

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR MUSCULOSKELETAL DISORDER
AND ITS SURGERY**

PREPARED BY NERVEEN ABDELSALAM ABDELKADER AHMED

Physical Therapy Department for Musculoskeletal Disorder and Its Surgery

Master Degree
2012

Author	:	Amr Mohamed Hussein.
Title	:	Comparative Study Between Two Taping Techniques In Treatment Of Patellofemoral Pain Syndrome.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Manal Mohamed Ismail.
	2.	Hala Rashad El-Habashy.
	3.	Mona Hassan Gamal El-dein.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>Background: patellofemoral pain syndrome (PFPS) is a common knee disorder. Patient often complain from excessive lateral tracking and/or lateral tilt of the patella where vastus lateralis (VL) which is the lateral side active stabilizer of the patella is the generally considered to be more active than its medial counterpart the vastus medialis obliques (VMO). Objective: The purpose of this study was to compare between the effect of medial patellar taping technique and vastus lateralis inhibitory taping technique on pain intensity, EMG activity of VMO, VL and VMO/VL ratio in patients with PFPS. Methods: thirty patients had participated in this study; they were assigned randomly into two experimental groups. With age ranged from 19 to 39 years. <i>Group A:</i> consisted of 15 patients (6 females / 9 males) with mean age of 29.53 (\pm 9.546), received medial patellar taping, <i>Group B:</i> consisted of 15 patients (5 females / 10 males) with mean age of 30.33 (\pm 7.622), received VL inhibitory muscular taping technique. Patients were evaluated without and with tape for their pain severity, EMG activity of VMO, EMG activity of VL and VMO/VL ratio. Results: Both medial patellar taping technique and VL inhibitory are effective in decreasing pain, with medial patellar taping technique is more effective; Both Taping techniques are effective in improving EMG activity, and there were no significant differences between both groups, Conclusion: application of either medial patellar taping technique or vastus lateralis taping technique is effective in reducing pain, increase VMO activity, decrease VL activity and normalization of VMO/VL ratio, with medial patellar taping technique was more effective in decreasing pain intensity.</p>		
Key words	1.	Patellofemoral pain syndrome.
	2.	Taping Techniques.
	3.	electromyographic activity.
	4.	Pain Syndrome.
Arabic Title Page	:	دراسة مقارنة لأسلوبين من طرق الرباط اللاصق في علاج متلازمة ألم الركبة.
Library register number	:	2839-2840.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR MUSCULOSKELETAL DISORDER
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PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Ashraf Mohammed Senousy.
Title	:	Early Combined Endurance-Coordination Exercise Program For Postoperative Rehabilitation After Lumbar Laminectomy and Discectomy.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Salwa Fadl Abd Elmageed.
	2.	Manal Mohamed Ismail.
	3.	Hosam Salah Eldin Taha.
Degree	:	Master.
Year	:	2012.
Abstract	:	<p>The purpose of this study is to determine the effect of an early endurance-coordination exercise program on pain intensity, lumbar flexion ROM, trunk extensors endurance, and functional disabilities level of postoperative lumbar laminectomy and discectomy patients. Thirty male and female subjects who recently underwent a lumbar laminectomy and discectomy participated in this study. The endurance-coordination training group or group (A): this group consisted of fifteen patients and received endurance-coordination exercises accompanied with stretching exercises. The stretching-strengthening group or group (B): this group consisted of fifteen patients, and received strengthening exercises accompanied with stretching for 12 sessions over four week's period each other day. Each patient was evaluated pretreatment, 2 weeks and post treatment. The results of this study showed that there is a significant difference found between the two programs for low back pain intensity, lumbar flexion ROM, trunk extensors endurance, and functional disability. This significant difference indicated that endurance-coordination exercise program plus stretching is better than stretching-strengthening exercise program in the management and rehabilitation of postoperative Lumbar laminectomy and discectomy patients.</p>
Key words	1.	physical therapy.
	2.	Endurance.
	3.	Coordination.
	4.	Lumbar laminectomy.
	5.	discectomy.
	6.	early
Arabic Title Page	:	برنامج مبكر ومركب لتمارين التحمل والتوافق لتأهيل ما بعد جراحة استئصال الصفيحة الفقرية القطنية والغضروف القطني.
Library register number	:	2745-2746.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
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AND ITS SURGERY**

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	:	Faten Fathy Ibrahim Hassan.
Title	:	Assessment Of The Peak Torque Of Hip Abductors And Adductors In Adolescent Idiopathic Scoliosis.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Salwa Fadle Abd El-Majeed.
	2.	Ihab Mohamed Emran.
	3.	Mohamed Mohamed Ibrahim.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>Background: Idiopathic scoliosis is a three- dimensional deformity of the spine which concerns not only the vertebral column, but also the pelvis and the hips. Asymmetry within these areas may affect the progression of scoliosis. Purpose: was to compare the isokinetic torques for the hip abductors and adductors muscle groups in adolescent idiopathic scoliosis (AIS) with that of normal subjects. Subjects: isokinetic data were collected from twenty four AIS patients with age ranged between 10-20 years, from both gender with Cobb's angle between 15°- 45°, and twenty four normal subjects with age ranged from 10- 20 years. Methods: peak torque/body weight (PT/BW) was recorded from hip abductors and adductors at isokinetic concentric contraction mode with a speed of 90°/sec. Comparison between the mean values of different variables in the two groups was performed using unpaired student t test. P value less or equal to 0.05 was considered significant. Results: there were significant differences between PT/BW of hip abductors and adductors of patients with AIS and that of normal subjects with no significant difference between right and left sides in both groups neither for hip abductors nor for hip adductors. Conclusion: the results of this study support adding strengthening exercises for the hip abductors and adductors to the treatment program of patients with AIS.</p>		
Key words	1.	adolescent idiopathic scoliosis.
	2.	peak torque.
	3.	hip abductors.
	4.	Adductors.
	5.	isokinetic assessment.
	6.	Assessment of isokinetic.
Arabic Title Page	:	تقييم أقصى عزم للعضلات المبعدة والمقربة لمفصل الفخذ في حالات الجنف الغير محدد السبب للمراهقين
Library register number	:	2967-2968.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR MUSCULOSKELETAL DISORDER
AND ITS SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Haytham Mohamed Mohamed Gamal Eldin.
Title	:	Effect of Taping on Balance and Ankle Functional Activity after Chronic Lateral Ankle Sprain.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Nadia Abd Elazeem Fiaaz.
	2.	Nasef Mohamed Nasef.
	3.	Mona Hassan Gamal Eldin El Lathy.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>BACKGROUND: Lateral ankle sprain is an extremely common athletic injury; it causes functional problems and disabling complications. Treatment of ankle sprains and their dysfunctional sequels continues to challenge surgeons and therapists. OBJECTIVE: The purpose of the study was to compare the effect of ankle taping in addition to balance training and using balance training alone on improving balance and ankle functional activity after chronic lateral ankle sprain. METHODS: Thirty patients had participated in this study; they were assigned into two groups with age ranged from eighteenth to thirty five years old. Group A consisted of 15 patients (10 males and 5 females) with mean age (24.01 ± 1.23), received a selected balance training program in addition to taping the ankle joint with adhesive non elastic tape in the form of closed basket weave technique during training program. Group B consisted of 15 patients (6 males and 9 females) with mean age (23.18 ± 1.37) received the same balance training program as Group A but without taping the ankle. Treatment was given 3times/ week, for six consecutive weeks. Patients were evaluated pre and post treatment for their ankle functional activity using the foot ankle disability index (FADI) and for balance using the biodex balance system (BBS). RESULTS: The results revealed that there was a significant difference between both groups regarding the improvement in balance. While there was no significant difference between both groups regarding the improvement in ankle functional activity. CONCLUSION: Adding the non elastic tape to the balance training in treatment of chronic lateral ankle sprain significantly improved balance, but did not significantly improve the ankle functional activity.</p>		
Key words	1.	Taping.
	2.	balance training.
	3.	ankle functional activity.
	4.	chronic lateral ankle sprain.
Arabic Title Page	:	تأثير اللاصق الطبي على الإتزان و ال نشاط الوظيفي لمفصل الكاحل بعد التمزق المزمن للرباط الخارجي.
Library register number	:	2755-2756.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
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PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Karima Abdel Aty Hassan Mohamed.
Title	:	Influence Of Strengthening Of Hip abductors And External Rotators In Treatment Of Patellofemoral Pain Syndrome.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Ahmed Hassan Hussein.
	2.	AbdelAziz Mohamed Elsinger.
	3.	Manal Mohamed Ismail.
	4.	Mona Hassan Gamal Eldein.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>BACKGROUND: Patellofemoral pain (PFP) is a common musculoskeletal pain condition, especially in females. Decreased hip muscle strength has been implicated as a contributing factor, yet the relationships between pain, hip muscle strength and function are not known.</p> <p>OBJECTIVE: The purpose of this study was to investigate the effects of adding strengthening hip abductors and lateral rotators to knee exercises program on pain intensity, function and hip abductors and hip lateral rotators (eccentric and concentric) torques in patients with PFPS.</p> <p>METHODS: Thirty patients had participated in this study; they were assigned into two groups (study and control). With age ranged for eighty to thirty five years. Study group consisted of 15 patients (11 females and 4 males) with mean age 20.8 (± 2.73) years, received knee exercise program and hip strengthening exercises. Control group consisted of 15 patients (12 females and 3 males) with mean age 21.2 (± 3.27) years, received knee exercise program. Treatment was given 2-3 times/week (12-14 sessions), for 6 weeks. Patients were evaluated pre and post treatment for their pain severity, function of knee joint, hip abductors and external rotators concentric/eccentric peak torque.</p> <p>RESULT: the results revealed that there were significant improvement in pain and function between both groups, while there was improvement for all values for both group.</p> <p>CONCLUSION: Six weeks rehabilitation program focusing on knee strengthening exercises either supplemented by hip strengthening exercises or not effective in improving function, reducing pain and improving hip muscles torque in patients with PFPS. However, adding hip abduction and lateral rotation strengthening exercises seem to reduce pain and improve function more efficiently.</p>		
Key words	1.	Patellofemoral pain syndrome.
	2.	hip muscles.
	3.	Rehabilitation.
	4.	Patellofemoral Pain Syndrome.
Arabic Title Page	:	تأثير اضافة تقوية العضلات المبعدة وعضلات الدوران الخارجى لمفصل الفخذ فى علاج متلازمة ألم الرضفة.
Library register number	:	2743-2744.

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PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Mahmoud Ahmed Elbayomy Abd Elnaby.
Title	:	Exercise Therapy For Non Specific Low Back Pain: Systematic Review.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Ahmed Hassan Hussein.
	2.	Manal Mohamed Ismail.
	3.	Mona Hassan Gamal Eldein.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>BACKGROUND: Low back pain (LBP) is a common musculoskeletal pain condition. Exercise therapy is an important non pharmacological treatment approach. It is widely used treatment for LBP. OBJECTIVE: The purpose of this study was to assess the effectiveness of exercise therapy for non specific low back pain and to determine which type of exercise is the most effective for treatment of non specific (LBP). METHODS: A computer –aided search of Medline, physiotherapy evidence data base (PEDro) , EMBASE, cumulative index to nursing and allied health literature (CINAHL), manual alternative and natural therapy (MANTIS), the Cochrane controlled trial register databases was undertaken from January 1990 until December 2011 for randomized controlled trials of exercise therapy for non specific low back pain. Data were extracted and trials qualities were assessed. Results were summarized by using a rating system of four levels of evidence: strong, moderate, limited or contradictory or none. RESULT: Forty six trials were identified, the results concluded that the evidence support the effect of exercise therapy for chronic LBP patients, graded activity exercises for subacute LBP and no additional effect of exercises over no treatment for acute LBP. CONCLUSION: The evidence summarized in this systematic review indicates that exercise therapy is not more effective than no treatments or other conservative treatment for acute LBP. Moderate evidence suggests the effectiveness of graded activity exercises in subacute LBP, intensive balance and strengthening exercise program is not more effective than no treatment or other conservative treatment for subacute LBP. Exercises are effective at decreasing pain and improving function, strong evidence support the use of specific stabilization and McKenzie exercises for patients with chronic low back pain.</p>		
Key words	1.	non specific low back pain.
	2.	mechanical low back pain.
	3.	exercise therapy.
	4.	systematic review.
Arabic Title Page	:	العلاج بالتمارينات لآلام أسفل الظهر غير محددة السبب:مراجعة منظمة.
Library register number	:	3041-3042.

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PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Mohamed Farouk Abdel-Latif Soliman.
Title	:	Monthly hormonal fluctuations in relation to functional knee stability in adult female athletes.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Ahmed H. Hussien.
	2.	Manal M. Ismail.
	3.	Hatem H. Refaai.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>Knee stability is one of the hallmarks of sport injuries in female athletes. The purpose of this study was to provide a data base about knee functional stability in normal adult female athletes and to clarify the relations between phases of normal female menstrual cycle and functional knee stability. Methods: Fifty adult female athletic normal subjects were recruited for this study, their age ranged from 18-30 years. Each individual was tested three times during the phase of the normal female menstrual cycle (phase I: follicular phase, phase II: ovulation phase, and phase III: luteal phase) by two evaluation methods; first: using the Biodex System 3 – Pro Dynamometer Multi Joint Testing and Rehabilitation System as an assessment tool for isokinetic hamstrings to quadriceps ratio (HQR). Second: using functional performance testing (Four single leg-hopping tests). Results: The results of the study provided varied significant differences in status of functional knee stability represented in this study by six parameters (HQR at angular velocity of 60°/sec, HQR at angular velocity of 180°/sec, Single Hop for Distance, Timed Hop, Triple Hop, and Cross over Hop for distance), in relation to three phases of normal female menstrual cycle. HQR at 60°/sec showed no significant difference among the three phases of menstrual cycle, while HQR at 180°/sec showed significant difference between follicular phase and luteal phase, and no correlation with any of the three phases was shown by HQR at both angular velocities. The four Single leg hop tests showed strong correlation with the three phases of menstrual cycle. The four tests showed significant differences among the three phases which revealed a great chance for probably high risk of decreasing knee functional stability during luteal phase of a 28-days menstrual cycle. Conclusion: With the limitations of this study it can be concluded that distance and time functional hop tests parameters related to functional knee stability are strongly correlated to phases of normal menstrual cycle, while HQR at 60°/sec and 180°/sec angular velocities are not correlated to the same phases. The significant differences showed by results of single leg hop four tests reveal a probably high risk of decreasing knee functional stability during luteal phase of a 28-days menstrual cycle, and this concept should be considered in planning the training, gaming and rehabilitation programs for adult female athletes.</p>		
Key words	1.	Functional knee stability.
	2.	menstrual cycle phases.
	3.	isokinetic hamstring quadriceps ratio
	4.	single leg-hopping tests.
Arabic Title Page	:	التغيرات الهرمونية الشهرية وعلاقتها بالثبات الوظيفي للركبة في الرياضيات البالغات.
Library register number	:	2797-2798.

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PREPARED BY NERVEEN ABDEL SALAM ABD EL KADER AHMED

Author	:	Mohammed Ezzat Mohammed Shalaby.
Title	:	Scapular muscle training versus mobilization in treatment of shoulder impingement syndrome.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Ahmed Hassan Hussein.
	2.	Nadia Abdelazim Fayaz.
	3.	Khaled Elsayed Ayad.
	4.	Hatem Mohammed Elazizi.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>BACKGROUND: Shoulder impingement syndrome is the most common disorder of the shoulder, resulting in functional loss and disability in the patient it affects. OBJECTIVE: The study compared the combined effect of Cool's suggested exercises to correct scapular muscles imbalance and therapeutic exercises versus glenohumeral mobilization combined with the same therapeutic exercises in treatment of shoulder impingement syndrome. METHODS: Thirty patients had participated in this study; they were assigned randomly into two experimental groups. The first experimental group (A) consisted of 15 patients with a mean age 32.4(±6.05) years; they received Cool's suggested exercises with a program of therapeutic exercises. The second experimental group (B) which consisted of 15 patients with a mean age 32.53(±7.98) years; they received a combined program of mobilization techniques and therapeutic exercises identical to those applied to the first group. Treatment was given 3 times per week, each other day, for 4 consecutive weeks. Patients were evaluated pretreatment and posttreatment for shoulder pain severity, shoulder functional disability, shoulder flexion, abduction, internal rotation motions, and shoulder acromiohumeral distance (AHD) in adduction, abduction and loaded abduction using ultrasonography. RESULT: Patients showed significant improvement in all measured variables in both groups but between groups difference the first group show a more significant improvement than the second group in all measured variables. CONCLUSION: Both of the scapular exercises combined with therapeutic exercises and the combination of therapeutic exercises and mobilization had a significant effect on shoulder pain severity, shoulder functional disability, shoulder flexion, abduction, internal rotation motions, and (AHD) in adduction, abduction and loaded abduction. However, the combination of selected scapular exercises and therapeutic exercises were more effective than the therapeutic exercises and mobilization in the treatment of shoulder impingement syndrome patients.</p>		
Key words	1.	impingement syndrome.
	2.	scapular exercises.
	3.	therapeutic exercises.
	4.	joint mobilization.
	5.	acromiohumeral distance.
Arabic Title Page	:	تدريب عضلات لوح الكتف ضد التحريك اليدوى فى علاج متلازمة إنبشار الكتف.
Library register number	:	2923-2924.

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Author	:	Nagi Mohamed Awad.
Title	:	Early Activation Program of Rehabilitation Versus Protective Program After Arthroscopic Subacromial Decompression.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Manal Mohamed Ismail.
	2.	Ahmed Abd El-Samie.
	3.	Lillian Albert Zaky.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>Purpose: The purpose of this study was to investigate the effect of early activation program of rehabilitation versus protective program after arthroscopic subacromial decompression on pain, function and range of motion of the affected shoulder. Subjects: Thirty patients diagnosed as having shoulder impingement syndrome stage II Neer classification due to mechanical causes were referred after operation from arthroscopic surgeon for P.T to participate in this study. Methods: Patients were randomly assigned into two equal groups. The first experimental group consisted of 15 patients with a mean age of 38.47(+6.96) years; received early activation program after arthroscopic subacromial decompression surgery. The second experimental group consisted of 15 patients with a mean age of 39.67(+5.92) years; received protective program of rehabilitation after arthroscopic subacromial decompression surgery. Treatment was given 3 times per week, every other day, for 8 consecutive weeks. Patients were evaluated pretreatment and post-treatment for shoulder pain severity, shoulder functional disability, shoulder flexion, abduction, internal and external rotation motions. Results: Patients of both groups showed significant improvement in all of the measured variables. Statistical analysis between groups showed a more significant improvement in the first group than in the second group in all the measured variable. Conclusion: Both of early activation and protective programs had a significant effect on decreasing shoulder pain severity and shoulder functional disability. There was also increasing of shoulder flexion, abduction, internal rotation motions. However, the early activation program of rehabilitation was more effective than protective program as a rehabilitation after arthroscopic subacromial decompression surgery in the treatment of shoulder impingement syndrome patients.</p>		
Key words	1.	Arthroscopic subacromial decompression surgery.
	2.	early activation program of rehabilitation.
	3.	protective program of rehabilitation.
Arabic Title Page	:	برنامج تنشيط مبكر التأهيلي مقابل برنامج وقائي بعد عملية توسيع الضيق تحت عظمة النتوء الغرابي لرأس عظمة اللوح بالمنظار.
Library register number	:	3045-3046.

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PREPARED BY NERVEEN ABDEL SALAM ABDEL KADER AHMED

Author	:	Nehad Mohamed Abdel Nabi Mousa.
Title	:	The Efficacy of Hip Abductors and Extensors Strengthening Exercises in Treatment of Knee Osteoarthritis.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Ibrahim Magdy Elnaggar.
	2.	Mohamed Maher Elsaeid.
	3.	Lilian Albert Zaky.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>Purpose: Was to investigate the efficacy of hip abductors and extensors strengthening exercises in treatment of knee osteoarthritis. Subjects: Thirty patients diagnosed as unilateral knee osteoarthritis. Methods: Patients were randomly distributed into two equal groups. The first experimental group (A) consisted of 15 patients with a mean age of 54.13 (± 5.9) years; received infrared radiation followed by quadriceps strengthening exercises and hamstring strengthening and stretching exercises. The second experimental group (B) consisted of 15 patients with a mean age of 51.93 (± 7.52) years; received the same program of the first group associated with hip abductors and extensors strengthening exercises. Treatment: was given 3 times per week, each other day, for 5 consecutive weeks. Patients were evaluated pretreatment and posttreatment for knee pain severity, knee adduction moment, isokinetic strength of (quadriceps, hamstring), and functional status (20 m walking speed test, ascending and descending stair time test). Results: Patients of both groups showed a significant improvement in all the measured variables. Difference between groups the second group showed a significant improvement more than the first group in all the measured variables. Conclusions: Both of quadriceps strengthening exercises and hamstring strengthening, and stretching exercises and the same program associated with hip abductors and extensors strengthening exercises had a significant effect on decreasing knee pain severity, and knee adduction moment. Also there were increasing of isokinetic strength of (quadriceps, hamstring), and improvement of functional status (20 m walking speed test, ascending and descending stair time test). However, the combination of hip abductors and extensors strengthening exercises and quadriceps strengthening exercises and hamstring strengthening and stretching exercises was more effective than quadriceps strengthening exercises and hamstring strengthening and stretching exercises alone in the treatment of knee osteoarthritis patients.</p>		
Key words	1.	knee OA.
	2.	knee adduction moment.
	3.	exercise treatment.
	4.	hip muscles.
	5.	Hip Abductors Strengthening Exercises.
	6.	Hip Extensors Strengthening Exercises.
	7.	Knee Osteoarthritis.
Arabic Title Page	:	فاعلية تقوية العضلات المبعدة والباسطة للخذ في علاج خشونة الركبة.
Library register number	:	3031-3032.

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PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	:	Omar Medhat Mounir Hagag.
Title	:	Light therapy versus laser in treatment of recurrent lateral ankle sprain.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Nadia Abd Al-azeem Fiaaz.
	2.	Khaled Elsayed Ayad.
	3.	Hatem Ahmad El Azizi.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>Purpose: the purpose of this study was to compare between the effect of polarized, polychromatic, non-coherent, low energy light therapy and low level laser therapy on recovery of lateral ankle sprain. Subjects: Thirty patients diagnosed as grade I and II recurrent lateral ankle sprain. Methods: Patients were distributed randomly into two groups. The first group (A) consisted of 15 patients who received polarized light treatment, ice, ultrasound, edema management (compression and elevation). The second group (B) consisted of 15 patients who received low level laser therapy instead of light therapy in addition to the same program in group one. Treatment was given daily for 2 consecutive weeks. Patients were evaluated pre-treatment and post-treatment for pain severity, edema measurement, ligament healing and ankle function. Results: there is a significant difference between both groups in favor of group (A). Conclusion: Polarized light therapy is more effective than low level laser therapy in treatment of recurrent lateral ankle sprain.</p>		
Key words	1.	Polarized light therapy.
	2.	lateral ankle sprain.
	3.	Lasers.
	4.	Light therapy.
	5.	recurrent lateral ankle sprain.
Arabic Title Page	:	العلاج الضوئي مقابل الليزر في علاج الالتواء الخارجي المتكرر للكاحل.
Library register number	:	2877-2878.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
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PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Ramy Mohamed Abdel-Wahab Soliman.
Title	:	Water-Based Versus Land-Based Exercises in Treatment of Knee Osteoarthritis.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Nadia Abdel-Azem Fayaz.
	2.	Ahmed Hassan Yousry.
	3.	Mona Hassan Gamal Elden.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>Objective: To compare the effects of a water-based exercise versus a land-based exercise on pain and functional activity in the treatment of knee osteoarthritis (OA). Methods: Twenty-seven men with OA of the knee were randomly assigned to 1 of 2 groups that performed exercises for 6 weeks: a water-based exercise group and a land-based exercise group. The outcome measures included a numerical rating scale (NRS) for pain at rest, pain during gait assessed by a NRS immediately following the 50-Foot (15.24-meter) Walk Test (50FWT), the Western Ontario and McMaster universities osteoarthritis index (WOMAC), and walking time measured by timed up and go (TUG) test. Measurements were recorded at baseline and at 6 weeks after initiating the intervention. Results: There was no significant difference between the two groups at baseline for any of the clinical or self reported outcome measures. Reductions in pain and improvements in WOMAC scores were similar between 2 groups. Pain after the 50FWT decreased significantly over time in both groups. There was a significant improvement in the walking time for the water group, while there was no significant improvement for the land-based exercises group. Discussion and Conclusion: Both the land and water interventions produced positive outcomes in the pain and the function for patients with knee OA. The water based intervention was found to be like the land based intervention in improving pain and function.</p>		
Key words	1.	water-based exercises.
	2.	Osteoarthritis.
	3.	Knee.
	4.	Pain.
	5.	functional activity.
	6.	land-based exercises.
Arabic Title Page	:	التمارين المائية مقابل التمارين الأرضية في علاج الالتهاب العظمى المفصلي للركبة.
Library register number	:	3055-3056.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR MUSCULOSKELETAL DISORDER
AND ITS SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Rania Fathy.
Title	:	Effect of synergistic wrist motion on rehabilitation of finger flexor tendon repair on zone II.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Ahmed Hassan.
	2.	Nadia Fayaz.
	3.	Khaled Ayad.
	4.	Yasser El Safoury.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>Introduction: The effectiveness of rehabilitation program post surgical repair of flexor tendon still remains unproved and controversy exists in the literature about the specific program which results in improved outcomes. The purpose: this study was conducted to investigate the effect of adding synergistic wrist motion in rehabilitation patients with flexor tendon repair in zone II. Methods: thirty patients participated in this study were assigned randomly into two experimental groups with age ranged from 20-60; group (A) fifteen patients were treated by Kleinert protocol only, group (B) were treated by Kleinert protocol with addition of synergistic wrist motion at 3rd week. Both groups were evaluated through measuring TAM by Finger Goniometer, hand grip strength by Jamar Dynamometer and functional disabilities by quick Dash scale, were measured at the 6th ,9th and 12th week postoperatively. Results: the independent sample t-test was used to identify the differences between both groups; there was significant early improvement in TAM and hand strength into the group (B) more than group (A); and significant reduction in functional disabilities scale into the group (B) lesser than group (A) post treatment Conclusion: the synergistic wrist motion can be used as one of effective modality on rehabilitation program after flexor tendon repair on zone II, as it was revealed a good and early outcomes.</p>		
Key words	1.	flexor tendon repair.
	2.	synergistic wrist motion.
	3.	zone II.
	4.	Kleinert protocol.
	5.	rehabilitation of finger flexor tendon.
	6.	finger flexor tendon.
Arabic Title Page	:	تأثير حركات الرسغ الموازنة في برنامج تأهيل بعد جراحات توصيل الأوتار القابضة لأصابع اليد في المنطقة الثانية.
Library register number	:	2895-2896.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR MUSCULOSKELETAL DISORDER
AND ITS SURGERY**

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	:	Rasha Atef Saad El-Metwally.
Title	:	Efficacy of Sensory Motor Integration Program on Gait Pattern in Children with Spastic Diplegia.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Kamal El Sayed Shoukry.
	2.	Hatem Abd El-Rahman Ahmed.
Degree	:	Master.
Year	:	2012.
Abstract	:	<p>The purpose of this study is to determine the effect of sensory motor integration program on gait pattern in children with spastic diplegia through participation in gait training on treadmill by using AutoStep device in collaboration with visual, auditory and cognitive training in addition to the selected therapeutic exercise program. Thirty children with spastic diplegia, ranged in age from three to six years participated in this study. They were classified randomly into two groups of equal number, (study and control). The control group received the selected therapeutic program. The study group received gait training on treadmill by using AutoStep device in collaboration with visual, auditory and cognitive training in addition to the selected therapeutic exercise program. Children were assessed using Gross Motor Function Measure (GMFM), before and after three months of the application of the treatment program. The results of this study revealed statistically significant improvement in the measuring variables of study and control groups. From the obtained results of this study, it could be concluded that, sensory motor integration program had beneficial effect to be applied as a modality in addition to traditional techniques used to improve the gait pattern in children with spastic diplegia.</p>
Key words	1.	Cerebral palsy.
	2.	spastic diplegia.
	3.	sensory motor integration.
	4.	Gait Pattern in Children.
Arabic Title Page	:	تأثير برنامج التدريب الحسي الحركي علي انموذج المشي عند الاطفال المصابين بالشلل المزدوج التشنجي.
Library register number	:	2993-2994.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR MUSCULOSKELETAL DISORDER
AND ITS SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Reda Kotb Abd Elrazik.
Title	:	Efficacy of joint mobilization with movement in treatment of knee osteoarthritis.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Nadia Abd Elazeem Fayyaz.
	2.	Ali M. El zawahry.
	3.	Magdolin M. Samy.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>Purpose: The purpose of this study was to investigate the efficacy of mobilization with movement (MWM) technique in improving pain level, functional disability, and ROM in patients with knee osteoarthritis. Subjects: Thirty male and female patients diagnosed as unilateral knee osteoarthritis participated in this study. Methods: patients were divided randomly into two groups: the first group consisted of 15 patients with a mean age 50.13 (\pm 8.75) years treated with infrared radiation, stretching and strengthening exercises, 3 sessions/week each other day for 4 weeks . The second group consisted of 15 patients with a mean age 44.47 (\pm 7.65) treated with infrared radiation, stretching, strengthening exercises and MWM. The patient was assessed before and after treatment by VAS for pain, WOMAC for functional disability and electrogoniometer for ROM. Results: both treatment groups had a significant reduction of pain, functional disability and ROM. Comparison between groups showed a significant difference between both groups in favor of MWM group. Conclusion: adding MWM to the treatment programme of osteoarthritic patient will help in better patient prognosis.</p>		
Key words	1.	Osteoarthritis.
	2.	MWM
	3.	Electrogoniometer.
	4.	Exercise.
	5.	WOMAC.
	6.	joint mobilization.
	7.	movement.
	8.	knee osteoarthritis.
Arabic Title Page	:	فاعليه التحريك المفصلي مع الحركة في علاج الالتهاب العظمي المفصلي للركبة.
Library register number	:	2907-2908.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR MUSCULOSKELETAL DISORDER
AND ITS SURGERY**

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	:	Sahem Ahmad Mousa Al-Shawabkah.
Title	:	Manual Pressure Release versus Positional Release in Treatment of Myofascial Trigger Point of the Upper Trapezius Muscle.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Alaa Alden Abd Elhakem Balbaa.
	2.	Magdolin Mishel S.S. Shenouda.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>Purpose: To investigate the effects of manual pressure release (MPR) and positional release technique (PRT) in comparison with a control group regarding pain intensity and neck active range of motion (AROM) in patients with myofascial pain dysfunction syndrome of the upper trapezius muscle. Subjects: Forty-five patients between 20 to 33 years of age diagnosed with Mechanical neck pain and presenting with unilateral latent myofascial trigger points in the upper fibres of the trapezius muscle. Methods: The first group (group A) was a control group with mean age 21 years; the second group received MPR (group B) for one session of 60 s duration with mean age 23 years and the third group (group C) with mean age 22 years received PRT for one session of 90 s duration. The pressure pain threshold (PPT) was recorded pre- and post-intervention using a digital algometer. Results: showed an immediate decrease in pressure pain threshold of the trapezius muscle, a reduction of MTrP sensitivity and increase in AROM in the group B and C in comparison with control group. It was also found that the group B received the MPR was more effective than the group C.</p>		
Key words	1.	myofascial pain dysfunction syndrome.
	2.	manual pressure release.
	3.	positional release technique.
	4.	Upper Trapezius Muscle.
	5.	Trapezius Muscle.
Arabic Title Page	:	الضغط اليدوي الإنفراجي مقابل الوضع الإنفراجي في علاج نقاط النسيج العضلي الضام المستهدفة في الجزء العلوي من العضلة شبه المنحرفة.
Library register number	:	3057-3058.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT FOR MUSCULOSKELETAL DISORDER
AND ITS SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	wageeh Fawzy Hassan Hassanien.
Title	:	Closed Versus Open Kinetic Chain Exercises in Treatment of Patients with Hemophilic Arthritis.
Dept.	:	Physical Therapy Department for musculoskeletal disorder and its Surgery.
Supervisors	1.	Nadia AbdelAzeem Fayaz.
	2.	AbdelRahman Ibrahim Eldesoky.
	3.	Lilian Albert zaki.
Degree	:	Master.
Year	:	2012.
Abstract	:	
<p>BACKGROUND: Haemophilia is a congenital sex-linked disorder resulting from a deficiency of clotting factor. Recurrent joint bleeding in persons with haemophilia is known to lead to joint damage associated with pain, loss of range of motion and function. OBJECTIVE: The purpose of this study is to compare between the effects of open versus closed-kinetic chain exercises in treatment of patients with hemophilic arthritis. METHODS: Twenty patients had participated in this study; with age ranged for eighteen to forty years, they were randomly assigned into two experimental groups.. Group A consisted of 10 male patients with mean age 27.3 (\pm 7.2) years, received closed kinetic chain exercises program. Group B consisted of another 10 male patients with mean age of 28 (\pm 8.2) years, received a program of open kinetic chain exercises. Treatment was given 3 times/ week, every other day, for 6 consecutive weeks. Patients were evaluated pre and post treatment for their functional walking, knee joint position sense measured at 60 degree knee flexion, and isometric strength of quadriceps. RESULTS: the results revealed that there were significant differences between both groups regarding the improvement isometric quadriceps strength, knee joint's position sense at the tested angle, while there were no significant differences between groups regarding improvement in functional walking. CONCLUSION: closed-kinetic chain exercise significantly improved knee joint position sense and open-kinetic chain exercises improved isometric quadriceps strength while there was no difference between exercises in improving functional walking in patients with hemophilic arthropathy.</p>		
Key words	1.	hemophilic arthritis.
	2.	kinetic chain exercises physical therapy.
	3.	physical therapy.
Arabic Title Page	:	تمرينات السلسلة الحركية المغلقة مقابل المفتوحة في علاج الالتهاب المفصلي لمرضى سيولة الدم.
Library register number	:	2905-2906.