

Department of Basic Science
Master Degree
2019

Author	:	Afnan Hamdy Abd El Ghny Ali Elfol.
Title	:	Axillary Ultrasound Versus Traditional On Functional Ability on Patient With Adhesive Capsulitis.
Dept.	:	Department of Basic Science.
Supervisors	1.	Abeer Abdel Rahman Mohamed.
	2.	Ali Mohamed El Geoushy.
	3.	Marwa Shafiek Mustafa.
Degree	:	Master.
Year	:	2019.
Abstract	:	<p>Background: Adhesive capsulitis is a painful and disabling disorder of unclear cause in the shoulder. It restricts joint motion and cause chronic pain. Purpose: to investigate and compare the effect of axillary ultrasound application versus traditional ultrasound on functional ability in patient with adhesive capsulitis. Subjects and methods: Thirty patients of both sex with unilateral adhesive capsulitis had been participated and recruited from physical therapy department of Al Azhar university specialized hospital. Patients were randomly divided into two equal group's number: Group (A) (Axillary ultrasound group): It composed of 15 patients who received axillary ultrasound in addition to physical therapy treatment. Group (B) (Traditional Ultrasound group): It composed of 15 patients who received traditional ultrasound in addition to physical therapy treatment. Patients in both groups received ultrasound according to the following specification: medium transducer, 3MHz pulsed type (1:1), and 1.5 W/Cm applied for 10 minutes. In both group, Functional activity was measured by disabilities of the arm, shoulder and hand (DASH) questionnaire. Shoulder Flexion, abduction and external rotation range of motion were measured by digital inclinometer. Pain intensity was measured by visual analogue scale (VAS) before and after four weeks of treatment. Results: all measured parameters were improved significantly in both groups. Axillary group showed statistically significant improvement over traditional group in all outcome variables ($P=0.149$) except external rotation ROM where there was no statistically significant difference. Conclusion: axillary ultrasound could significantly improve function activity better than traditional in patient with adhesive capsulitis.</p>
Key words	1.	Traditional ultrasound.
	2.	Adhesive Capsulitis.
	3.	Axillary ultrasound.
	4.	Functional Ability - Adhesive Capsulitis.
Classification number	:	000.000.
Pagination	:	110 p.
Arabic Title Page	:	الموجات فوق الصوتية أبطي مقابل الموجات فوق الصوتية التقليدية على القدرة الوظيفية لدى مرضى التهاب المحفظة اللاصق.
Library register number	:	6733- 6734.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Ahmed Hussien Abdel Motal Ali.
Title	:	Validity and Reliability of Arabic Version of Kujala to Measure Patellofemoral Pain.
Dept.	:	Department of Basic Science.
Supervisors	1.	Ragia Mohamed Kamel.
	2.	Amira Hussin Draz.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Patellofemoral pain (PFP) has a debilitating effect on sufferers, daily lives by reducing their ability to perform sporting and work related activities pain free. The Kujala Patellofemoral Disorder Score (KPs) was particularly designed and developed for the assessment of patients having anterior knee pain as well as patellofemoral conditions. Purpose: The purpose of the study were to culturally translate and validate the Arabic version of Kujala Patellofemoral Disorder Score (KPS) (and evaluate the test-retest reliability, internal consistency, construct validity ceiling or floor effects of this instruments) in patients with PFP to measure the physical function and to ensure better care delivery. Subject and Methods: Two expert panels (each consists of nine experts) and 46 patients with Patellofemoral pain (PFP) aged from 18 to 60 years old participated in this study. Forward translation, development of preliminary initially translated version, backward translation, and development of the pre-final version and testing of pre-final version using experts then testing of the final version on patients were 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 mean age was (47.58±12.62) years, the mean weight of patients was (84.28±20.49)kg, the mean height of patients was (157.75±7.38)cm, scale index of clarity equaled 100%, while The Excellent content validity (S-CVI) equaled 92.38%. With regard to internal consistency, the Cronbach's alpha equaled 0.598 (range from 0.487 to 0.660). In addition, the Spearman's rank correlations were moderate to strong in the majority of items. Conclusion: The Arabic Anterior Kujala Patellofemoral Scale (KPS) is a valid and reliable tool and is comparable to the original English version.</p>		
Key words	1.	Validity-Reliability.
	2.	Patellofemoral Syndrome.
	3.	Arabic Kujala Patellofemoral Scale (KPS)
Classification number	:	000.000.
Pagination	:	131 p.
Arabic Title Page	:	اختبار صلاحية ومصداقية النسخة العربية من مقياس كوجالا لقياس ألم رضفة الفخذ.
Library register number	:	6427-6428.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Alaa Samir El-Said Mohamed
Title	:	Effect of fatigue on inversion position sense of ankle in volleyball female players.
Dept.	:	Department of Basic Science.
Supervisors	1.	Abeer Abd El-Rahman
	2.	Hisham Mohamed Abd El-Raheem
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Passive inversion joint position sense (PIJPS) was proved to be risk factor for lateral ankle sprain (LAS) which occur commonly in female volleyball players later on matches when fatigue is present suggesting that fatigue may alter PIJPS and lead to LAS. Purpose: To investigate the effect of evertor muscles fatigue on PIJPS in volley ball female players. Study Design: One group pretest / posttest cross section design. Methods: Twenty five female volleyball players from 18-25years old were selected by convenient sampling. Formal consent was signed up. Participants were tested for PIJPS at 10° and 20° of inversion before and after induction of evertor muscles fatigue. Fatigue protocol and PIJPS assessment were performed using Biodex System 3 Pro Isokinetic dynamometer. Each test angle was tested three times then mean error (ME) was calculated. Results: There was statistical significant difference in PIJPS at 10° of inversion after evertor muscles fatigue (P<0.001). While at 20° of inversion there was no statistical significant difference (p=0.904). Conclusion: Fatigue of the evertor muscles affects the acuity of the ankle PIJPS at 10° of inversion and adversely affect ankle proprioception which may enhance the risk of LASs.</p>		
Key words	1.	Ankle.
	2.	Inversion position sense.
	3.	Muscle fatigue.
	4.	
	5.	
Classification number	:	000.000.
Pagination	:	75 p.
Arabic Title Page	:	تأثير الأجهاد على الاحساس بالوضع المقلوب للداخل لمفصل الكاحل في لاعبي كرة الطائرة للإناث.
Library register number	:	6339-6340.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Amal Ahmed Mohamed Morsi Abdel Baky.
Title	:	Immediate Effect of Sustained Natural Apophyseal Glide On Balance And Pain In Chronic Non-Specific Low Back Pain.
Dept.	:	Department of Basic Science.
Supervisors	1.	Neveen Abdel Latif Abdel Raouf.
	2.	Hisham Mohamed Abdel Raheem.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Objectives: To investigate the immediate effect of the Mulligan's lumbar sustained natural apophyseal glides (SNAGs) on balance and pain in patients with chronic non-specific low back pain (CNSLBP). Subjects: 30 participants with CNSLBP were randomly allocated into two groups. The study group (n= 15) received a "SNAGs" on the affected lumbar level (s), and the control group (n=15) received the sham "SNAGs". Methods: Outcome measures were balance assessment, pain level. They were measured by Biodex balance system (BBS) and visual analogue scale (VAS) respectively. Outcomes were measured before and immediately after the end of the intervention. Results: paired t-test revealed that there was a significant improvement in pain and balance after treatment regarding study group except for dynamic/8/single limb/ right and dynamic/4/single limb/right ($p=0.0735$, $p=0.1643$ respectively), while, the control group has shown no statistically significant difference in all pain and balance values except for static/both limbs and dynamic/8/single limb/left values ($p=0.0116$, $p=0.0203$ respectively). Unpaired t-test showed that lumbar SNAGs resulted in significant improvement in pain and static balance when compared to sham treatment ($p=0.0046$, $p=0.0017$ respectively). While there was no statistically significant difference between lumbar SNAGs and sham treatment regarding all dynamic balance tests that been applied during this study. Conclusions: Mulligan lumbar "SNAGs" have an immediate effect on static and dynamic balance and pain intensity. There was no significant difference between Mulligan lumbar "SNAGs" and sham treatment regarding dynamic balance.</p>		
Key words	1.	"SNAGs".
	2.	Chronic Non-Specific Low Back Pain (CNSLBP).
	3.	Balance.
	4.	Pain.
	5.	Sham.
Classification number	:	000.000.
Pagination	:	81 p.
Arabic Title Page	:	تأثير المباشر الطبيعي (بطريقة موليجان) للمفاصل المسطحة على الاتزان والالم في الام اسفل الظهر المزمنة غير المحددة.
Library register number	:	6505-6506.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Amira Ezzat Mohamed Abd El Hay.
Title	:	Correlation Between Musculoskeletal Disorders and Work Related Postures in Physical Therapists.
Dept.	:	Department of Basic Science.
Supervisors	1.	Wdida Hassan Abd El Kader.
	2.	Marwa Shafiek Mustafa Saleh.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Physical therapists daily often complain from awkward postures daily with exhausting way due to the lake of the number of physical therapists especially in General Hospitals. Purpose: of current study was to study the relationship between Musculoskeletal Disorders (MSDs) and work related postures in physiotherapists in General Hospitals of Cairo, Egypt. Subjects: One hundred thirty physical therapists working in general hospitals of Cairo with age range 25 - 40 years were selected for this study; Both male and female were included in the study who have varied style of life. Methods: Nordic Musculoskeletal Questionnaire (NMQ) was used to survey the physical therapists' musculoskeletal disorders, also Ovako Working Posture Assessment System (OWAS) was applied to evaluate, analyze and categorize the repeated work related postures in 130 physical therapists. OWAS method was processed using Win OWAS software, involving 16 work related postures. The collected data statistically analyzed using Excel and SPSS. Results: NMQ indicated that 72% of physical therapists complained MSDs in at least one part of the nine determined body parts during the last 12 months. The most common disorders were lower back pain (75%), neck (65%) and shoulder pain (58%). Standing for long periods were very strongly correlated with lower back pain and strongly correlated with lower limbs with $r = 0.84$ and 0.79 respectively. Results of OWAS categories showed incategory1 eight postures (59%, 77 frequencies), in category 2 seven postures (35%, 46 frequencies) and one posture in category 3 (5%, 7 frequencies). Conclusion: There is high correlation between MSD sand work related post res of physiotherapists work in gin Cairo General Hospitals. The dominant prevalence pains were in the lower back, neck and shoulders. OWAS work posture 4222 (category 3) were highly significant with lower back and upper limbs MSDs, it was partially correlated with neck MSDs. Meanwhile, work posture 2222 and 2221 (category 2) were significantly correlated with lower back, upper limbs and neck MSDs.</p>		
Key words	1.	Musculoskeletal Disorders.
	2.	Nordic Questionnaire.
	3.	OWAS.
	4.	Work Related Postures.
	5.	Physical Therapists Postures.
Classification number	:	000.000.
Pagination	:	86 p.
Arabic Title Page	:	العلاقة بين الاضطرابات العظميةالعضلية ووضعيات العمل عند أخصائي العلاج الطبيعي.
Library register number	:	6345-6346.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Amr Elsayed Mahmoud
Title	:	Effect of extracorporeal shock wave therapy on scaphoid fracture nonunion.
Dept.	:	Department of Basic Science.
Supervisors	1.	Omaima Kattabei.
	2.	Ahmed Fathy Genedy.
	3.	Abeer Ramadan.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: The scaphoid is the most frequently fractured carpal bone, typically as a result of a fall onto an outstretched hand nonunion caused by poor blood supply is an important complication of scaphoid fracture. The purpose of this study: was to investigate the effect of the extracorporeal shock wave therapy on the healing of scaphoid fracture nonunion and hand grip strength. Subjects: Thirty patients from both sexes were diagnosed with scaphoid fracture without healing for more than six months, aged 20 to 50 years participated in this study. They were divided into two equal groups; fifteen patients each. Method: Subjects were randomly divided into two groups; group A (control group) received conservative treatment (Immobilization with cast for one month and follow up). Group B (experimental group) received three extracorporeal shock wave therapy sessions followed by immobilization by cast ,both groups followed active free exercise program for hand grip five times daily for two weeks. X-ray radiographs and hand grip assessment by hand dynamometer were obtained before and after treatment. Results: Data obtained was analyzed via Chi square test which was used to compare the healing response between both groups at pre and post treatment and paired and unpaired t-test to compare the improvement in hand grip strength . There were statistical differences between the two groups, where the treatment group showed greater improvement in the healing response and hand grip strength. Conclusion: extracorporeal shock wave therapy is an effective method in treatment of <i>scaphoid</i> fracture nonunion and improvement of hand grip strength.</p>		
Key words	1.	Scaphoid bone.
	2.	hand grip.
	3.	shock wave therapy
	4.	nonunion fracture.
	5.	fracture of nonunion.
Classification number	:	000.000.
Pagination	:	81 p.
Arabic Title Page	:	تأثير العلاج بالموجات التصادمية على الكسر الغير ملتئم في عظمة الزورقيه.
Library register number	:	6309-6310.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Amr Mohamed Ahmed Khalil.
Title	:	Prevalence of flat foot among patients with mechanical low back pain.
Dept.	:	Department of Basic Science.
Supervisors	1.	Salwa Fadl Abd Elmajeed.
	2.	Nasr Awad Abd Ekader.
	3.	Ahmad Hamdi Azzam.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Persons with mechanical LBP were more likely to have a decrease in dorsiflexion and an increase in navicular drop. However, the available literature on the link between LBP and foot posture, particularly excessive pronation, has not been examined adequately from a biomechanical and mechanistic perspective. Determine the prevalence of flat foot among patients with mechanical low back pain will aid in prevention of mechanical LBP and decrease the burden that comes from money and time lost spent to treat such cases. Purpose: to determine the prevalence of flat foot among patients with mechanical low back pain. Methods: Two hundred and twenty five patients suffered from mechanical LBP were selected from Luxor and Aswan, their age ranged from 18 to 40 years and their body mass index (BMI) was ranged from 18 to 25 kg/m². Mechanical Inflammatory Low Back Pain Index was conducted on the recruited participant Then the patients with results of (Very High Mechanical Component) included in the study. And followed the navicular drop test procedure. Analysis was carried out using descriptive statistics. The data analyzed using (SPSS) for Windows version 20. The χ^2 test was used to examine the association between variables .P_value less than 0.05 was used. Results: The percentage of right flat foot among patients with mechanical LBP was 11.66%. The percentage of left flat foot among patients with mechanical LBP was 10.22% There are 26 (11.66%) patients have ND 10 mm greater than, 199 (88.34%) subjects have ND less than 10mm of the right foot. There are 23 (10.22%) patients have ND greater than 10 mm, 202 (89.78%) patients have ND less than 10mm of the left foot. Conclusion: According to author, knowledge there were no previous studies determined the prevalence of flatfoot among patients with mechanical low back pain so we cannot judge whether this percentage were high or low prevalence. However there were many studies similar to our study</p>		
Key words	1.	Mechanical low back pain.
	2.	Flat Foot.
Classification number	:	000.000.
Pagination	:	122 p.
Arabic Title Page	:	مدي انتشار القدم المسطحة بين المرضى الذين يعانون من آلام أسفل الظهر الميكانيكية.
Library register number	:	6379-6380.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Arwa Abdallah Mohamed.
Title	:	Relationship Between Refractive Visual Errors and Cervical angles and Range of Motion.
Dept.	:	Department of Basic Science.
Supervisors	1.	Soheir Shehata Rezkalla.
	2.	Yasser Ramzy Lasheen.
	3.	Manar Hussien.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Myopia is one of the common refraction visual errors (RVE) that produces musculoskeletal complains , such as stiffness, fatigue and muscular pain in the neck which in turn may affect cervical curvature and range of motion. Aim of the study: To investigate the relationship between refractive visual errors subjects and cervical curvature and cervical range of motion. Participants: Fifty participants divided into two groups 15-30 years old from KASR AL AINI hospital in radiology department from employees and students in October 2016. They assigned in two equal groups refractive myopic and normal sighted. Methods: Active cervical range of motion (CROM) was assessed by using O.B goniometry, cervical angles (OC-C2, C1-C2, C2-C7) were measures by using corel draw program in x-ray. Results: Comparison between groups revealed no significant different in OC-C1 and a significant different in C1-C2 and C2-C7, additionally there was a significant difference in flexion , extension , Rt and Lt rotation (P= 0.007, 0.01, 0.0001, 0.001) between groups respectively, there was no significant correlation between right and left eye and cervical angles and range of ROM. Conclusion: Myopia causes changes in cervical curve and ROM but the degree of Myopia is not correlated to this changes of cervical curve and ROM.</p>		
Key words	1.	Refractive visual errors.
	2.	myrine O. B goniometer.
	3.	Corel _ draw program in x-ray.
	4.	Cervical range of motion.
	5.	Range of Motion.
Classification number	:	000.000.
Pagination	:	103 p.
Arabic Title Page	:	العلاقة بين الاخطاء البصريه و زوايا الفقرات العنقيه ومدى حركتها.
Library register number	:	6465-6466.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Aya A. Saaid Mahmoud,
Title	:	Correlation between Degree of Forward Head Posture and Rounded Shoulder Posture in Physical Therapy Students.
Dept.	:	Department of Basic Science.
Supervisors	1.	Haytham M. Elhafez,
	2.	Ghada A. Mohammed.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Forward head posture has been shown to be a common postural displacement, with a conservative estimate being 66% of the patient population. Failure of the head to align with the vertical axis of the body can lead to malalignments in the body such as rounded shoulders. Although most previous researches were conducted to determine the relation between forward head posture and cervical pain or thoracic kyphosis or temporomandibular joint and the relation between Forward Head Posture and rounded shoulder posture is not clearly understood. <i>Aim of the study:</i> The present study aimed to investigate the correlation between different degrees of forward head posture and changes in shoulder angle in asymptomatic subjects with forward head and rounded shoulder posture. <i>Subjects and Methods:</i> One hundred and fourteen physical therapy students (58 males and 56 females) aged 19-25 years and body mass index ranged from 18-27 kg/cm² were recruited for this cross section study. The craniovertebral and shoulder angle were used to measure the degree of forward head posture and rounded shoulder posture respectively from standing position by photogrammetry. <i>Results:</i> Significant negative negligible correlation was detected between mild degree of forward head posture and rounded shoulder (p<0.001 and r= -0.06) and significant positive negligible correlation a between moderate degree of forward head posture and rounded shoulder posture (p<0.01and r=0.1). However, the relation between severe degree of forward head posture and rounded shoulder posture was non-significant positive negligible correlation (p>0.3 and r= 0.08). <i>Conclusion:</i> it was concluded that, mild and moderate degrees of forward head posture change the degree of the rounded shoulder. However, the severe degrees of forward head posture didn't change the degree of the rounded shoulder.</p>		
Key words	1.	Correlation.
	2.	Rounded shoulder posture.
	3.	Forward head posture.
	4.	Physical Therapy Students.
Classification number	:	000.000.
Pagination	:	86 p.
Arabic Title Page	:	العلاقة بين درجة وضعية الرأس إلى الأمام و وضعية الكتف المستديرة في طلاب العلاج الطبيعي.
Library register number	:	6247-6248.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Aya Mohamed Abd El-Sadek
Title	:	Effect of smart phone addiction on scapular symmetry and functional level of neck and upper back.
Dept.	:	Department of Basic Science.
Supervisors	1.	Fatma Sedek Amin.
	2.	Mary Kamal Nassif Takla.
Degree	:	Master.
Year	:	2019.
Abstract	:	<p>Background: The continuous use of smartphone for a long time can cause various musculoskeletal problems affecting scapula, neck and upper back. Purpose: This study was conducted to investigate the effect of smart phone addiction on scapular symmetry and functional level of neck and upper back. Subjects: Forty five subjects from both genders with age ranging from 15 to 25 years were stratified into three equal groups; 15 subjects for each group. Methodology Group I: subjects with smartphone addiction level from (15 to 30) points. Group II: subjects with smartphone addiction level from (31to 45) points. Group III: subjects with smart phone addiction level from (46 to 60) points according to smart phone addiction scale short version(SAS-SV). They were assessed using the functional level of neck and upper back questionnaire and the scapular symmetry was assessed by lateral scapular slide test from shoulder adduction , 45° and 90° shoulder abduction using palpation meter. Results: There was a positive significant correlation between smartphone addiction and neck and upper back functional level ($r = 0.33$, $p = 0.02$) and also with lateral scapular slide test in the tested position (2) of 45° shoulder abduction ($r = 0.43$, $p = 0.003$) and position (3) of 90° shoulder abduction ($r = 0.54$, $p = 0.0001$). Conclusion: Smartphone addiction had a significant effect on functional level of neck and upper back and leads to scapular asymmetry in highly addicted ones.</p>
Key words	1.	Smart phone addiction.
	2.	Functional level of neck.
	3.	Lateral scapular slide test.
	4.	Scapular symmetry.
	5.	upper back.
Classification number	:	000.000.
Pagination	:	89 p.
Arabic Title Page	:	تأثير ادمان الهاتف الذكي على تناسق لوح الكتف و مستوى الأداء الوظيفي للرقبة والجزء العلوي من الظهر.
Library register number	:	6463-6464.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Enas Abdul Khaliq Sayed Mahmoud
Title	:	Establishment Of Normative Data Using Jebsen Taylor Hand Function Test (Jthft) For Normal Egyptians In Different Ages.
Dept.	:	Department of Basic Science.
Supervisors	1.	NeveenAbd EILatif Abdel Raouf
	2.	Mary Kamal Nassif
	3.	NeveenAbd EILatif Abdel Raouf
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: The Jebsen Taylor Hand Function Test (JTHFT) was established to provide a standardized and objective evaluation of fine and gross motor hand function using simulated activities of daily living (ADL). Aims: of this study were to establish normative data for hand function using JTHFT and to investigate the effect of age, gender and dominance differences on hand function in normal Egyptian individuals. Design and participants: One shot cross sectional descriptive design was used. One hundred and fifty normal Egyptians were equally stratified into 3 age groups Group A (20<30), Group B (30<40), Group C (40 <50). Methods: JTHFT sub-tests were introduced to all participants that included; writing; turning over 3 by 5-inch cards; picking up small common objects; simulated feeding; stacking checkers; picking up large objects; and picking up a large heavy object. Measurement outcome: Speed on completing each JTHFT subtest was calculated in seconds, and the total score was computed. Results: normative data for middle aged Egyptian's have been established, the finding provide evidence that handedness & age may affect hand function especially high level fine dexterity activities. Statistically significant differences were found between gender, age of dominance (P<0.001). Conclusion: these finding document that function decline with aging hand dominance affect the results & no effect of sex without considering the age.</p>		
Key words	1.	Jebsen Taylor hand function test.
	2.	Dominance.
	3.	Gender.
	4.	Population.
	5.	Egyptians In Different Ages.
Classification number	:	000.000.
Pagination	:	85 p.
Arabic Title Page	:	تأسيس المعلومات الطبيعية باستخدام اختبار جاسبين تايلور لقياس وظائف اليد للأشخاص الطبيعيين المصريين.
Library register number	:	6343-6344.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Hatem Youssef Mohammed Lazem.
Title	:	Lumbopelvic muscles activity and scapular position in nonspecific chronic low back pain.
Dept.	:	Department of Basic Science.
Supervisors	1.	Reham Hussein Diab.
	2.	Rania Reda Mohamed.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Nonspecific chronic low back pain is the most common problem that can cause economic and social problems for an individual. Although there were, many studies have reported the changes in the lumbopelvic muscles activity and scapular position in nonspecific chronic low back pain patients but it still debated. purpose: This study was conducted to investigate the electromyographic activity of lumbopelvic muscles and scapular position in nonspecific chronic low back. Subjects: Thirty nonspecific chronic low back pain male patients and thirty healthy male subjects were recruited and assigned into 2 groups .Group A (study) with mean age 29 ± 5.53 years ,mean weight 70.94 ± 7.39 Kg , mean height 169.73 ± 5.84 cm and mean BMI 24.61 ± 2.18 kg/m² .Group B (control) with mean age 31.03 ± 6.31 years , mean weight 70.66 ± 9.95 Kg,mean height 171 ± 6.05 cm and mean BMI 24.12 ± 2.76 kg/m²). Methods: Assessment was conducted by surface electromyography (MyoTrac infinity System T 9800) to assess muscle activity for right and left latissimus dorsi and gluteus maximus muscles and inclinometer to assess right and left scapular upward rotation from (neutral position, 45°abduction, 90°abduction, 135°abduction and end range abduction) positions. Results: There were significance difference in all parameters between both study and control group including right and left latissimus dorsi activity with p value 0.0001 ,0.0001 , right and left gluteus maximus activity with p value 0.0001 , 0.0001 , right and left scapula upward rotation from(neutral position , 45° abduction, 90° abduction, 135° abduction, end range abduction)with p value ranged from 0.002 to 0.0001. Conclusion: there were an influence of non-specific chronic low back pain have on the activity of lumbopelvic muscles (increase in the activity of latissimus dorsi and decrease in the activity of the gluteus maximus) and increase in upward rotation of the scapula from five different position (neutral, 45°abduction, 90°abduction, 135°abduction, and end range) for both sides in male patients when compared to matched control group . Our findings will help clinicians to include the assessment of lumbopelvic muscles and scapular position in both conditions (NSCLBP and scapular dyskinesia) prior to formulate a treatment plan.</p>		
Key words	1.	lumbopelvic muscles.
	2.	scapular position.
	3.	Electromyography.
	4.	Inclinometer.
	5.	nonspecific chronic low back pain.
Classification number	:	000.000.
Pagination	:	97 p.
Arabic Title Page	:	نشاط العضلات القطنية المرتبطة بالحوض ووضع عظمه لوح الكتف في حالات الأم اسفل الظهر المزمنة الغير محددة.
Library register number	:	6249-6250.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Heba Ahmed Abd El Azeem Haridy.
Title	:	Influence Of Different Ankle Positions On Tibial Nerve Conduction velocity Study.
Dept.	:	Department of Basic Science.
Supervisors	1.	Neveen Abdel Latif Abdel Raouf.
	2.	Ibrahim Mohamed Zoheiry.
	3.	Marwa Shafiek Mustafa Salah.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Changes in joint positions have been reported to affect nerve mobility and adaptability. Purpose: To investigate the influence of different ankle positions on tibial nerve conduction velocity. Methods: This study was conducted on sixty healthy participants from both sexes. Tibial nerve motor distal latencies were recorded from different ankle positions (neutral, 20° ankle dorsiflexion and 40° ankle plantar flexion) Results: showed a significant effect for ankle positions in motor distal latency of both lateral and medial branches of tibial nerve in favor of neutral ankle position compared with other positions Plantar flexion and dorsiflexion, the mean values of motor distal latency of both lateral and medial branches for neutral ankle position were (4.62± 0.87, 4.57± 0.89) respectively, plantar flexion were (5.06± 0.81, 5.24 ±0 .83) respectively, and dorsiflexion were (5.64± 0.92, 6.03 ± 0.93). Conclusion: Ankle neutral position is the most convenient position for assessing tibial nerve conduction velocity and it is the most appropriate position for reduce tibial nerve entrapment, while prolonged ankle dorsiflexion should be avoided to reduce risk of tibial nerve entrapment.</p>		
Key words	1.	Ankle positions.
	2.	Tibial nerve.
	3.	Nerve conduction velocity.
Classification number	:	000.000.
Pagination	:	61 p.
Arabic Title Page	:	تأثير الأوضاع المختلفة لمفصل الكاحل علي دراسة سرعه انتقال الإشارة العصبية لعصب قصبه الساق.
Library register number	:	6485-6486.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Heba Ahmed Ibrahim Ibrahim ElGayar.
Title	:	Effect of chronic ankle instability on cervical active repositioning accuracy.
Dept.	:	Department of Basic Science.
Supervisors	1.	Neveen Abdel Latif Abdel Raaof
	2.	Magda Ramadan Zahran
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Cervical proprioception has an important role in maintaining normal spinal movement, stability and maintaining the balance of the body as a whole. Lateral ankle sprains are considered one of the most prevalent injuries in sports or in daily lives even. Purpose: This study was conducted to investigate the effect of chronic ankle instability on cervical active repositioning accuracy .Methodology: thirty subjects of both genders (16 females and 14 males) were selected and assigned into 2 groups (A & B). Group A which is the Chronic Ankle Instability (CAI) group consisting of 7 females and 8 males. Group B is the control group included (9 females and 6 males). Cumberland ankle instability tool was used to identify subjects and determine the severity of functional ankle instability. Manual testing including talar tilt and anterior drawer tests of ankle was used to determine the integrity of ankle ligaments to identify subjects with ankle mechanical instability. Cervical proprioception was evaluated by cervical range of motion device in the sagittal, frontal and horizontal planes. Results: There was a significant effect of chronic ankle instability on cervical reposition error in all cervical movements of the three planes; cervical flexion reposition error ($p = 0.001$), cervical extension reposition error ($p = 0.0001$), cervical Rt side bending reposition error ($p = 0.0001$), cervical Lt side bending reposition error ($p = 0.0001$), cervical Rt rotation reposition error ($p = 0.0001$) and cervical Lt rotation reposition error ($p = 0.006$). Conclusion: There was a relation between chronic ankle instability and the increase in cervical reposition error compared with healthy subjects. This effect should be considered in the rehabilitation program of patients with CAI.</p>		
Key words	1.	chronic ankle instability.
	2.	cervical proprioception.
	3.	cervical reposition error.
	4.	ankle ligaments.
	5.	cervical active repositioning accuracy.
	6.	Cumberland ankle instability tool (CAIT).
Classification number	:	000.000.
Pagination	:	84 p.
Arabic Title Page	:	تأثير العلاج الكهرومغناطيسي على وظائف اليد لدى الاطفال المصابين بالحروق.
Library register number	:	6347-6348.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Hossam El-Deen Ibrahim Mousa.
Title	:	Cardiovascular And Ventilatory Pulmonary Function Risks Related To Obese Children And Adolescents In Kafr El-sheikh Governorate.
Dept.	:	Department of Basic Science.
Supervisors	1.	Soheir Shehata Rezk-Allah.
	2.	Gehan Mosaad Abd El-Maksoud.
	3.	Nadia Kamal Marie.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Obesity in children and adolescents and its health impact is widely handled for study in late time, Egypt one of the countries which has a high rate of obese population in Africa, Kafr El-Sheikh is one of the Delta governorates, Kafr EL-Sheikh is a rural country, the rural life may have an effect on the feeding style and hence body weight in children and adolescents. Purpose of the study: To investigate the effect of excess body weight of children and adolescents on cardiovascular capacities (CVCs) and ventilatory pulmonary functions (VPFs) in Kafr EL-Sheikh Governorate Public School's students. Participants: Six hundred and fourteen children and adolescents of normal weight, overweight and obese according to their BMI% were randomly selected from Kafr EL-Sheikh Governorate primary, middle and high Schools their ages ranged from 6 to 18 years from both genders. Methods: Students were assigned into 3 groups according to their school grade (Group A: primary school age (from 6 to 11 years n = 206 males =100 females =106), group B: middle school age (from >11to15 years n = 205 males =102 females =103) and group C: high school age (from >15to18 years n = 203 males =103 females =100). Each group was assessed for CVCs and VPFs. Results: There was a significant difference of CVCs and VPFs between normal, overweight and obese students in all grades. Pairwise comparison revealed a significant difference of CVCs and VPFs between normal and excess body weight students in all grades, a significant difference of CVCs, tidal volume (TV) and inspiratory reserve volume (IRV) between overweight and obese students in primary and high schools only, a significant difference of the rest of VPFs between overweight and obese students in primary schools only. Conclusion: Excess weight has a negative impact on CVCs and VPFs in children and adolescents. Overweight is as dangerous as obesity that may lead to cardiovascular and Ventilatory pulmonary functions risks especially in middle and high Schools.</p>		
Key words	1.	Adolescents,
	2.	Obesity.
	3.	Cardiovascular, Children
	4.	Ventilatory pulmonary functions.
	5.	Children in Obesty.
	6.	Adolescents in Obesty.
	7.	Kafr El-sheikh Governorate.
Classification number	:	000.000.
Pagination	:	115 p.
Arabic Title Page	:	مخاطر القلب والأوعية الدموية المرتبطة بالاطفال والمراهقين البدناء في محافظة كفر الشيخ.
Library register number	:	6767-6768.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Islam Moustafa Arfeen
Title	:	Validity And Reliability Of Arabic Version Of Lysholm Knee Scale In Knee Osteoarthritis Patients.
Dept.	:	Department of Basic Science.
Supervisors	1.	Mohamed Hussein el Gendy.
	2.	Magda Gaid Sedhom.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Knee osteoarthritis (OA) is a chronic degenerative and progressive condition affecting physical function. So, it is necessary to measure physical function in knee OA. Purpose: The purpose of this study was to test face and content validity, feasibility and internal consistency and test retest reliability of Arabic-language version of Lysholm knee scale in knee osteoarthritis patients Subjects and methods: Two expert panels (first consists of eight experts and second consists of seven experts) and 40 patients there age ranging from 40 and 76 years with knee OA participated in this study, 80 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. Face validity, content validity, feasibility, internal consistency reliability and test retest reliability were statistically analyzed. Results: The study showed that the Arabic version of Lysholm knee scoring scale has excellent face validity as scale index of clarity equal 91.66%, also it has excellent content validity of 89.16%, Regarding The scale feasibility; all items were filled in less than 5 minutes. Cronbach's alpha equaled .853 and spearman's rank correlation coefficient between test and retest was 0.935 Conclusion: Arabic version of Lysholm knee scale has face and content validity, feasibility and internal consistency and test retest reliability enough to measure the physical function in knee osteoarthritis patients.</p>		
Key words	1.	Validity – Reliability
	2.	lysholm knee scale.
	3.	Knee.
	4.	osteoarthritis
	5.	Arabic Version Of Lysholm.
Classification number	:	000.000.
Pagination	:	99 p.
Arabic Title Page	:	أختبار صلاحية و مصداقية النسخة العربية من مقياس لايشلوم فى مرضى خشونة الركبة.
Library register number	:	6421-6422.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Mahmoud Salah Yousef Aboraya.
Title	:	Correlation between waist circumference and dynamic balance in young adults.
Dept.	:	Department of Basic Science.
Supervisors	1.	Neveen Abdel Latif Abdel Raouf.
	2.	Doaa Ibrahim Amin.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: There is a relationship between the weight of individuals and their ability to balance. Studying the relation between waist circumference and balance would help to establish risk factors leading to decreased balance and increased risk of falling, helping physiotherapists to define the high risk population and train them specifically to prevent falling and subsequent injury. Purposes: to investigate the correlation between waist circumference and dynamic balance in young adults. Methods: Thirty six obese subjects aged eighteen to twenty five years and their body mass index ranged from 30-34.99 kg/m² (obesity class 1) were recruited for this cross section study by verbal invitation. The dynamic postural balance was measured using Biodex balance system with one leg stance at stability level 4 and waist circumference was measured using stretch resistant tape. Results: revealed that in males there was a positive moderate significant correlation between waist circumference and dynamic postural balance indices (overall stability index, anteroposterior stability index and mediolateral stability index) with values of .54, .52 , .5 and P values as follows .01, .02, .03 consecutively. Unlike female group which displayed a negative weak non-significant correlation between the same variables with values of .28, .21, .34 and P values as follows .3, .45, .21 consecutively. Conclusion: there was moderate significant correlation between waist circumference and dynamic postural balance indices in obese male adults. However, there was a non-significant correlation between waist circumference and dynamic postural balance indices in obese female adults.</p>		
Key words	1.	Dynamic postural balance.
	2.	Waist circumference.
	3.	Obesity.
	4.	Young adults – balance.
Classification number	:	000.000.
Pagination	:	61 p.
Arabic Title Page	:	ارتباط محيط الخصر بالاتزان الحركي لدى البالغين.
Library register number	:	6437-6438.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Mai Ezzat Mousa Mohamed.
Title	:	Effect of Bilateral Versus Unilateral Use of Smartphone on Cross Sectional Area of Median Nerve.
Dept.	:	Department of Basic Science.
Supervisors	1.	Rania Reffat Ali.
	2.	Marwa Shafiek Mustafa saleh.
	3.	Khaled Abdelwahab Abo Dewan.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: The use of smartphones and mobile devices has become widespread, particularly among youth, and the possible impacts on hand function and structures have not been clarified during bilateral and unilateral use of smartphone. Purpose: This study was conducted to investigate and compare between bilateral and unilateral use of smartphone on cross sectional area of median nerve in healthy university students. Subjects and methods: Fifty-six students aged 18-25 years old were recruited from Faculty of Physical Therapy Kafrelsheikh University. By using noninvasive ultrasonography, cross sectional area (CSA) of median nerve was measured while subjects typed specific text on smartphone using bilateral hands then unilateral hand. Results: The paired t test showed significant increase in CSA of median nerve in unilateral than bilateral hands use of smartphone(P<.001). Conclusion: Unilateral hand use of smartphone has adverse effect on CSA of the median nerve. The evidence from this study suggest that bilateral hands use of smartphone is recommended to reduce risk of Carpal tunnel syndrome.</p>		
Key words	1.	Cross sectional area.
	2.	Smart phone single handed use.
	3.	Median nerve.
Classification number	:	000.000.
Pagination	:	66 p.
Arabic Title Page	:	تأثير الاستخدام الثنائي مقابل الفردي للهاتف المحمول علي مساحة المقطع العرضي لعصب اليد الأوسط.
Library register number	:	6383-6384.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Manar Fawzy Mohamed Hussein.
Title	:	Effect of Aerobic Exercises on Functional Capacity in Patients Under Hemodialysis.
Dept.	:	Department of Basic Science.
Supervisors	1.	Amira Hussein Draz, assistance
	2.	Rania Nagy Karkousha
	3.	Nesreen Ghareb El-Nahas
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Chronic kidney disease is the progressive deficiency of renal function for months and years that may reach life threatening stage. Purpose of the Study: This study was conducted to determine the effect of aerobic exercise versus resisted exercise on functional capacity in patients under hemodialysis. Subjects and Methods: Thirty patients of both sex with chronic renal failure participated in the study ,their age ranged from 25 to 35 years old and recruited from hemodialysis unit of benha University Hospital. They were randomly assigned into two equal groups (A&B). Group A received resistance exercise while Group B was received aerobic exercise. Both groups received 2 session per week for 2 months. Assessment were performed twice, before and after treatment: urea reduction ratio, 6 minute walk test and quality of life questionnaire. Results: The results showed that there were significant improvement in urea reduction ratio, 6minute walk test and quality of life questionnaire distance in both groups pre and post treatment while there were no significant difference between two groups after treatment. Conclusion: Both aerobic and resisted training exercise are effective in improvement of dialysis efficiency and performance. With no difference between both groups post treatment.</p>		
Key words	1.	chronic kidney disease.
	2.	aerobic exercise.
	3.	resisted exercise.
	4.	Aerobic Exercises on Hemodialysis.
Classification number	:	000.000.
Pagination	:	92 p.
Arabic Title Page	:	تأثير الانواع المختلفة من التمارين الهوائية علي القدرات الوظيفية علي مرضي الغسيل الكلوي.
Library register number	:	6671-6672.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Marwa Osman Hussien.
Title	:	Interrelation between body composition and age on muscle torque, activation and co-contraction in sedentary women in Cairo Government.
Dept.	:	Department of Basic Science.
Supervisors	1.	Amira Hussien Draz.
	2.	Nesreen Gharib Elnahas.
	3.	Wafaa Mohamed.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Obesity is becoming a problem of public health concern affecting different social and economic classes in Egypt, with little studies measuring the effect of obesity on musculoskeletal system, a relation between obesity and aging is very important to know the true impact of obesity. Aim: The aim of this study was performed to investigate the interrelation between body composition and aging on joint torque, muscle activation and co-contraction in sedentary women in Cairo government, Egypt. Design of the Study: Observational cross-sectional study Material and Methods: Eighty obese untrained females age selected from (18-70 years old) were participated in the study; they were assigned into equal two groups. Group 1 consisted of young aged females. Group 2 consisted of old aged females. planter flexion and dorsiflexion maximum voluntary contraction and agonist/antagonist ratio were measured by Biodex system 3 Pro Multi joint system isokinetic dynamometer, muscle activation and muscle co-contraction was measured by Electromyography (Neuro-EMG-Micro, Neurosoft, Ivanovo, Russia .Model: HPK-BOISB-0901-00, 2010). Results: There was a statistical effect of BMI on Pf MVC, DF MVC and Co-Contraction, also There was a significant effect of aging on PF MVC, and DF MVC but there was no significance of aging on Average PF, DF torque And Co-Contraction where all factors were affected by BMI*Age interaction, There were strong positive correlations between PF MVC, and BMI, W/H ratio in young females group. There were weak positive correlations between PF MVC, and BMI, W/H ratio, in old females group. BMI was the only predictor in a stable model. Conclusion: there is a marked effect of BMI on muscle strength contributors but a weak effect of aging where both BMI and aging can cause decrease in all previous factors.</p>		
Key words	1.	Obesity.
	2.	Aging on muscle torque.
	3.	Muscle strength.
	4.	Body composition.
	5.	Activation in Women.
	6.	Co-contraction in Women.
	7.	Women in Cairo Government.
Classification number	:	000.000.
Pagination	:	123 p.
Arabic Title Page	:	الارتباط بين مكونات الجسم و العمر علي عزم الدوران وتنشيط العضلات والانقباض المتزامن للمرأة المستقرة في محافظة القاهرة.
Library register number	:	6735- 6736.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Michel Fathy Fayek.
Title	:	Effect of manual versus mechanical lymphatic drainage on total lymphocytic count in Healthy subjects.
Dept.	:	Department of Basic Science.
Supervisors	1.	Maher Ahmed El Keblawy.
	2.	Abeer Mahmoud Yousef.
Degree	:	Master.
Year	:	2019.
Abstract	:	<p>Background: lymphocytes are one of the main components of the immune system, reaching an optimum level of lymphocytic count may improve immunity in healthy subjects or fasten recovery from diseases; therefore manual lymphatic draining effects were compared to mechanical lymphatic draining. Purpose: This study was conducted to investigate manual lymphatic drainage versus mechanical lymphatic drainage effects on total lymphocytic count in healthy subjects. Subjects: forty five healthy individuals of both genders were conducted to this study, their ages ranged from 20 to 40 years old Participants were randomly alphabetically chosen and divided into three equal groups each group included 15 subjects. Methods: this study was conducted in Nasser institute hospital outpatient physical therapy department Cairo Egypt; Group A (Experimental Group A): Fifteen participants received mechanical lymphatic drainage Course segmentally. Group B (experimental group B): Fifteen participants received segmental manual lymphatic drainage course. Group c (control group c): Fifteen participants did not receive any treatment approach. lymphocytic count were measured before and after every week through 5 consecutive weeks by medonic cell counter in lab. Results: lymphocytic counts increased gradually from the 0-Day to 1st week through the 2nd, 3rd, 4th and 5th week respectively in manual massage than mechanical massage and both than the control group. Conclusion: conducting manual lymphatic drainage increased lymphocytic count than that of mechanical drainage and both of experimental groups increased lymphocytic count than the control group of no drainage. lymphatic draining appeared to potentiate immunological improvements increasing circulating phenotypic lymphocytic markers. Manual lymphatic drainage technique may be an effective method for improving both patient and disease-oriented outcomes in relation to promoting immunity. Conclusion: It can be conclude that visceral decongestion of true pelvis can be used as a treatment in reducing severity of pain, reducing serum cortisol level and increasing blood supply to the uterus in primary dysmenorrhea</p>
Key words	1.	Manual lymphatic drainage.
	2.	Mechanical lymphatic draining
	3.	Lymphocytic count.
	4.	Healthy subjects- Lymphocytic count.
Classification number	:	000.000.
Pagination	:	82 p.
Arabic Title Page	:	تأثير التحفيز الليمفاوي اليدوي مقابل الميكانيكي علي عدد الخلايا الليمفاويه في الاشخاص الاصحاء.
Library register number	:	6635- 6636.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Mohamed Abd Elaziz Emam Mohamed.
Title	:	The Effect of Cervicogenic Headache on The Myoelectrical Activities of Suboccipital Muscles and Functional Activities of The Neck in Different Ages.
Dept.	:	Department of Basic Science.
Supervisors	1.	Fatma Seddik Amin.
	2.	Radwa Azmy.
	3.	Doaa Ibrahim Amin.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Headache is the most prevalent pain disorder, and thereby it represents a major health problem, disturbing both quality of life and work productivity. Cervicogenic Headache (CGH) is typically chronic, presented as unilateral cephalgia, and is believed to be acquired by musculoskeletal dysfunction of the neck. The suboccipital muscles are a group of four muscles located posteriorly at the highest point of the cervical spine. They have been identified as playing a role in cervical pain, and are therefore a target for rehabilitation and intervention in Cervicogenic Headache. Purpose of this study: To investigate the effect of cervicogenic headache on myoelectrical activities of suboccipital muscles, functional activities and Range of Motion (ROM) of neck. Subjects and methods: Sixty subjects of both sex They were assigned according to age into 4 equal group (Group A, B, C and D). Their age ranged from 18 to 35 years old for Group (A) and (C) with mean age of (28±5.31). Regarding Group (B) and (D) the patients' age range was 36-55 with mean age of (47.43±5.39). Patient Groups (Group (A) & (B)) and Healthy Groups (Group (C) and (D)) each subject sat on a comfortable chair and the head and neck were slightly flexed to allow access to the suboccipital region. They were assessed using Natus nicoleet Vikingquest Electromyography device was used to analyze the motor unit potentials by quantitative measures. Cervical Range of motion (CROM) device was used to measure cervical ROM. Neck disability index was also used to measure functional activities of neck. The assessment done once for every subject. Results: The results of current study concluded that there was non significant difference in myoelectrical activities between cervicogenic patients and normal subjects, there was statistical significant decrease in ROM values of flexion, right & left side bending and right & left rotation in G (A) & G (B) than G (C) & G (D), there was decrease in extension ROM in G (A) & G (B) than G (C) & G (D) but with non-statistical significant difference and Comparison between Neck disability index (NDI) showed that there was decrease in functional activities in G (A) & G (B) than G (C) & G (D). Conclusion: Using of EMG in the diagnosis of CGH yields negative results. The current study provides suggestion for suboccipital muscle alterations in patients with CGH but it cannot provide evidence for a contribution of the neck to chronic headache symptoms. There was decrease in ROM and functional activities in headache patients than normal subjects.</p>		
Key words	1.	Cervicogenic Headache.
	2.	Electromyography.
	3.	Neck disability index.
	4.	The suboccipital muscles.
	5.	Different Ages - Neck.
Classification number	:	000.000.
Pagination	:	141 p.
Arabic Title Page	:	تأثير الصداع ذي المنشأ العنقي على النشاط العضلي الكهربائي لعضلات تحت القذالي والأنشطة الوظيفية للرقبة في مختلف الأعمار.
Library register number	:	6265-6266.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Mohaya Ahmed El Hariry.
Title	:	Prevalence of Work Related Musculoskeletal Disorders Among Dentists.
Dept.	:	Department of Basic Science.
Supervisors	1.	Mohamed Hussein El Gendy.
	2.	Ghada Abdel-Moniem Abdallah.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: work related musculoskeletal disorders (WRMSD) are one of the most important occupational health issues in healthcare workers, the prevalence among Egyptian dentists has not been reported. Purpose: to determine the prevalence of musculoskeletal disorders among Egyptian dentists, the prevalence of musculoskeletal disorders between the different body parts and to determine the relationship between the dentists working position and musculoskeletal disorders present. Study Design: a cross sectional study. Subjects: Two hundred and eighty (140 males and 140 females) dentists aged from 22 to 32 years old and their body mass index ranged from 23to 25 kg/m² participated in the study and were divided equally into two groups according to their working positions: Standing position group (group A) 140 dentists and seated position group (group B)140 dentists were selected from educational and public hospitals in Egypt. Methods :The dentists were asked to answer modified Nordic questionnaire which assessed musculoskeletal disorders due to their work related musculoskeletal disorder in the last 12 month. Results: the reported 12 months prevalence of work related musculoskeletal disorders among Egyptian dentists was(46.06%)the prevalence of disorders according to body parts was as follow: neck(57.5%), upper back (55%), wrist and hand (52.5%), lower back (67.5%), hip (42.5%), knee (45%), foot and ankle (54.6%). According to the working position: The standing group(group A) had high prevalence of WRMSDs in the weight bearing joints as follow: hip region (71.5%), knee region (65%) and ankle region (80%) while the sitting group(group B) had high prevalence of WRMSDs in the lower back (60%).Conclusion: Egyptian dentists are prevalent to MSD as follow: the highest values were in the lower back (67.5%), neck region (57.5%), upper back (55%), foot and ankle (54.6%), wrist and hand (52.5)%, knee (45%) and the least one was hip (42.5%) According to the working position: The standing group (group A) had high prevalence of WRMSDs in the weight bearing joints as follow: hip region (71.5%), knee region (65%) and ankle region (80%) while, the sitting group(group B) had high prevalence of WRMSDs in the lower back (60%).</p>		
Key words	1.	Work related musculoskeletal disorder
	2.	Dentists.
	3.	prevalence.
Classification number	:	000.000.
Pagination	:	75 p.
Arabic Title Page	:	اضطرابات الجهاز العظمى العضلي المتعلقة بالعمل بين أطباء الأسنان.
Library register number	:	6271-6272.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Mona Mohammed Diab Ali.
Title	:	Fine Motor Skills Assessment In Children With Thalassemia.
Dept.	:	Department of Basic Science.
Supervisors	1.	Faten Hassan Abdelaziem.
	2.	Ghada Saad Abdelmotaleb.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Purpose: The study was conducted to assess fine motor skills in children with Beta thalassemia major .Subject, Materials and Methods: cross sectional study was conducted with forty children who received regular blood transfusion according to blood laboratory tests ranged in age from five to fifteen years old. They recruited from outpatient of hematology pediatrics department clinic of Banha University hospital and Health Insurance hospital- Banha- Qalyubia. They were classified according to age into two groups of equal number with no sex difference. Group A twenty children with age from 5years to ≥ 10years. Group B twenty children with age from more than 10years to ≥ 15years. Bruninkies Osertesky Test 2nd edition was used to assess fine motor skills with subtests (fine motor precision, fine motor integration, manual dexterity, upper limb coordination) was applied, Jabsen Hand function test was used to assess activities of daily living in the form of time of performance and Pneumatic Bulb Dynamometer to measure hand grip strength of both hands for all children. Results: children appear to be below the average category in fine motor precision and integration with no significance difference between boys and girls but they were in average category in upper limb coordination and manual dexterity with significance increase for boys than girls, and there were no significance difference between two age groups in BOT2. According to JTHFT there were significance difference between dominant hand and non-dominant hand otherwise there was no significance difference between boys and girls. According to age there was significance difference in them with significance decrease in time in group B, which ensured with grip strength measure that found significance increase difference in dominant hand than non-dominant hand, and significance increase of grip strength in group B. All subtests of BOT2 were in moderate positive correlation in the current study. In addition there were moderate negative significant correlations between JHFT sum and grip strength. Conclusion: In this study, the results showed that some children with Beta thalassemia major may have poor fine motor skills without respect to different ages and different sex.</p>		
Key words	1.	Fine motor skills.
	2.	Children With Thalassemia.
	3.	Thalassemia.
	4.	Assessment In Children.
Classification number		
Pagination	:	168 p.
Arabic Title Page	:	تقييم المهارات الحركية الدقيقة لدى الاطفال المصابين بمرض الثلاسيميا.
Library register number	:	6713-6714.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Rania Mohammed Ahmed Elsayed.
Title	:	Effect Of Ultrasonic Lipocavitation On Normal Lipid Profile In Healthy Subjects.
Dept.	:	Department of Basic Science.
Supervisors	1.	Awatef Mohammed Labib.
	2.	Amira Hussin Mohammed Draz
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Obesity has become a major social and health problem, and is a risk factor for many diseases. Purpose: this study was conducted to investigate the effect of low frequency ultrasonic lipocavitation on normal lipid profile of healthy subjects with localized fat deposits in abdomen. Design: pretest posttest repeated measure study. Subjects: Forty eight volunteer healthy women participated in the study, their age was (25- 45) years old and their body mass index (BMI) was (25- 35) Kg/m². Method: All participants adhered to balanced healthy diet to maintain body weight and received 12 sessions of ultrasonic lipocavitation on abdominal area along 6 weeks with session frequency of 2 sessions weekly and session duration of 25 min with ultrasonic Frequency of 32 -36 KHz, Output Power of 10-70 Watt/cm². Lipid profile, BMI, waist circumference (WC), abdomen circumference (AC), waist/hip ratio (WHR), body fat mass (BFM) and trunk fat (TF) were measured before treatment, after 4 weeks of treatment and repeated again at the end of treatment after 6 weeks. Results: there was a significant decrease in values of total cholesterol, triglycerides, low density lipoproteins, WC, AC, WHR, BFM and TF mass. Also significant increase in high density lipoproteins favoring "post 4 weeks of treatment" and " post 6 weeks of treatment " in compare to pretreatment and favoring post 6 weeks in compare to post 4 weeks of treatment. Conclusion: Low frequency ultrasonic lipocavitation was effective in improving lipid profile and reducing abdominal localized fat deposits</p>		
Key words	1.	ultrasound cavitation.
	2.	lipid profile
	3.	abdominal adiposity.
	4.	Healthy Subjects.
Classification number	:	000.000.
Pagination	:	125 p.
Arabic Title Page	:	تأثير الموجات فوق الصوتية التجويفي علي مستوى دهون الدم في الاشخاص الأصحاء.
Library register number	:	6289-6290.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Rasha Abd Elkader AbdElazeem.
Title	:	Work related musculoskeletal disorders among Egyptian physical therapists and years of experience.
Dept.	:	Department of Basic Science.
Supervisors	1.	Amir Mohamed Saleh.
	2.	Salah Eldin Bassit Elsayed.
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Background: Work related musculoskeletal disorders are induced or aggravated by work and the circumstances of its performance. Physiotherapists are at risk of work related musculoskeletal disorders due to the physically demanding nature of their job. Objective: To survey the relationship between work related musculoskeletal disorders and physical therapists duration of work in Egypt. Methods: The study was conducted on 835 physical therapists. They were assigned into four groups according to their duration of work, Their mean age \pm SD was 28.57 ± 5.31 years ranged between 21 and 51 years. They were working in educational, general, private, rehabilitation hospitals and private clinics in Egypt, to assess musculoskeletal disorders due to work in the last 12 months. The participants were asked to answer Modified Nordic questionnaire. Results: The form sent to 1000 physical therapists the response for the questionnaire was 83.5%. The twelve-month prevalence of back compliant due to work of the study groups were 97.6% with 95% confidence interval (CI) of 96.32- 98.44%. Life time prevalence of upper back pain was 27.18% with 95% CI of 24.27-30.3%.; and that of low back pain was 89.82% with 95% CI of 87.85-91.69%. There was a significant association between back disorders and duration of work ($p = 0.0001$).The highest low back pain life time prevalence of 95.74% was among physiotherapists with 7-10 years of work. The last twelve-month prevalence of back compliant was 100% among physiotherapists with 4-6 and 7-10 years of work. Conclusion: There was a high prevalence of work related back pain among Egyptian physiotherapists. Physiotherapists more than one year of working are at high risk of developing back disorders.</p>		
Key words	1.	work related musculoskeletal disorder
	2.	physiotherapy
	3.	Modified Nordic questionnaire
	4.	Egyptian physical therapists.
Classification number	:	000.000.
Pagination	:	72 p.
Arabic Title Page	:	إضطرابات الجهاز العظمى العضلى المتعلقة بالعمل بين اخصائى العلاج الطبيعى المصريين و سنوات الخبرة.
Library register number	:	6243-6244.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Reem Mohamed Atta El-Kaffas.
Title	:	Correlation between Scapular Muscle Endurance and Core Muscle Endurance in Subjects with Chronic Shoulder Pain.
Dept.	:	Department of Basic Science.
Supervisors	1.	Aliaa Attya Diab.
	2.	Yasser Mohamed Aneis.
	3.	Hanaa Kenawy Ata.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Subacromial impingement syndrome (SAIS) is the most common disorder of the shoulder. Although it is known that trunk control is an integral part of shoulder stability, the relationship between core muscle endurance and scapular muscle endurance among SAIS is not well established till now. Purpose: Examine the relationship between measures of scapular muscle endurance, core muscle endurance and pain level in subjects with SAIS. Subjects: 60 subjects of both sexes with mean age 25.66 ± 2.30 years, mean weight of 75.50 ± 11.79 Kg and mean height of 169.93 ± 10.28 cm participated in this study .They were divided into two equal groups; the control group and the study group who suffered from SAIS. Methods: Endurance of the serratus anterior and trapezius muscles was assessed using the scapular muscle endurance test. Modified Sorensen test, trunk flexor endurance test, and feet-elevated side-support test(FESS) were conducted to assess the core endurance. The pain level was assessed by shoulder pain and disability index. Results: Scapular muscle endurance test scores showed a correlation with the modified Sorensen test, trunk flexor endurance test, FESS on affected side and pain level ($r = 0.859, p = 0.0001$; $r = 0.845, p = 0.0001$; $r = 0.824, p = 0.0001$; $r = -0.668, p = 0.0001$) respectively. Conclusion: Patient with SAIS have deficient Scapular and core muscle endurance. Therefore, both elements needs immense attention and should represent an essential part of the evaluation and management process in patient with SAIS.</p>		
Key words	1.	Scapular muscle.
	2.	Subacromial Impingement Syndrome.
	3.	Endurance.
	4.	Core muscle.
	5.	Chronic Shoulder Pain.
Classification number	:	000.000.
Pagination	:	131 p.
Arabic Title Page	:	العلاقة بين تحمل عضلات الكتف وتحمل عضلات الثبات الجذعي في حالات ألم الكتف المزمن.
Library register number	:	6327-6328.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Samar Ahmed El- Sayed Mohamed.
Title	:	Adaptation to Arabic language, validity and reliability test of Boston carpal tunnel questionnaire in carpal tunnel syndrome patients.
Dept.	:	Department of Basic Science.
Supervisors	1.	Wadida H. El Sayed.
	2.	Magda Ramadan Zahran.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Carpal tunnel syndrome (CTS) is a frequent cause of compression neuropathy. So, it is necessary to measure function and symptoms which are highly important to patients with CTS and have the most impact on quality of life (QOL). Purpose: To translate and test the face validity, the content validity, the feasibility; the internal consistency reliability and the test retest reliability of Arabic-language version of Boston carpal tunnel questionnaire (BCTQ) in carpal tunnel syndrome patients. Methodology: Two expert panels (each consists of ten experts) and 50 patients with carpal tunnel syndrome participated in this study, 95 sheets (test and retest sheets) were filled out. Forward translation, development of preliminary initially translated version, backward translation, development of the pre-final version, testing of pre-final version using experts then testing of the final version on patients was done. Index of clarity, expert proportion of clearance, index of content validity, expert proportion of relevance, descriptive statistics, missed item index, Cronbach's alpha and Spearman's rank correlation coefficient were used for statistical analysis. Results: The study showed that scale index of clarity equals 87.14%, the mean proportion of clearance equals 87.14%, scale index of content validity equals 96.67%, and the mean proportion of relevance equals 96.67%. The scale items were filled by 95% in all sheets. The scale needed less than 7 minutes to be filled. Cronbach's alpha equals 0.915 (0.877, 0.915) and all Spearman's correlations between test and retest results were statistically significant, r equals 0.995. Conclusion: Arabic-language version of the BCTQ has face and content validity, feasibility, internal consistency and test retest reliability enough in assessment of carpal tunnel syndrome patients.</p>		
Key words	1.	Validity.
	2.	Reliability.
	3.	Boston carpal tunnel questionnaire.
	4.	Carpal tunnel syndrome.
	5.	Boston questionnaire in Arabic language
Classification number	:	000.000.
Pagination	:	122 p.
Arabic Title Page	:	المواءمة للغة العربية لإختبار صلاحية ومصداقية إستبيان بوسطن علي مرضي متلازمة النفق الرسغي.
Library register number	:	6685-6686.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Sara Abd El-wahab Fetoh.
Title	:	Effect of Extensive Use of Smart Phones on The Functions of the Upper Extremity.
Dept.	:	Department of Basic Science.
Supervisors	1.	Mohamed Hussein El-Gendy.
	2.	Ibrahim Mohamed Ibrahim.
	3.	Dr. Rania Nagy Karkousha
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Extensive use of smart phones can be associated with physical health related problems. Purpose of the study: was to investigate the effect of smart phones extensive use on the functions of the upper extremity, median and ulnar conduction velocity and hand grip strength. Methods: one hundred normal subjects with their age ranging from 18 to 25 years were divided into two equal groups. Group A represented the extensive smart phone users for minimum 3-6 hours per day while Group B represented the non-extensive smart phone users for less than 2 hours per day. Electromyography was used for measuring conduction velocities of the median and ulnar nerves, hand dynamometer was used to measure hand grip strength and disabilities of arm, shoulder and hand scale was used for assessment of upper extremity function. Results: The results showed that there were no statistical significant differences regarding hand grip strength ($p=0.999$) and disabilities of arm, shoulder and hand scale ($p=0.980$) between both groups , while there were statistical significant decrease in conduction velocity of ulnar nerve at forearm level ($p=0.0001$) and prolonged motor and sensory distal latencies of median nerve at wrist level ($p=0.0001$) in group A. Conclusion: Extensive usage of smart phones is a predisposing factor for affection of ulnar and median nerves, but almost doesn't affect the function of the upper extremity and hand grip strength.</p>		
Key words	1.	extensive smartphone use
	2.	disabilities of arm
	3.	shoulder and hand scale
	4.	hand grip strength.
	5.	Smart Phones - Upper Extremity.
	6.	nerve conduction velocity.
Classification number	:	000.000.
Pagination	:	97 p.
Arabic Title Page	:	تأثير الاستخدام المفرط للهواتف الذكية على وظائف الطرف العلوي.
Library register number	:	6483-6484.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Wafaa Kamel Salib Rezkalla.
Title	:	Multimodal approach of electrotherapy versus myofascial release in patients with chronic mechanical neck pain.
Dept.	:	Department of Basic Science.
Supervisors	1.	Mohammed Hussien El-Gendy.
	2.	Yasser Ramzy Lasheen.
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Mechanical neck pain is highly common musculoskeletal disorder and the leading cause of disability worldwide. It is also associated with decreased quality of life and productivity of workers. Purpose: The purpose of this study was to investigate and compare which is more effective the multimodal approach of electrotherapy or myofascial release on pain, ROM and functional restriction in patients with chronic mechanical neck pain. Subjects: 60 patients of both genders were diagnosed by orthopedist in shobra general hospital Cairo Egypt with chronic mechanical neck pain, their age was ranged from 18-40 years, were randomly assigned into 3 groups. Group A: 20 patients received multimodal approach of electrotherapy (Low Level LASER Therapy, Interferential Current, Ultrasound) and traditional therapeutic exercises in form of stretch and strength three times a week for 4 weeks. Group B: 20 patients received myofascial release therapy and traditional therapeutic exercises in form of stretch and strength three times a week for 4 weeks. Group C: 20 patients received traditional therapeutic exercises in form of stretch and strength three times a week for 4 weeks. Methods: by VAS for pain, CROM for cervical ROM and NDI for functional restriction before and after 4 weeks. Results: Multiple pairwise comparison tests (Post hoc tests) revealed that there was no significant difference between multimodal approach of electrotherapy (group A) and myofascial release therapy (group B) on pain intensity level, cervical ROM and functional restriction. While, there was significant difference between them and traditional therapeutic exercises (group C) where they were more effective than (group C). Conclusion: No significant difference between Multimodal approach of electrotherapy and Myofascial release therapy and both are effective in treatment of patients with chronic mechanical neck pain</p>		
Key words	1.	Multimodal approach.
	2.	Chronic mechanical neck pain.
	3.	Myofascial release.
	4.	Electrotherapy.
Classification number	:	000.000.
Pagination	:	134 p.
Arabic Title Page	:	أسلوب متعدد الوسائط للعلاج الكهربائي مقابل الانبساط العضلي الليفي في المرضى الذين يعانون من الألام الميكانيكية المزمنة للرقبة.
Library register number	:	6745-6746.

**ELECTRONIC GUIDE TO THESES APPROVED BY
DEPARTMENT OF BASIC SCIENCE
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Yahya Zakaria Mohamed.
Title	:	Effect of Cervical Radiculopathy on Handgrip Strength in Egyptian Dentists.
Dept.	:	Department of Basic Science.
Supervisors	1.	Magda Gaid Sedhom and Ass
	2.	Mary Kamal Nassif
Degree	:	Master.
Year	:	2019.
Abstract	:	
<p>Background: Dentistry demands high accuracy and dentists frequently assume a rotated and forward head posture. This produces high static load in the neck muscle leads to imbalance or cervical instability. Purpose of this study: was to investigate the effect of cervical radiculopathy on handgrip strength in Egyptian dentists. Participants and method: Case control study was used. One hundred right handed dentists were selected from different hospitals at Cairo and Giza as follow: October 6 university, MUST university , MSA university and KASR EL AINY ORAL AND DENTIST medical school with age ranging from 25 to 35 years old and with work experience from 3 to 10 years. Dentists were stratified into two equal groups; cervical radiculopathy; group A; Uni-lateral cervical radiculopathy, confirmed with a positive Spurling sign as well as a score above 30 of neck disability index and has pain 3 months prior to assessment . Control group; group B; healthy dentists with no pain experience 3 months prior to the study. Outcome measures; handgrip strength was measured by Jamar handgrip dynamometer and neck disability index. Results: There was a significant decrease of the handgrip strength in group A when compared with that of group B as the mean \pm SD handgrip strength of group A was 29.48 ± 4.29 kg while that of group B was 47.72 ± 5.21 kg. There was a strong negative correlation between handgrip strength and NDI ($r = -0.8$, $p = 0.0001$) . Conclusion: based on the findings of this study, there was a significant decrease of the handgrip strength in dentists suffering from unilateral cervical radiculopathy compared to healthy pain free dentists.</p>		
Key words	1.	Cervical Radiculopathy
	2.	Handgrip Strength.
	3.	Dentists.
	4.	Egyptian Dentists Handgrip.
Classification number	:	000.000.
Pagination	:	56 p.
Arabic Title Page	:	تأثير الاعتلال الجذور العنقية على قوة اليد في أطباء الأسنان المصريين.
Library register number	:	6627-6628.