Department of Basic Science
Doctoral Degree
2019

Author	**:**	**Al Shaymaa Shaaban Abdelazeim.**
Title	**:**	**Integrated Neuromuscular Inhibition Technique Versus Kinesiotape on Upper Trapezius Myofascial Trigger Points: A Randomized Clinical Trial.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Haytham M. Elhafez.**
	2.	**Omaima M. Ali Kattabei.**
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Degree	**:**	**Doctoral.**
Year	**:**	**2019.**
Abstract	**:**	

Objective: This study was designed to investigate the effects of integrated neuromuscular inhibition technique (INIT) versus kinesiotape (KT) on upper trapezius myofascial trigger points. Methods: Sixty subjects with active trigger points at both side (53 females and seven males) were divided randomly into three equal groups. Group "A" received INIT three times/week while group "B" received KT twice/week for four weeks. Group "C" (control group) didn't receive any treatment but follow instructions. Visual analogue scale (VAS), Pressure pain threshold (PPT), Arabic neck disability index (ANDI), Cervical range of motion (CROM) and muscle amplitude (RMS) were used to evaluate subjects at two intervals (pre-treatment and post-treatment). Results: Statistical analysis shown that there was a significant change within-group of VAS, PPT, ANDI, CROM and RMS pre-post treatment at groups A, B and C as ($p<0.05$). Between-group analysis there was no significant change in pre value of all variables as ($p>0.05$) while post-treatment there was a significant change in all variables as ($p<0.05$). Conclusion: INIT and KT are most effective methods in the management of subjects with active trigger points at upper trapezius myofascial trigger points with superiority for INIT.

Key words	**1.**	**Integrated Neuromuscular Inhibition Technique.**
	2.	**Kinesiotape.**
	3.	**Myofascial Trigger Points.**
	4.	**Upper Trapezius Myofascial Trigger Points.**
	5.	**Randomized Clinical Trial.**
Classification number	**:**	**000.000.**
Pagination	**:**	**105 p.**
Arabic Title Page	**:**	**تقنية التثبيط العصبي العضلي المتكاملة مقابل شريط الكينسيو على نقاط الألم العضلي الليفي في الجزء العلوي من العضلة شبه المنحرفة: دراسة عشوائية.**
Library register number	**:**	**6541-6542.**

Author	**:**	**Atef Abdul Alim Abdul Halim.**
Title	**:**	**Positional release technique versus post isometric relaxation technique in treatment of cervicogenic headache.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Salwa Fadl Abd Elmageed**
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	3.	**Hany Mohamed Hamed**
Degree	**:**	**Doctoral.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Soft tissues of the neck are a common cause of cervicogenic headache (CGH).The purpose of this study: To compare between the effect of positional release technique (PRT) and post isometric relaxation (PIR) technique in patients with CGH. Patients and method: Thirty patients of CGH have been taken in the study. They were selected from Kafer El sheikh general hospital. They were randomly assigned into 2 groups. Group A consisted of 15 patients with mean age 45.86±8.825 years; who had received PRT for upper trapezius , sternocleidomastoid muscles and suboccipital muscle with hot pack, and group B consisted of 15 patients with mean age 43.66±8.39 years underwent PIR for the same muscles with hot pack. Intervention was given for 9 sessions (3 sessions / week). Outcome measures taken were visual analogue scale (VAS), neck disability index (NDI) and cervical range of motion (ROM) before treatment and post the 9^{Th} session. Results: Both groups showed significant improvement in VAS, NDI, cervical extension, RT and LT side bending and RT rotation. There was non-significant improvement of flexion ROM at both groups at post treatment in compare to pretreatment (P-value =0.12). There was non-significant improvement of LT rotation ROM at group (A) at post treatment in compare to pretreatment (P-value =0.194). There was non-significant difference between both groups on pain, NDI, flexion, bilateral rotation and bilateral side bending cervical ROM while there was significant difference between both groups on cervical extension in favor to group A (P-value=0.041). Conclusion: Both treatments were effective in reducing pain and decreasing NDI and improving all cervical ROM except cervical flexion at both groups and LT rotation at group A. There is no significant difference between PRT and PIR on pain, NDI and Cervical flexion, extension, bilateral side bending and bilateral rotation ROM. Positional release technique is more effective than PIR for increasing cervical extension ROM in patients with CGH.

Key words	**1.**	**Cervicogenic headache.**
	2.	**Post isometric technique.**
	3.	**positional release technique.**
Classification number	**:**	**000.000.**
Pagination	**:**	**85 p.**
Arabic Title Page	**:**	**تقنية ا لانفراج الوضعي مقابل استرخاء ما بعد إنقباض متساوي الشدة في علاج الصداع العنقي.**
Library register number	**:**	**6269-6270.**

Author	**:**	**Haidy Henry Fakhry Maher.**
Title	**:**	**Focused Extracorporeal Versus Radial Shock Wave Therapy In Treatment Of Chronic Lateral Epicondylitis (Randomized Control Trial).**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ragia Mohamed Kamel.**
	2.	**Soheir Shehata Rezk Allah.**
	3.	**Hassan Husein Ahmed.**
Degree	**:**	**Doctoral.**
Year	**:**	**2019.**
Abstract	**:**	

Background: lateral epicondylitis is a painful condition affecting the tendinous tissue of the origins of the wrist extensor muscles at the lateral epicondyle of the humerus, leading to impaired of function of the affected limb. Therefore it can have a major impact on the patient's social and professional life.**Objective:** To compare the therapeutic effect of Focused shock wave therapy versus Radial shock wave therapy in patient with chronic lateral epicondylitis. **Subjects, Material and Methods:** A total of 45 subjects of both genders participated in the current study, 45 patients (31 females and 14 males) with chronic lateral epicondylitis. The participants' ages ranged from 30 to 60 years. The mean values (± SD) of age in Focused shock wave therapy, Radial shock wave therapy and convential physical therapy groups were 41.07 ± 7.73 yrs., 41.07 ± 7.43 yrs. and 42.93 ± 6.61 yrs., respectively. They were recruited from orthopedic outpatient clinics. Exclusive criteria were subjects who had other co morbidities which affect results. They were randomly assigned into three equal groups 15 patients each group. Focused extracorporeal shock wave therapy group, Radial shock wave therapy group, and control group received conventional physical therapy only.The three groups received conventional physical therapy program. Focused shock wave therapy and Radial shock wave therapy were applied with frequency one a week for alternative weeks on the maximum of 3 sessions (6 weeks).All patients were delivered 2000 impulses per session (4 HZ, 0.12 mj/mm^2 Focused shock wave therapy and 8 HZ,2.4 bar Radial shock wave therapy, respectively). The conventional physical therapy program for all groups was 12 sessions, two sessions per week (6 weeks). Pain assessed by visual analogue scale and by thomsen test and muscle strength by handheld dynamometer (HHD).**Results:** There were statistically significant improvements in post-intervention and follow-up Pain pressure test, pain at work, and Thomsen test in Focused shock wave therapy and Radial shock wave therapy groups. Focused shock wave therapy had significantly improved muscle force. As for the conventional physical therapy, no significant difference was found between the pre-, post-intervention and follow-up values (P > 0.05). Bonferroni correction test revealed that there was a significant difference between Focused shock wave therapy versus Radial shock wave therapy and Focused shock wave therapy versus conventional physical therapy in Pain pressure test, pain at work and between Focused shock wave therapy versus Radial shock wave therapy, Radial shock wave therapy and conventional physical therapy and Radial shock wave therapy versus conventional physical therapy in Thomsen test. Shockwave treatment groups maintained the treatment effect at the 3 and 6 months follow up.*Conclusion*: Both Focused shock wave therapy and Radial shock wave therapy were effective in decreasing Pain pressure Comparison between median values of Thomsen test measured at different times of measurements in different studied groups test values, decreasing pain at work and decreasing Thomsen test provoking pain while Radial shock wave therapy they have no effect on muscle force in lateral epicondylitis.

Key words	**1.**	**lateral epicondylitis.**
	2.	**Radial shock wave therapy.**
	3.	**conventional physical therapy.**
	4.	**Focused shock wave therapy.**
	5.	**Pain.**
	6.	**Randomized Control Trial.**
Classification number	**:**	**000.000.**
Pagination	**:**	**176 p.**
Arabic Title Page	**:**	**الموجات التصادمية المركزية مقابل القطرية فى علاج التهاب فوق اللقمة العظمية الوحشية المزمنة (محاولة تجربة عشوائية)،**
Library register number	**:**	**6599-6600.**

Author	**:**	**Mahmoud Ibrahim Elsayed.**
Title	**:**	**New integrated exercise program versus Bracing in Adolescent Idiopathic Scoliosis.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Fatma Sedik Amin.**
	2.	**Mohamed Abdel-Monem Negm.**
	3.	**Aliaa Attyah Mohamed Diab.**
Degree	**:**	**Doctoral.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Idiopathic scoliosis is the most common structural spinal deformity in children and adolescents that affects about 2–3% of the population. Early identification and intervention has been shown to prevent the need for surgery by halting or slowing the progression of structural scoliotic curve. The Purpose of this study is to compare between the effect of integrated exercise program and bracing on Cobb's angle in adolescent idiopathic scoliosis. Subjects: Sixty subjects with Adolescent Idiopathic Scoliosis (54 females, 6 males), was divided into 2 equal groups. Group A consists of 30 subjects mean age (14.6±1.07SD) years, height (1.52± 0.07) meters, mean weight (50.27± 5) kilograms; received the integrated exercises program for 6 months. The integrated exercises program consists of Schroth, Core stability, Yoga, Pilates exercises and Myofascial release. Group B consists of 30 subjects mean age (15.1±1.16) years, mean height (1.53±0.05) meters, mean weight (52.23±2.73) kilograms; used Boston Brace for 6 months. Cobb's angle was measured before and after treatment. Results: the mean of Cobb's angle in Group A before intervention (35.2±3.03) and after intervention (33.2±2.86) and in Group B before intervention (34.7±2.76) and after intervention (35.5±2.56) while the p value (between groups) in Group A before and after intervention was (0.000), in Group B before and after intervention was (0.006). Conclusion: There was a significant difference in both groups before and after intervention. The integrated exercise program was more effective than Boston Brace in correcting Cobb's angle of Adolescent idiopathic scoliosis. There was a significant difference in the 11 variables used in PostureScreen Mobile assessment before and after Integrated exercise program intervention.

Key words	**1.**	**Adolescent Idiopathic Scoliosis.**
	2.	**Integrated Exercise Program.**
	3.	**Boston Brace.**
	4.	**Bracing in Adolescent.**
	5.	**Idiopathic Scoliosis.**
Classification number	**:**	**000.000.**
Pagination	**:**	**131 p.**
Arabic Title Page	**:**	**برنامج التمارين المتكاملة الجديد مقابل الدعامة الظهرية في الجنف مجهول السبب للمراهقين.**
Library register number	**:**	**6637-6638.**

Author	**:**	**Mahmoud Sabry Ahmed Asal.**
Title	**:**	**Contralateral versus ipsilateral neural mobilization of median nerve in patients with unilateral carpal tunnel syndrome.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Mohamed Hussein Elgendy.**
	2.	**Olfat Ibrahim Ali.**
	3.	**Amira Ahmed Labib.**
Degree	**:**	**Doctoral.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Carpal tunnel syndrome (CTS) is a common neuropathy caused by entrapment of the median nerve at the level of the wrist. Neural mobilization is one of the frequently used methods for treating CTS. Objective: The purpose of this study was to investigate and compare the effects of contralateral and ipsilateral neural mobilization of median nerve in cases of unilateral (CTS). Methods: forty five patients of both genders with ages ranged from 30-50 years old were diagnosed as unilateral mild to moderate CTS. They randomly assigned into three groups, each one included 15 patients, all groups received conventional treatment in form of TENS, U.S and infra-red. The first group received contralateral neural mobilization in form of upper limb tension test 1 (ULTT-1) plus conventional treatment, the second group received ipsilateral neural mobilization in the form of (ULTT-1) plus conventional treatment and the third group received only conventional treatment. All groups received 3 treatment sessions per week for 2 weeks. Computerized electromyography was used for measuring median nerve motor and sensory distal latencies before and after the treatment. Pain level and Functional level were measured by Upper Extremity Functional Scale (UEFS) and visual analogue scale (VAS) respectively. Results: There was a significant decrease in motor median latency, peak sensory latency and VAS and a significant increase in functional score post-treatment compared with that pretreatment in the three groups ($p < 0.05$). However, there was no significant difference between the three groups post treatment ($p > 0.05$). Conclusion: Neither contralateral nor ipsilateral neural mobilization had any additional effects in patients with CTS as regard to (1) improving electrodiagnostic measures of the median nerve (motor and sensory latencies), (2) decreasing pain (3) improving functional ability of the upper limb in patients with unilateral CTS.

Key words	**1.**	**Neural mobilization.**
	2.	**Contralateral neural mobilization.**
	3.	**Carpal tunnel syndrome.**
	4.	**Median nerve - unilateral carpal tunnel syndrome.**
Classification number	**:**	**000.000.**
Pagination	**:**	**88 p.**
Arabic Title Page	**:**	**التحريك العصبي للعصب الأوسط للجانب المقابل مقابل نفس الجانب في مرضي متلازمة النفق الرسغي أحادي الجانب.**
Library register number	**:**	**6237-6238.**

Author	**:**	**Mohamed Marzouk Mohamed Ragab.**
Title	**:**	**Effect of Cognitive Behavioral Therapy in Management of Chronic Cervical Radiculopathy.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Neveen Abdel-Latif.**
	2.	**Salah Eldin Bassit.**
	3.	**Enji Hamdy Elsawy.**
Degree	**:**	**Doctoral.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Cervical radiculopathy is a nerve root pathology that causes chronic physical and psychological disabilities. Treatment should not focus only on underlying pathology but also related psychological factors. Cognitive behavioral therapy integrated with physical therapy appear to be the hallmark treatment for chronic radicular pain. **Purpose:** to investigate the effectiveness of adding cognitive behavioral therapy to physical therapy in the short and medium term for physical and psychological disabilities in chronic cervical radiculopathy. **Methods**: Sixty patients from both gender with age between 45 and 65 years diagnosed as chronic spondylotic cervical radiculopathy were assigned randomly into two groups: Group A (control group):30 patients received a physical therapy program of manual therapy and therapeutic exercise for eighteen sessions over 6 weeks period (3 sessions/week). Group B (study group):30 patients received the same program as group (A) plus cognitive behavioral therapy. Neck pain and function through neck disability index, Pain-related anxiety through pain anxiety symptoms scale, and cervical range of motion were measured pretreatment as a baseline, immediately post-treatment, and at 6 months for follow up. **Results**: Mixed MANOVA for effect of treatment on mean values of outcome measures for groups (A) and (B) exposed that there was a significant difference for post-treatment and 6 months follow up compared with pre-treatment. Multiple pairwise comparisons determined the difference between both groups, for pre-treatment, there was no significant difference, but for post-treatment and follow up there was a significant improvement in study group (B) than control group (A) as P value was (0.0001). **Conclusion**: A multimodal approach of cognitive behavioral therapy combined with physical therapy program of manual therapy and therapeutic exercises yields greater improvement among pain anxiety, neck disability, and cervical range of motion in the short and medium term effects compared with physical therapy alone.

Key words	**1.**	**Cervical radiculopathy.**
	2.	**Pain anxiety symptom scale.**
	3.	**Neck disability index.**
	4.	**Multimodal approach.**
	5.	**Cognitive behavioral therapy.**
Classification number	**:**	**000.000.**
Pagination	**:**	**99 p.**
Arabic Title Page	**:**	تأثير العلاج السلوكي المعرفي في علاج اعتلال الجذور العنقية المزمن.
Library register number	**:**	**6549-6550.**

Author	**:**	**Mohamed Nabil Fiaad.**
Title	**:**	**Spinal manipulation versus mulligan mobilization in low back dysfunction.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Wadida H. El Sayed.**
	2.	**Ali M. Elzawahry.**
	3.	**Mary Kamal Nassif Takla.**
Degree	**:**	**Doctoral.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Low back dysfunction (LBD) is the most common complaint of the working age population, in addition to human suffering; it causes an economic burden due to the use of medical services and absence from work. The purpose of this study was to compare the effect of Spinal Manipulation with Mulligan lumbar mobilization on pain intensity level, functional impairment, and spinal mobility in patients with chronic LBD. Subjects: Forty five patients (24 male and 21 female) were diagnosed with chronic LBD, aged from 25 to 40 years. Method: Subjects were randomly divided into three groups (fifteen patients each); group A (control group) received conventional physical therapy program included Infrared and strength exercises for back and abdominal muscles. Group B received conventional physical therapy program and Spinal Manipulation technique. Group C received conventional physical therapy program and Mulligan lumbar mobilization technique. The treatment was applied three days/week for four weeks. Pain intensity level, Functional impairment and Lumbar flexion ROM was measured by Visual Analogue Scale, Oswestry disability scale and Inclinometer respectively. Measurements were taken at two intervals pre-treatment and post-treatment. Results: There were statistical differences among the three groups, where group B showed greater improvement in pain intensity level, functional impairment, and spinal mobility than other two groups. Conclusion: Spinal Manipulation technique was considered as an effective treatment for reducing pain intensity level, improving functional impairment and increasing lumbar range of motion in individuals with chronic LBD.

Key words	**1.**	**Low back dysfunction.**
	2.	**Spinal manipulation.**
	3.	**Mobilization with movement technique.**
	4.	**Inclinometer.**
	5.	**Oswestry disability scale.**
Classification number	**:**	**000.000.**
Pagination	**:**	**150 p.**
Arabic Title Page	**:**	**تحريك الفقرات مقابل التحريك بتقنية موليجان فى الخلل الوظيفى المزمن لأسفل الظهر.**
Library register number	**:**	**6667-6668.**

Author	**:**	**Rehab Abdel Hafiez Saleh**
Title	**:**	**Influence Of Electromagnetic Waves At Resonance Frequency On The Process Of Healing Of Induced Ligament Tear**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Haytham M. Elhafez.**
	2.	**Fadel Mohamed Ali.**
	3.	**Alyaa Atteya Diab.**
	4.	**Ibrahim Mohammed Ibrahim.**
	5.	**Prof. Dr. Ibrahim Mohammed Ibrahim.**
Degree	**:**	**Doctoral.**
Year	**:**	**2019.**
Abstract	**:**	

Objective: The aim of current study was to determine the resonance frequency of collagen and to investigate the influence of electromagnetic at resonance frequency on the process of healing of induced ligament tear. Subjects: Ten, 3 months old healthy male New Zealand White rabbits, weighting from 1.5 to 2 Kg were used in this study. The rabbits were randomly assigned into three groups: (the normal group) include 5 rabbits with intact medial collateral ligament of the left side of control group as reference, (the control group) included 5 rabbits with second degree medial collateral ligament injury of the right side, received daily care of wound and (the experimental group) included 5 rabbits with second degree medial collateral ligament injury of the right side, received electromagnetic waves with daily care of wound. Methods: Dielectric measurement for determining collagen resonance frequency, electromagnetic waves of 1.7 MHz for treatment of 2 degree medial collateral ligament injury and histological evaluation performed. Results: Indicated that the resonance frequency of collagen was 1.7 MHz, there was a highly significance increase in the diameter of fibroblasts ($p < 0.0001$), a highly significance increase in collagen thickness ($p<0.0001$) and the arrangement of collagen in wavy (crimped) pattern resemble the normal ligament was very clear in the experimental group. Conclusion: electromagnetic waves could resonate with collagen frequency and enhance ligament remodeling. This study may be considered as a novel treatment protocol of ligament injury

Key words	**1.**	**electromagnetic waves.**
	2.	**Resonance frequency.**
	3.	**Induced ligament tear.**
	4.	
Classification number	**:**	**Healing Of Induced Ligament Tear**
Pagination	**:**	**119 p.**
Arabic Title Page	**:**	**تأثير الموجات الكهرومغناطيسية عند التردد الرنينى على عملية إلتئام قطع الرباط المستحث.**
Library register number	**:**	**6757-6758.**

Author	**:**	**Sabah Mohamed Eissa Alkady**
Title	**:**	**Efficacy of Mulligan Mobilization Versus Muscle Energy Technique in Chronic Sacroiliac Joint Dysfunction**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ragia Mohammed Kamel.**
	2.	**Enas Abu Taleb.**
	3.	**Yasser Ramzy Lasheen.**
	4.	**Fatma Alshaarawy.**
Degree	**:**	**Doctoral.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Sacroiliac joint dysfunction represents 15% of low back pain conditions. If sacroiliac joint is hypomobile, it cannot absorb forces causing musculoskeletal dysfunction. Purpose: This study was conducted to compare between Mulligan mobilization versus muscle energy technique in chronic sacroiliac joint dysfunction. Subjects: 45 chronic sacroiliac joint dysfunction patients (37 females and 8 males), their age ranged between 30 to 39 years divided into three groups. Methods: Group A received Mulligan mobilization with movement (3 sets with 10 repetitions for 12 sessions 3 sessions per week for 4 weeks) plus traditional treatment program formed of ultrasound, infrared and therapeutic exercise. Group B received muscle energy technique (3 times per session for 12 sessions, 3 sessions per week for 4 weeks) plus traditional treatment program. Group C (control group) received traditional treatment program only. Doppler imaging of vibration, palpation meter, visual analogue scale were used to evaluate patients before and after treatment. Results: A statistical improvement in right and left sacroiliac mobility in Mulligan mobilization group with a mean difference (4.54, 5.6) threshold units. A statistical significant decrease of anterior pelvic tilting angle in Mulligan mobilization group and muscle energy technique groups with a mean difference (3.13, 2.6) degrees. The 3 groups showed a statistical significant decrease in pain with a mean difference 5.2 , 4.14 and 3.2 for groups (A), (B) and (C) consecutively. Mulligan mobilization group showed a statistical high detectable difference in right and left sacroiliac mobility more than other groups ($p < 0.0001$). A significant difference between males and females in anterior pelvic tilting angle in group (A) ($p < 0.006$). Conclusion: Mulligan mobilization is more effective than muscle energy technique in improving range of motion in patients with chronic sacroiliac joint dysfunction.

Key words	**1.**	**Sacroiliac joint dysfunction.**
	2.	**Muscle energy technique.**
	3.	**Mulligan mobilization**
	4.	**Doppler imaging of vibration.**
Classification number	**:**	**000.000.**
Pagination	**:**	**212 p.**
Arabic Title Page	**:**	**تاثير التحريك بطريقة موليجان مقابل تقنية الطاقة العضلية على الخلل العجزي الحرقفى المزمن.**
Library register number	**:**	**6763-6764.**

Author	**:**	**Yasmin Mohammed Safwat El-khateeb.**
Title	**:**	**Influence of Scapular Stabilization Exercises on Asymptomatic Forward Head Posture.**
Dept.	**:**	**Department of Basic Science.**
Supervisors	**1.**	**Ragia Mohamed Kamel.**
	2.	**Amir Nazih Wadee.**
	3.	**Yasser Ramzy Lasheen.**
Degree	**:**	**Doctoral.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Forward head posture is one of the most causal factors affecting scapular kinematics and kinetics. Scapular stability depends on the surrounding musculature. Purpose: The aim of this study was to investigate the effect of scapular stabilization exercises on Forward head posture. Subjects, Materials and Methods: Forty participants aged from 20-40 years with mean 28.72±1.70 years, both genders were included randomly assigned into two groups: Study group (A) received SSE with postural correctional exercises while control group (B) received PCE only three sessions per week for ten weeks. Cranio-vertebral angle (CVA), Neck flexion endurance (NFET), Neck extension endurance (NEET), muscle amplitude (RMS) of upper trapezius and serratus anterior both sides and cervical ROM in all directions were measured pre-treatment and post treatment. Results: MANOVA showed that there were significant changes within-group of CVA, NFE, NEE, RMS and CROM pre-post treatment at groups A, and B as (p=0.000). In-between-group analysis showed no significant change in pre values of all variables as (P=0.716, 0.244, 0.190, 0.617, 0.099, 0.195, 0.591, 0.440, 0.726, 0.304, 0.93, 0.845, 0.701) respectively while post-treatment there was a significant change in post values of all variables as (p=0.000) except post-treatment muscle activity for upper trapezius and serratus anterior muscles on both sides as (P= 0.296, 0.0152, 0.078, 0.176). Conclusion: Scapular stabilization exercises is considered as an effective method in correcting FHP more than posture correctional exercises only

Key words	**1.**	**Scapular stabilization exercises.**
	2.	**Forward head posture.**
Classification number	**:**	**000.000.**
Pagination	**:**	**163 p.**
Arabic Title Page	**:**	**تاثير تمارين تثبيت لوح الكتف علي وضع الراس الامامي بدون اعراض.**
Library register number	**:**	**6787-6788.**