSIS) on intensity of pain , joint Range Of Motion (ROM) and Functional level of shoulder joint . subjects : 30 adult male patient , their age was ranged from 25-40 years ,were inducted in the current study . Subjects were classified into two groups , Group A : 15 patients received LLLT and conventional treatment (ultrasound, selective strengthening and stretching exercises for shoulder joint).Group B : 15 patients received AL-TENS and conventional treatment . Methods : pain intensity was measured by visual analogue scale , ROM of shoulder joint was measured by electrogonimeter , while functional level of shoulder was measured by shoulder pain and disability index . Results : the present study revealed that there was a significant effect of LLLT (group A) on pain intensity level , shoulder joint ROM and shoulder functional level in CSIS , also there was a significant effect of AL-TENS(Group B) on pain intensity level , shoulder joint ROM and shoulder functional level in CSIS , but LLLT group had a significant difference and improvement in pain intensity level , shoulder joint ROM and shoulder functional level than AL-TENS group in CSIS .Conclusion: Both LLLT and AL-TENS had a significant effect on pain intensity level,shoulder joint ROM and shoulder functional level in CSIS.But the LLLT group more significant effect in pain intensity level,shoulder joint ROM and shoulder functional level than AL-TENS in CSIS.

Key words	**1.**	**Low Level Laser Therapy (LLLT),**
	2.	**Chronic Shoulder Impingement Syndrome**
	3.	**Acupuncture Like Transcutaneous.**
	4.	**Electrical Nerve Stimulation(AL-TENS) .**
Classification number	**:**	**000.000.**
Pagination	**:**	**111 p.**
Arabic Title Page	**:**	**مقابلة الليزر منخفض الشدة بتنبيه العصب الكهربائى عبر الجلد المماثل للوخز بالابر الصينيه فى حالات متلازمة انحشار الكتف.**
Library register number	**:**	**6103-6104.**

Author	**:**	**Karima Salah Mohamed Hamd**
Title	**:**	**Effectof forward head and rounded shoulder posture on hand grip strength in asymptomatic young adults**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Dalia Mohamed MohamedMosaad**
	2.	**Ghada Ismail Mohamed**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Forward head and rounded shoulder postures are considered widely spread postural disorders related to musculoskeletal abnormalities. They negatively affect neural function and proximal stability around the scapula which may affect distal functional mobility of the arm. Grip strength is used to be a marker of upper limb function. Purpose: This study was conducted to investigate the effect of forward head and rounded shoulder posture on hand grip strength in asymptomatic young adults. Materials and methods: one hundred and two right-handed participants of both genders with their age ranged from 19 to 24 (under graduate students) assigned into 3 groups according to deformity type, Group A: 30 participants with normal posture (control group), Group B: 34 participants with rounded shoulder posture and Group C: 38 participants with forward head rounded shoulder posture. Participants had forward head if craniovertebral angle ≤ 50 and had rounded shoulders if the distance between "on the table" and the posterior aspect of acromion process≥2.5 cm. Craniovertebral angle was measured by photogrammetric method, rounded shoulder was measured by the supine method while hand grip strength of both hands was measured by Jamer hand dynamometer. Results:there was no significant difference in hand grip strength among the three groups (F=0.209, P=0.812). However, there was significant difference in hand grip strength between both hands where the dominant hand was stronger than the non-dominant hand in the three groups (F=64.488, P=0.0001). Conclusion: There was no significant effect of forward head and rounded shoulder posture on hand grip strength in asymptomatic young adults.

Key words	**1.**	**Forward head posture**
	2.	**Hand grip strength**
	3.	**Rounded shoulder posture**
	4.	**asymptomatic young adults.**
	5.	**adults - asymptomatic young**
Classification number	**:**	**000.000.**
Pagination	**:**	**83 p.**
Arabic Title Page	**:**	**تأثير وضعية الرأس الأمامية والكتف المدورة علي قوة قبضة اليد في صغار البالغين الأصحاء.**
Library register number	**:**	**6161-6162.**

Author	**:**	**Mahmoud Mohammed Abdel Rahman Shahien**
Title	**:**	**Validity and reliability of the Arabic version of Oxford Shoulder Score in assessment of shoulder joint pain.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Awatef M. Labeeb**
	2.	**Soheir S. Rezk-Allah**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Shoulder pain is common chief complains presenting in current orthopedic practices. The Oxford Shoulder Score (OSS) is the only one that covers, not only shoulder pain frequency and severity, but also quality of life and activity of daily living affected by shoulder illness. Purpose: The purpose of this study is to test the face validity, the content validity, the feasibility; the internal consistency reliability and the test retest reliability of Arabic-language version of OSS in assessment of shoulder joint pain. Subjects and methods: Three expert panels (each consists of ten experts) and 43 patients with Shoulder join pain caused by degenerative or inflammatory disorders participated in this study, 86 sheets (including retest sheets) were filled out in this study considering that patient filled out 2 sheets. Forward translation, development of preliminary initially translated version, backward translation, development of the pre-final version and testing of pre-final version using experts then testing of the final version on patients was done. Clarity index, expert proportion of clearance, index of content validity, expert proportion of relevance, descriptive statistics, missed item index, time taken to answer the scale, Cronbach's coefficient alpha and Spearman's rank correlation coefficients were used for statistical analysis. Results : The study showed that scale index of clarity equals 88.04%, scale-level clarity index universal agreement (UA) equals 95.83% and the mean of proportion of clearance (clear responses) equals 86.07%. In addition, scale index of content validity (S-CVI) equals 95.83%, S-CVI/UA equals 95.83% and the mean of the proportion of relevance (relevant responses) equals 95.83%. The scale items were filled by 100% in all sheets and it needed less than 5 minutes to be answered in about 98.5% of all sheets, Cronbach's alpha equals 0.932 (0.897, 0.958) and all Spearman's rank correlation coefficients between test and retest results were statistically significant. Conclusion: Arabic-language version of the OSS has face and content validity, feasibility and internal consistency and test retest reliability enough in assessment of shoulder joint pain.

Key words	**1.**	**Validity.**
	2.	**Arabic OSS.**
	3.	**Shoulder joint pain.**
	4.	**Reliability.**
	5.	**Oxford Shoulder Score.**
Classification number	**:**	**000.000.**
Pagination	**:**	**82 p.**
Arabic Title Page	**:**	**أختبار صلاحية و مصداقية النسخة العربية من مقياس أوكسفورد للكتف في تقييم ألم مفصل الكتف.**
Library register number	**:**	**5985-5986.**

Author	**:**	**Mahmoud Mohamed Mahmoud**
Title	**:**	**Cold Laser Versus Ultra-Sound Cavitation On Fat Thickness In Abdominal Obesity Measuerd By Ultra-Sonography**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Maher Ahmed EL Keblawy**
	2.	**Hossam Abo- zeid**
	3.	**Enas Abutaleb**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Obesity is a condition of abnormal excessive fat accumulation in adipose tissue. Overweight/obesity is associated with significant morbidity, mortality and costs. Greater demand in body aesthetic medicine for noninvasive procedures has motivated researchers to develop new techniques to replace traditional treatments for body contouring. through liposuction and other modalities like cold laser and ultrasound cavitation. Purpose: This study was conducted to compare the effectiveness of cold laser versus ultra-sound Cavitation on fat thickness layer of abdomen measured by ultra-sonography. Subjects: Forty patients aged from 25-35 years and BMI (25-29.9) were assigned randomly into 2 equal groups: Group (A) received ultra-sound cavitation. Group (B) received cold laser therapy (632.8nm-16J/cm2). The modalities were applied for 30 min, twice weekly for 12 weeks in both groups. Both groups received the same diet program throughout the treatment period. Assessment was carried out for body weight using weight scale, waist/hip ratio using stretch resistant tape and fat thickness layer of abdominal region using ultra-sonography before and after treatment. Results: showed that there was a significant reduction of body weight, waist/hip ratio and abdominal fat thickness below the umbilicus after treatment in both groups and a significant reduction of abdominal fat thickness above umbilicus in group A only. Comparison between post treatment values of waist/hip ratio and abdominal fat thickness above and below the umbilicus showed significant difference between both groups with favorable results for group A.Conclusion: cold laser therapy and ultra sound cavitation is an effective physical therapy modality in treatment of abdominal obesity by reducing body weight, waist/hip ratio and abdominal fat thickness.

Key words	**1.**	**cold laser therapy.**
	2.	**Ultra-sonography of fat thickness.**
	3.	**Ultra-sound cavitation.**
	4.	**Fat thickness layer.**
	5.	**Abdominal Obesity.**
Classification number	**:**	**000.000.**
Pagination	**:**	**132 p.**
Arabic Title Page	**:**	**مقابل الليزر البادر بالموجات فوق صوتية التجويفية على سمك الطبقة الدهنية فى سمنة البطن مقاسة الفحص بالموجات فوق الصوتية.**
Library register number	**:**	**5771-5772.**

Author	**:**	**Mariam Samir Hakeem Hermina,**
Title	**:**	**Adaptation to Arabic language validity and reliability test of constant score in frozen shoulder patients**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Wadida Hassan Abd El Kader**
	2.	**Reham Hussein Diab**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Adhesive capsulitis is a common, painful condition of the shoulder. Common functional impairments include difficulty putting on a coat, reaching into the hip pocket for a wallet or combing one's hair. So it is necessary to measure the physical function of adhesive capsulitis. Purpose: The purpose of this study was to translate the English version of constant score to Arabic version, adapt and test its face validity, content validity, internal consistency reliability, feasibility and test-retest reliability as it is a scoring system directed toward a numeric description of the quality of function of the shoulder in adhesive capsulitis patients. Subjects and methods: Two expert panels; each consist of ten experts and 66 patients with chronic (3-6 months) adhesive capsulitis participated in this study.111 sheets were filled out in this study (including the retest sheets). Forward translation, development of preliminary initially translated version, backward translation, development of the pre-final version and testing of the pre-final version by experts then testing of the final version on patients was done. Clarity index, expert proportion of clearance, index of content validity, expert proportion of relevance, descriptive statistics, missed item index, time taken to answer the score, Cronbach's coefficient alpha, Spearman's and Pearson correlation coefficient were applied for statistical analysis. Results: The study showed that score index of clarity equals 93%, scale-level clarity index universal agreement (UA) equals 50%, the mean of the proportion of clearance (clear responses) equals 93%. Also, Scale Index of Content Validity (S-CVI) equals 98%, Scale Index of Content Validity/Universal Agreement (S-CVI/UA) equals 83.33% and the mean of the proportion of relevance (relevant responses) equals 98.33%. The score items were filled out by 94.9% in all sheets and it needed an average of 4.5 minutes to be answered in about 85% of all sheets. Cronbach's alpha equals 0.656 (0.606 - 0.706) and all Spearman's and Pearson rank correlation coefficients between test and retest were statically significant except one item was marginally significant. Conclusion: The translated Arabic- language version of Constant Score has a face and content validity, feasibility and internal consistency and test-retest reliability enough for research and clinical application as it is a scoring system directed toward a numeric description of the quality of function of the shoulder in adhesive capsulitis patients.

Key words	**1.**	**Validity.**
	2.	**Adhesive Capsulitis**
	3.	**Reliability .**
	4.	**Feasibilit.**
	5.	**frozen shoulder - Constant Score**
	6.	**Arabic Constant Score**
Classification number	**:**	**000.000.**
Pagination	**:**	**122 p.**
Arabic Title Page	**:**	**المواءمة للغة العربية لاختبار صلاحية و مصداقية المقياس الثابت على مرضى الكتف المتجمد.**
Library register number	**:**	**5841-5842.**

Author	:	**Marian Amir Fouad Ibrahim**
Title	:	**combination therapy using low versus medium frequencies in treating trigger points of upper fibers of trapezius**
Dept.	:	**Department of Basic Science.**
Supervisors	**1.**	**Ragia Mohamed Kamel**
	2.	**Ashraf Nihad Moharram**
	3.	**Mary Kamal Nassif**
Degree	:	**Master.**
Year	:	**2018.**
Abstract	:	

Background: Myofascial Trigger Point has been described as a hyperirritable spot located in a taut band of muscle; which is painful to palpation or compression and refers pain, tenderness, or an autonomic response to a remote area. Purpose: the aim of this study was to compare between low frequency, high intensity burst-Transcutaneous Electrical nerve Stimulation combination therapy and medium frequency, low intensity amplitude modulated frequency Interferential Therapy on upper trapezius active myofascial trigger points. Subjects and Methods: Single-blinded randomized controlled trial design was used. Seventy participants with acute mechanical neck pain and more than two active myofascial trigger points in upper trapezius were allocated randomly into three groups: Group (A): The Burst transcutaneous electrical nerve stimulation combination therapy group consisted of (23) patients with mean age, weight, height and BMI values of (34.39±5.92) years, (77.47 ± 19.93) Kg, (163.73±11.69) cm and (28.5±4.85) kg/m^2 respectively. Group (B): The amplitude modulated frequency combination therapy group consisted of (25) patients with mean age, weight, height and BMI values of (34.88±5.67) years, (78.64±17.99) Kg,(167.92±10.22) cm and (27.5±3.71) kg/m^2 respectively. Lastly, Group (C): the sham combination therapy control group consisted of (22) patients with mean age, weight, height and BMI values of (35.18±5.56) years (88.59±19.09) Kg,(167.5±13.83) cm and (31.3±3.93) kg/m^2 respectively. All groups received progressive pressure release and passive stretch for the upper trapezius muscle, 3 sessions per week for 4 consecutive weeks. Primary measurement outcome included pressure pain threshold using an electronic digital algometer. Secondary outcome included active cervical lateral flexion using a smart phone Clinometer application. Data was collected prior to the first treatment and at the end of the 4-week trial. Results: Demonstrated that combination therapy significantly increased both pressure pain threshold values as well as cervical lateral flexion range of motion with a P<0.0001. However, among groups comparison low frequency burst transcutaneous electrical nerve stimulation combination therapy the mean values (4.73 ±0.59) yield a greater increase in pressure pain threshold values and cervical lateral flexion range of motion with a (547%) increase than medium frequency amplitude modulated frequency combination therapy the mean values (2.74 ±0.32) with a 290% increase and more than control group with a mean values (1.87 ±0.13) with a 154% increase Conclusion: Within the scope of our study, we conclude that both combination therapy modalities were effective in increasing pressure pain threshold and cervical lateral flexion, however, Group (A): low frequency, high intensity burst transcutaneous electrical nerve stimulation combination therapy produced significant improvements than Group (B): medium frequency, low-intensity amplitude modulated frequency combination therapy in the management of upper trapezius active myofascial trigger points.

Key words	**1.**	**Combined therapy.**
	2.	**Transcutaneous Electrical Nerve Stimulation**
	3.	**Myofascial Trigger Points.**
	4.	**Pressure Pain Threshold.**
	5.	**Interferential therapy**
	6.	**upper fibers of trapezius**
Classification number	:	**000.000.**
Pagination	:	**81 p.**
Arabic Title Page	:	**العلاج المشترك باستخدام الترددات المنخفضة مقابل المتوسطة في علاج نقاط النسيج العضلي الضام المستهدفة في الجزء العلوى من العضلة شبه المنحرفة.**
Library register number	:	**5729-5730.**

Author	**:**	**Mariana Mohsen Fahmy Hana**
Title	**:**	**Systematic Review Of Manual Therapy For Knee Osteoarthritis.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Haytham Mohamed Elhafez**
	2.	**Soheir Shahata Rezk-Allah**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Manual therapy has been considered as a theraputic approach for patients with knee osteoarthritis (OA) . The different modalities of manual therapy have variable effects on this knee joint OA. The Objectives of this study was to determine effect of manual therapy techniques on management of Osteoarthritis of the knee joint. Methods: using MEDLINE Pubmed , MEDLINE Cochrane, PEDRO and Google Scholar detailed searching the electronic data base from the year 2008 up to 2018 was conducted and only randomized controlled trial (RCT) studying the effect of different techniques of manual therapy on management of knee OA were selected. After exclusion of the invalid studies, only nine trials were included in the review. Assessment of methodological quality of the studies was performed using PEDro scale and the data was extracted from them. Two trials were of high quality scoring According to PEDro scale two trials was of high quality scoring 9/10 and 8/10 while the remaining studies ranged from scoring7/10and 6/10 and 5/10 and 2/10. Results Meta-analysis was performed to pool together the results of the studies. Certain techniques of manual therapy were found statistically significant on reducing pain, improving the range of motion (ROM) and other symptoms in patients with knee osteoarthritis . Conclusion Manual therapy with its different techniques has a good efficacy on reducing pain, increase range of motion and decrease functional disability on management of knee OA.

Key words	**1.**	**knee osteoarthritis.**
	2.	**randomized control trials.**
	3.	**systematic review**
	4.	**manual therapy**
	5.	**Manual Therapy For Knee Osteoarthritis.**
Classification number	**:**	**000.000.**
Pagination	**:**	**83 p.**
Arabic Title Page	**:**	**مراجعة منهجية لتأثيرالعلاج اليدوى فى علاج خشونة الركبة.**
Library register number	**:**	**6181-6182.**

Author	**:**	**Marwa Adel Mohammad Abdel-Ghaffar**
Title	**:**	**Alterations of Static and Dynamic Balance in Lumbar Radiculopathy**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Soheir Shehata Rezk Allah**
	2.	**Mary Kamal Nassif**
	3.	**Amr Hassan Elsayed Mohammed**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Lumbar radiculopathy (sciatica) is a common condition that is a major cause of work absenteeism and a major financial burden to both industry and health service provision. It is characterized by low back pain (LBP) radiating into one or both lower limbs; this can be due to mechanical compression of the nerve by a disc herniation. LBP was reported to have balance impairments in static and dynamic postures. This drives the interest in exploration of balance deficits in discogenic problems. Purpose: The purpose of this study was to investigate the alterations of static and dynamic balance in patients with lumbar radiculopathy Subjects: Twenty four participants were involved in the study. They were divided into 2 equal groups, Group A; 12 patients with lumbar radiculopathy in one lower limb with mean age (which ranged from 35 to 55 years), body mass, height, and BMI (which ranged from 18.5 up to < 30 Kg/m2) values of 47.25±5.61 years, 73.58±5.29 kg, 166.75±4.47 cm, and 26.44±2.27 Kg/m2 respectively, their diagnosis was confirmed clinically by SLR test and radiographically by lumbosacral MRI and group B; 12 healthy participants with mean age (which ranged from 35 to 55 years), body mass, height, and BMI (which ranged from 18.5 up to < 30 Kg/m2) values of 41.41±6.8 years, 74.5±12.3 kg, 168.41±8.06 cm, and 26.13±3.65 Kg/m2 respectively with negative SLR. Procedure: Static balance was assessed by using functional reach test (FRT) and dynamic balance by using Biodex Balance System. Maximum anterior distance (MAD) for static balance, overall stability index "OASI, anterior/posterior stability index "APSI" and medial/lateral stability index "MLSI" for dynamic balance and overall directional control (DC) and total test time (T) for dynamic limits of stability. The Results: Results revealed that, there was a significant difference between groups in the mean values of OASI, APSI (p>0.0001), T (p=0.0001), MLSI (P>0.002), MAD (P>0.0001) and DC (p=0.0001). Conclusion: Patients with lumbar radiculopathy due to disc herniation may have impaired postural stability, dynamic balance and reduced functional abilities when compared to normal subjects.

Key words	**1.**	**Static balance.**
	2.	**Biodex Balance System.**
	3.	**Dynamic balance.**
	4.	**Lumbar radiculopathy.**
	5.	**FRT**
Classification number	**:**	**000.000.**
Pagination	**:**	**95 p.**
Arabic Title Page	**:**	**التغيرات فى الإتزان الثابت والحركى لدى مرضى إعتلال الجذور القطنية.**
Library register number	**:**	**5949-5950.**

Author	**:**	**Mohamed Abd El Hameed Mohamed Ali**
Title	**:**	**Effect Of Lumbar Paraspinal Muscle Fatigue On Ankle Proprioception**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Maher Ahmed El Keblawy**
	2.	**Rania Nagy Karkousha,**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Proprioceptive information plays an important role in joint stabilization, body coordination and proper function in activities of daily living. Muscle fatigue may alter active repositioning accuracy and might have an effect on the joint function and predispose to injury. Objective: This study was conducted to investigate the effect of lumbar paraspinal muscle fatigue on ankle joint repositioning accuracy for healthy subjects in both sexes. Methods: Fifty healthy subjects of both sexes aging from 18_22 years and body mass index from 20_25 kg/ m^2 were participated in this study. They were recruited from the students of faculty of Physical Therapy Cairo University. The subjects were assigned into two equal groups; group A included 25 male subjects and group B included 25 female subjects. Ankle joint active repositioning accuracy was measured before and after lumbar paraspinal muscle fatigue for both groups using 3 pro-isokinetic Biodex system. Results: The study revealed that there was no significant difference between pre and post lumbar muscle fatigue in ankle joint active repositioning accuracy for both groups, where P-values were (0.549, 0.518) respectively, while concerning sex differences there was significant difference between males and females on ankle joint active repositioning accuracy error, where P-value was (0.019).Conclusion: Ankle proprioception was not affected by fatiguing of the lumbar paraspinal muscle.

Key words	**1.**	**Healthy subjects, ,**
	2.	**Biodex isokinetic system**
	3.	**Lumbar paraspinal muscle**
	4.	**Proprioception.**
	5.	**Ankle joint.**
	6.	**Muscle fatigue**
Classification number	**:**	**000.000.**
Pagination	**:**	**191 p.**
Arabic Title Page	**:**	**تأثير إجهاد عضلات جانبى المنطقة القطنية على المستقبلات الحسية العميقة لمفصل الكاحل.**
Library register number	**:**	**5783-5784.**

Author	**:**	**Mohamed Ekbal Abdel Kader**
Title	**:**	**Effect Of Cryolipolysis On Lipid Profile In Central Obese Women.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ahmed Ebrahim Ahmed Elerian.**
	2.	**Awny Fouad Rahmy.**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: cryolipolysis is an effective method of body contouring for central obesity. Purpose: To provide the physical therapist with an objective guideline about the effect of cryolipolysis on lipid profile in central obese women. Study design: experimental study. Methods: The assessment included measuring weight, height to obtain the BMI, tape measurement to obtain the waist/hip ratio, blood sample to detect the lipid profile. The assessment was done just before and after intervention. Results: There was a significant improvement of waist/hip ratio, body mass index, total cholesterol, triglycerides and high-density lipoprotein (HDL) cholesterol in the cryolipolysis group, more than low caloric diet group. Conclusion: Patients who underwent cryolipolysis and diet program had better improvement in lipid profile than patients maintained over diet program alone. And measures to decrease waist circumference are associated with improvement in lipid profile.

Key words	**1.**	**Cryolipolysis.**
	2.	**Women in Central obesity.**
	3.	**lipid profile.**
	4.	**Central obesity**
Classification number	**:**	**000.000.**
Pagination	**:**	**110 p.**
Arabic Title Page	**:**	**تأثيرالعمر والجنس على حالة الإتزان الديناميكي.**
Library register number	**:**	**6043-6044.**

Author	**:**	**Mohamed Hassan Ibrahim Salama.**
Title	**:**	**Combined Effect Of Different Ground Surfaces And Different Squat Depths On Knee Performance EMG Study.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Fatma Sedeek Amin**
	2.	**Rania Reffat Ali,**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Good balance between Vastus Medialis Obliques and Vastus Lateralis muscles is necessary in order to keep the normal alignment of patellofemoral joint. Therefore, the abnormal relation in the activation pattern of these muscles could alter the dynamics of the patellofemoral joint. Purpose: To investigate the effect of different surfaces and different squat depths on Vastus Medialis Obliques and Vastus Lateralis muscles activities and Vastsu Medialis Obliques /Vastus Lateralis Ratio in healthy males. Subjects and methods: Thirty healthy males whose age ranged from 18-30 years and body mass index from 25 kg/m^2 to30 kg/m^2.The participates performed body weight squat exercise on stable surface and unstable surface with squat depth 50 ^{o} and 80 ^{o} knee flexion. electromyograph studywas done by using amplitude potential to detect the vastus medialis obliques and vastus lateralis muscles activities on different squat depths that detected by universal goniometer. Results: 1-squat exercise on squat depth 80^{o}knee flexion increases the Vastus Medialis Obliques and Vastus Laterlais muscles activities, 2-unstable surfaces don't change the Vastus Medialis Obliques and Vastus Laterlais muscles activities during squat exercise,3-there are no change in VMO/VL ratio in squat depth 50^o,80^o in both stable and unstable surface. Conclusion: squat exercise on squat depth 80^{o}knee flexion increases the Vastus Medialis Obliques and Vastus Laterlais muscles activities, unstable surfaces don't change the Vastus Medialis Obliques and Vastus Laterlais muscles activities during squat exercise, there is no change in VMO/VL ratio in squat depth 50^o,80^o in both stable and unstable surface.

Key words	**1.**	**Vastus Medialis Obliques.**
	2.	**Squat Depths.**
	3.	**Unstable Surfaces.**
	4.	**Vastus Lateralis.**
	5.	**Combined Effect Of Different Ground Surfaces And Different Squat Depths On Knee Performance EMG Study.**
Classification number	**:**	**000.000.**
Pagination	**:**	**112 p.**
Arabic Title Page	**:**	**تاثير الاسطح المختلفة واوضاع القرفصاء المختلفة على النشاط العضلي الكهربائي لاداء الركبة..**
Library register number	**:**	**6129-6130.**

Author	**:**	**Mona Samir Ismail El Shahawy.**
Title	**:**	**Effect of Kinesio Tape and Exercise on Quadriceps Angle in Patients with Flatfoot.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Maher Ahmed El Keblawy**
	2.	**Amr Abdallah Azam**
	3.	**Enas Abu taleb**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Back ground: Adult acquired flatfoot deformity embraces a wide spectrum of deformities. Foot arch collapse shifts the body weight toward the foot medial border which places the entire lower limb in excessive internal rotation. The misalignment resulting from flatfoot increase Quadriceps angle above normal values that affect the lower limb function. Purpose: The current study was conducted to investigate the effect of traditional flatfoot treatment alone on the quadriceps angle value and combination of it with kinesio taping of quadriceps muscles. Methods: Pre-Posttest randomized control trial. 14patients with acquired flatfoot were assigned as group (A) received traditional flatfoot treatment with faradic stimulation and exercise, other 14 as compared were assigned as group (B) received traditional flatfoot treatment combined with kinesio taping of quadriceps. Patient's age ranged from 20 to 40 years. Computerized photogrammetry was used to evaluate quadriceps angle and foot print (Denis method) to evaluate flatfoot degree. Findings: Results revealed that there was significant improvement in group (A) flatfoot right (P-value=0.005) and left (P-value=0.002) and right quadriceps angle (p= 0.004) and left (p=0.003). Group B results significant improvement in flatfoot right and left (p=0.005) (p= 0.001) respectively and (p= 0.000) for both right and left quadriceps angle. In comparison between both groups results showed no significant improvement in flatfoot right (p= 0.930) left, (p= 1.00) and quadriceps angle left (p= 0.616) and significant improvement in right quadriceps angle (p= 0.015) Conclusion: It can be concluded that the quadriceps angle values showed significant improvement in both groups after the traditional treatment of acquired flatfoot with faradic stimulation and strengthening exercise, but there was no significant effect of adding kinesio tape to quadriceps muscle.

Key words	**1.**	**Quadriceps angle.**
	2.	**kinesio tape.**
	3.	**computerized photogrammetry**
	4.	**foot print.**
	5.	**Flatfoot.**
Classification number	**:**	**000.000.**
Pagination	**:**	**91 p.**
Arabic Title Page	**:**	**تأثير لاصقة الكينسيو والتمارين على زاوية العضلة الرباعيه في مرضى تفلطح القدم.**
Library register number	**:**	**6189-6190.**

Author	**:**	**Mostafa Mahmoud Zalabia**
Title	**:**	**Addition of integrated neuromuscular inhibition technique to amultimodal treatment program for chronic non specific neck pain**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Enas Elsayed Abutaleb**
	2.	**Reham Hussein Diab**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Most individual suffered from neck pain at some time during the course of their lives with incidence of approximately 30% of the adult population worldwide . The zygapophyseal joints and myofascial trigger points can be cause of chronic non specific neck pain. Mulligan technique and integrated neuromuscular inhibition technique may decrease pain intensity , increase pressure pain threshold (PPT) , Range of motion (ROM) and improve neck function. Purposes: To investigate the efficacy of adding integrated neuromuscular inhibition technique (INIT) to a multimodal treatment program that consisted of Mulligan technique (Natural Apophyseal Glides NAGS and Sustained Natural Apophyseal Glide SNAG) with isometric exercises in subjects with CNSNP on pain intensity, pressure pain threshold, ROM and neck function. Method: Thirty patients complaining of chronic non specific neck pain with active trigger point of upper trapezius (UT) and levator scapulae (LS) (15 females and 15 males), their age ranged from 18 to 26 years. Patients were randomly assigned with block randomization into three equal groups A, B & C. Group A received a multimodal treatment program that consisted of Mulligan (SNAG, NAGS) with isometric exercises . Group B received integrated neuromuscular inhibition technique (ischemic compression, positional release and muscle energy technique) and a multimodal treatment program . Group C (control group) received isometric exercises . Visual analogue scale (VAS) , Digital Algometer , CROM and Neck disability index (NDI) were used to evaluate pain intensity , pressure pain threshold (PPT) , ROM and neck function at two intervals (pre treatment, post treatment) before treatment and after 6 sessions through 2 weeks. Results: Within-group analysis there was a significant difference of VAS,NDI, PPT (RT and LT UT) (RT and LT LS) and ROM pre-post treatment at groups A, B and C(p = 0.0001) . Between group analyses there was no significant difference between pre values at all variables at three groups as p value > 0.05 but there was significant difference between post values at all variables at three groups as p value <0.05. Conclusion: Adding integrated neuromuscular inhibition technique (INIT) to a multimodal treatment program improve neck function .

Key words	**1.**	**Sustained Natural Apophyseal Glide.**
	2.	**Integrated Neuromuscular Inhibition Technique.**
	3.	**Natural Apophyseal Glides**
	4.	**chronic non specific neck pain**
Classification number	**:**	**000.000.**
Pagination	**:**	**135 p.**
Arabic Title Page	**:**	**اضافة تقنيه التثبيط العضلي المتكامله لبرنامج علاجي متعدد الاستخدامات بالنسبة لالم الرقبة المزمن والغير محدد.**
Library register number	**:**	**5919-5920.**

Author	**:**	**Nosaiba Ahmed Fahmy Eysa**
Title	**:**	**Effects of Short-term Treatment With kinesiot Aping for Plantar Fasciitis.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ragia Mohamed Kamel**
	2.	**Hatem Abdel Rhman Ahmed**
	3.	**Rania Nagy Karkousha,**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Plantar fasciitis is a common occupational and sport related repetitive strain injury. The purpose of this study: was to investigate the effect of kinesiotaping in addition to traditional physical therapy treatment in comparison to traditional physical therapy treatment only in patients with plantar fasciitis. Methods: Thirty subjects 9 males and 21 females participated in this study. All were referred from physician with clinical diagnosis of chronic plantar fasciitis. The subjects were randomly assigned into 2 equal groups: Group (A) Control group consisted of 15 patients (46.87±9.80) years, (160.9±17.4)cm, (81.6±12.1) kg, (29.40±3.96) (kg/m^2) treated with traditional physical therapy modalities (Trans Cutaneous Nerve Stimulation, Ultra Sound) for six sessions per week for one week. Group (B) Experimental group consisted of 15 patients (42.07±9.65) years, (166.60±7.79) cm, (80.6±12.1) cm, (29.00±3.42)(kg/m^2) received kinesiotaping in addition to traditional physical therapy modalities (Trans Cutaneous Nerve Stimulation and Ultra Sound) for six sessions per week for one week. Results: It reveald that there was statistical significant difference in mean of post scores for experimental group(B), than for control group (A) showing improvement for patients with plantar fasciitis in the following scores , visual analogue scale foot function index, Ankle dorsiflexion range of motion and ultrasound findings(D1) while there was no statistical significant difference in mean of pre and post scores for experimental group (B) for patients with plantar fasciitis showing improvement in post scores in the following assessment scores visual analogue scale, foot function index, ankle dorsiflexion range of motion and angle plantar flexion range of motion, ultrasound findings (D1, D2). Conclusion: It was concluded that combination between traditional Physical Therapy program and kinesiotaping are effective than using traditional treatment only in patients with Plantar Fasciitis.

Key words	**1.**	**Ankle joint.**
	2.	**Range of motion.**
	3.	**Traditional physical therapy.**
	4.	**Chronic plantar fasciitis,**
	5.	**Kinesiotaping**
	6.	**Plantar Fasciitis.**
	7.	**Ultrasonography.**
Classification number	**:**	**000.000.**
Pagination	**:**	**97 p.**
Arabic Title Page	**:**	**تأثير العلاج قصير المدى بشريط الكينيسيو لحالات التهاب باطن القدم الغشائى.**
Library register number	**:**	**5745-5746.**

Author	**:**	**Omnia Mohamed Hussein Elgendy**
Title	**:**	**Hand Grip Strength Following Cryotherpay On The Forearm For Tennis Players**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Maher El Keblawy**
	2.	**Yasser Ramzy Lasheen**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Cryotherapy was commonly used to minimize the deleterious effects produced by the inflammatory process and aid in recovery with reductions in pain, swelling and muscle spasm. Purpose of the study: was to investigate and compare between the effects of ice bag application for 3 and 10 minutes on hand grip strength for tennis players. Design of the study: Pre-test post-test research design. Subjects and methods: Sixty Tennis players from both sexes, their age ranged from 15 to 30 years old and they were classified randomly into three groups, group I: twenty players received cryotherapy in form of ice bag application to the forearm for 3 minutes, group II: twenty players received cryotherapy in form of ice bag application to the forearm for 10 minutes and group III: A control group of twenty players used sand bags instead of ice packs for 10 minutes. A Hand Grip dynamometer was used to measure grip strength before and after the ice application. Results: There was no statistical significant difference between (group I and group II) while there was clinical difference in favor to group II than group I. While, there was significant difference between (group I versus III) and (group II versus III) with (P=0.041* and P=0.0001*) respectively and this significant increase in favor of group (I) and group (II) in compared to group (III).Conclusion: It was concluded that there was a statistical significant effect for the using ice pack application for 3 minutes and 10 minutes on hand grip strength for tennis players. There is no statistical significant difference between using the ice application for three minutes and for ten minutes on handgrip strength for tennis players.

Key words	**1.**	**Cryotherapy.**
	2.	**Hand Grip Dynamometer.**
	3.	**Tennis Players**
	4.	**Hand Grip strength.**
	5.	**Forearm For Tennis Players**
Classification number	**:**	**000.000.**
Pagination	**:**	**121 p.**
Arabic Title Page	**:**	**قوة قبضة اليد عقب العلاج بالتبريد على الساعد للاعبي التنس الأرضى.**
Library register number	**:**	**5955-5956.**

Author	**:**	**Raghda Ahmed Mohammed Ibrahim**
Title	**:**	**The Effect Of Grasping Of Computer Mouse On Median Nerve Conduction Velocity In Computer Users**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Haytham Mohamed Elhafez**
	2.	**Samy Hasanen**
	3.	**Rania Nagy Karkousha**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Computer users with a long daily duration of computer use experienced musculoskeletal and neural symptoms. Purpose of this study: was to investigate if grasping the computer mouse affect the median nerve conduction velocity in computer users or not and if working years affect the median nerve conduction velocity in computer users or not. Methods: Forty adult computer users of both genders participated in this study. Aging from 20 to 45 years and they were using computer as a basic agent in their work. The Computer users assigned in to two equal groups: Group A: twenty participants using computer from 2 to 4 years and Group B: twenty participants using computer from 5 to 7 years. Results: There was a significant statistical difference in motor median nerve conduction velocity between dominant and non-dominant hands in computer users of group A. On the other hand; there was no significant statistical difference in sensory median nerve conduction velocity between dominant and non-dominant hands in computer users of group A. There was no significant statistical difference in the median nerve conduction velocity between dominant and non-dominant hands in computer users of group B. Conclusion: Grasping the computer mouse for the duration of 2-4 years affects the motor median nerve conduction velocity in computer users.

Key words	**1.**	**Computer mouse.**
	2.	**Conduction velocity.**
	3.	**Median nerve In Computer Users.**
	4.	**Computer users.**
Classification number	**:**	**000.000.**
Pagination	**:**	**89 p.**
Arabic Title Page	**:**	**تأثيرالإمساك بفأرة الكمبيوترعلى متوسط سرعة التوصيل العصبي للعصب الأوسط في مستخدمي الكمبيوتر**
Library register number	**:**	**6097-6098.**

Author	**:**	**Raghda Mohamed Hassan.**
Title	**:**	**Kinesiotape Versus Ultrasound In Chronic Plantar Fasciitis.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Wadida H. ELsayed**
	2.	**Sherif Mohamed Sokkar**
	3.	**Ghada Ismail Mohamed**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Plantar fasciitis (PF) is the most common injury of the plantar fascia and is the most common cause of heel pain. The use of Kineso Taping (KT) for the treatment of joint sprains and instability, soft tissue inflammation, and muscle pain and weakness is gradually increasing in sport medicine and orthopedics. Ultrasound (US) has been widely used for more than 40 years in the treatment of musculoskeletal disorders. Purpose: to compare the effect of KT with the effect of US on pain intensity level, ankle dorsiflexion range of motion (ROM) and foot functional level in patients with chronic PF. Materials and methods:Forty Five subjects with unilateral chronic PF aged from 30-50 years from both genders randomly distributed on three groups. The treatment was applied 3 times/week for four weeks. Pain intensity level, Ankle dorsiflexion ROM and foot functional level were measured pre-treatment and post-treatment. Group (A):15(14 female and 1 male) received ultrasound in addition to conventional physiotherapy program including stretching calf muscle, massage for plantar fascia and specific stretching for plantar fascia, group (B):15 (13 females and 2 males) received kinesiotape in addition to conventional physiotherapy program,the tape renewed twice/week for 4 weeks, while group (C):15(13 females and 2 males) received conventional physiotherapy program only. The treatment was applied 3 times/week for four weeks. Results: The Results showed that the pain intensity level was significant decreased in all groups P=0.0001. There was significant increase in ankle dorsiflexion ROM, group (A) and (B) P=0.0001 and group (C) P=0.033. There was significant increase in foot functional level in all groups P=0.0001. Conclusion: There was no statistical significant difference among three groups, but there was clinical difference in favor to group (A) than other groups and in favor to group (B) than group (C).

Key words	**1.**	**Kinesiotape.**
	2.	**Ultrasound.**
	3.	**Plantar fasciitis**
	4.	**Chronic Plantar Fasciitis.**
Classification number	**:**	**000.000.**
Pagination	**:**	**104 p.**
Arabic Title Page	**:**	**شريط كينسيو مقابل الموجات فوق الصوتية فى التهاب اللفافة الأخمصية المزمن**
Library register number	**:**	**6099-6100.**

Author	**:**	**Rami Maged Mahmoud Sayed Hendy**
Title	**:**	**Effect Of Transcutaneous Electrical Nerve Stimulation And Conventional Therapy In Post-Stroke Dysphagic Patients: A Randomized Controlled Trial**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ahmed Ebrahim Elerian**
	2.	**Tamer Hussein Emara**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Post stroke dysphagia (PSD) can decrease the quality of life, increase the risk of complications and mortality, and add a financial burden on healthcare systems. Purpose: The current study was conducted to investigate the effect of adding Transcutaneous electrical nerve stimulation (TENS) to the conventional therapy of treating PSD. Methods: Thirty patients who complaint from post stroke dysphagia were participated in this study, their ages was ranged from 45 to 85 years. They were randomly divided into two equal groups. Group (A): Received 3 weeks of treatment with TENS with frequency 80 HZ, pulse duration of 300 µsec, in addition to the conventional therapy in the form of thermotactile stimulation, tongue strengthening exercise, tongue range of motion (ROM), effortful swallowing, mendelsohn maneuver, supraglottic swallow, head and neck positioning and diet modification. While Group (B): Received 3 weeks of treatment with conventional therapy and placebo TENS, duration of treatment 30 min three times/ week. Results: There was a significant increase in the MASA of group (A) compared with that of group (B) post treatment. Moreover, there was a significant increase in the median values of the functional oral intake scale (FOIS) of group (A) post treatment compared with that of group (B). Conclusion: Both treatment protocols are effective, minimally invasive options for treatment of patients complaining of post stroke dysphagia, both groups produced subjective improvement.

Key words	**1.**	**Post stroke dysphagia.**
	2.	**Mann Assessment of Swallowing Ability (MASA).**
	3.	**Transcutaneous Electrical Nerve Stimulation.**
	4.	**Functional oral intake scale (FOIS).**
	5.	**Randomized Controlled Trial.**
Classification number	**:**	**000.000.**
Pagination	**:**	**108 p.**
Arabic Title Page	**:**	**تاثير تحفيز العصب الكهربائى عبر الجلد والعلاج التقليدى على صعوبة البلع فى مرضى ما بعد السكتة الدماغية.**
Library register number	**:**	**6083-6084.**

Author	**:**	**Rania Saad Abd El-Hafeez**
Title	**:**	**Influence of interferential current direct stimulation on sympathetic and parasympathetic chain on blood flow**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Amal Fawzy Ahmed**
	2.	**Soheir Shehata Rezk**
	3.	**Alaa Mahmoud Abd El-Hamid**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Interferential current stimulation may increase the blood flow when applied on both sympathetic dorso-lumber and sacral parasympathetic chain. This study was conducted to determine vasodilatation effect of interferential current therapy (IFC) when applied on dorso-lumber sympathetic chain or on applied on sacral parasympathetic chain . Material and method ; Thirty healthy subjects participated in this study ;their ages ranged from 20-35 years , they were selected from employee of El Kasr El Aini hospital at summer 2014 . They were randomly assigned into two study group of equal number ; group (A) received interferential stimulation on the sympathetic chain , while group (B) received interferential stimulation on parasympathetic chain . Blood flow in lower limbs (right and left) was evaluated by Duplex Doppler Ultrasound (DDU) pre, immediately post stimulation and 30 minutes post IF stimulation Results : revealed that there were no significant differences in the measured variables within groups regarding the measurement times and lower limbs sides (p > 0.05) and also there was no significant difference between group (p > 0.05) . Conclusion: From the obtained results of this study, it could be concluded that IFC stimulation of the dorso- lumber sympathetic chain and sacral parasympathetic chain did not have effect on blood flow .

Key words	**1.**	**Interferential current.**
	2.	**Parasympathetic chain.**
	3.	**Sympathetic chain**
	4.	**Duplex Doppler ultrasound.**
	5.	**Blood flow.**
Classification number	**:**	**000.000.**
Pagination	**:**	**67 p.**
Arabic Title Page	**:**	**تأثير تنبيه الجهاز السبمثاوي و الباراسبمثاوي بجهاز التيارات المتداخلة على تدفق الدم.**
Library register number	**:**	**6035-6036.**

Author	**:**	**Rasha Magdy Ibrahim Mohammed.**
Title	**:**	**Isokinetic Measurements of Shoulder Muscles Performance in Notebook Computer Users.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ragia Mohamed Kamel**
	2.	**Ghada Abd El Moniem Abd Allah**
	3.	**Ahmed Hassan Waly**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: The use of notebook computers has quickly become very popular among computer users due to their light weight, small size, portability, and battery power option. Purposes: To investigate the isokinetic measurements of shoulder muscle performance in notebook computer users. Subjects: Thirty healthy subjects from both sexes were assigned into two equal groups *Group (A)*was consisted of fifteen subjects of notebook computer users. Their mean age (22.33±1.11) years, weight (75.36±17.6) kg, height (170.13±8.5) cm. *Group (B)*was consisted of fifteen subjects of non-notebook computer users. Their mean age (22.8±3.4) years, weight (68.26±16.9) kg, height (171.53±10.35) cm. Materials and Methods: All participants were tested for shoulder flexion from 90° to 180° and they were tested for shoulder abduction from 15° to 135° at angular velocity 60°/ sec and 180°/ sec for both ranges to measure muscle work, torque and work fatigue of shoulder flexors and abductors using Biodex system-3 isokinetic dynamometer. Results: There were no significant differences between the two groups in shoulder flexors work, torque and work fatigue at angular velocity 60°/ sec, and at angular velocity 180°/ sec. There were no significant differences between two groups in shoulder abductors work, torque and work fatigue at angular velocity 60°/ sec, and at angular velocity 180°/ sec. Conclusion: Notebook computers proved to have no effect over shoulder flexors and abductors performance during shoulder movement .

Key words	**1.**	**Isokinetic measurements.**
	2.	**Shoulder muscles.**
	3.	**Performance**
	4.	**Notebook Computer Users.**
Classification number	**:**	**000.000.**
Pagination	**:**	**99 p.**
Arabic Title Page	**:**	**القياسات الايزوكينتيكيه لاداء عضلات مفصل الكتف لمستخدمى الكمبيوتر المحمول.**
Library register number	**:**	**6157-6158.**

Author	**:**	**Rehab Abdel Hamed Abou Elfotoh**
Title	**:**	**Influence of circadian rhythm on balance in healthy Subjects**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Maher A. Elkeblawy**
	2.	**Yasser Ramzy Lasheen**
Degree	**:**	**Master.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Circadian rhythm plays an important role in our biophysiological functions, also affects the human performance and effective movements, but little researches had been conducted on the body type in relation to the influence of time of day on motor ability such as body balance. The Purpose: this study was conducted to investigate the influence of circadian rhythm on dynamic balance. Subjects: Forty healthy male physical therapists with mean age 24.15±3.32 years, mean weight 69.25±6.67 kilogram (kg), mean height 176.5±7.66 centimeters (cm), and mean BMI 22.16±1.4 kg/m2. Subject's personality type was determined by morningness/eveningness scale and then assigned to two equal groups. Methods: Subject's dynamic balance was measured by the biodex balance system on the morning (8 am) and on the evening (2 pm) for both groups, post hoc tests were done to determine the significant difference in the dynamic balance at different times, also the difference between the morning and evening tested groups. Results: The result revealed that there was statistical significant difference in dynamic balance (Overall stability, anterior /posterior stability and medial /lateral stability) at different times of day according to subject's personality type in each group. But, there was no statistical significant difference between both groups (over all stability and anterior/posterior stability), except for medial/lateral stability which decreased in the evening group (group B) than morning group (group A). Conclusion: The finding revealed that circadian rhythm had significant statistical effect on dynamic balance throughout different times of day.

Key words	**1.**	**Circadian Rhythm.**
	2.	**Biodex Balance System.**
	3.	**Human Balance**
	4.	**healthy Subjects - balance**
	5.	**balance in healthy Subjects**
Classification number	**:**	**000.000.**
Pagination	**:**	**123 p.**
Arabic Title Page	**:**	**تأثير الساعة البيولوجية على الإتزان فى الأشخاص الأصحاء.**
Library register number	**:**	**5831-5832.**