

Physical Therapy Department of Surgery

Master Degree
2018

Author	:	Ahmed Ibrahim Abd Alhamied El-dabbour
Title	:	Survey study: incidence of breast cancer associated lymphatic edema in El-monofeyagovernorate
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	WafaaHussienBorhan
	2.	AsmaaFawzy El-Sayed
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Degree	:	Master.
Year	:	2018.
Abstract	:	
<p><u>Background:</u> Breast cancer is the most common malignant disease of women in Western countries. It affects more than 1.3 million women worldwide every year Fortunately, the survival rate has improved substantially during the last few decades because of early diagnosis and efficient adjuvant therapy. <u>Purpose:</u> The aim of this study was to determine the incidence of breast cancer associated lymphatic edema in El-MonofeyaGovernment by evaluating the reliability, validity ofPatient data recording sheet in assessment of quality of life (QOL) for Brest cancer patients. <u>Subjects:</u> All patient admitted in the oncology department in any governmental hospitals in El-Monofeya Government receiving medical, surgical or radiological treatment between JAN 2014 and MAY 2015. Although all breast cancer patients, how developed lymphatic edema was being included in this survey study. The Patient data recording sheet questionnaire was conducted to all patient in the study in the governmental hospitals in El-Monofeya Government. <u>Results:</u> The percent of frequency distribution of the presence lymphedema showed that there were 143 subjects (23.2%) had lymphedema, 474 subjects (76.8%) had no lymphedema. <u>Conclusion:</u> Breast cancer associated lymphatic edema is common in El-Monofeya Government.</p>		
Key words	1.	Breast cancer,
	2.	lymphatic edema
	3.	El-monofeyagovernorate
	4.	Survey study
Classification number	:	000.000.
Pagination	:	79 p.
Arabic Title Page	:	معدل حدوث الورم الليمفاوي المصاحب لمرضى سرطان الثدي في محافظة المنوفية.
Library register number	:	5857-5858.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Ahmed Mahmoud Ali Gabr Zarra
Title	:	Early intervention of ultrasound and active mobilization post surgical repair of hand flexor tendon laceration
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Mohamed Mahmoud Abd El Khalek Khallaf
	2.	shraf Abolfotooh Mohamed Khalil
	3.	Walid Ahmed Ibrahim Abouelnaga
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Purpose: The current study was conducted to investigate the effect of an early intervention of ultrasound (US) and active mobilization on interphalangeal (IP) joints active range of motion (ROM) affected by peritendinous adhesions post surgical repair of hand flexor tendon laceration. Subjects and Methods: Thirty male patients who underwent zone II flexor tendon primary direct four-strand repair technique participated in this study. Their ages ranged from 20 to 35 years. They were selected from Cairo University Hospitals and divided randomly into three groups: Group (A) composed of 10 patients (15 operated digits) who received early US therapy, and at the 4th and 6th postoperative weeks, the 2nd and 3rd phases of early active mobilization (EAM) program were added respectively to the US therapy, Group (B) composed of 10 patients (16 operated digits) who received EAM, and Group (C) composed of 10 patients (16 operated digits) who received early intervention of US therapy and active mobilization. Patients in each group received the treatment (3sessions/week) from the 3rd day postoperative till the end of the 6th week postoperative. Post surgical medical care (medications including analgesics and antibiotics, and wound dressings) was provided for all patients in each group. Finger goniometer was used to measure the IP joints active ROM of the operated digits at end of 3rd and 6th postoperative weeks. The Strickland's Original Scoring System was used to evaluate the outcome. Results: Group A, B, and C showed significant improvement in the active ROM and Strickland's Original Scoring System at end of 6th week postoperative compared with them at end of 3rd week postoperative. There was a significant improvement in the active ROM and Strickland's Original Scoring System at end of 3rd and 6th week postoperative of group B compared with group A. Group C showed significant improvement in the active ROM and Strickland's Original Scoring System at end of 3rd and 6th week postoperative when compared to group A but no significant improvement when compared to group B. Conclusion: Early intervention of US and active mobilization can improve the IP joints active ROM post flexor tendon repair significantly more than early US therapy alone but not significantly more than EAM alone.</p>		
Key words	1.	Ultrasound.
	2.	Flexor tendon laceration
	3.	Active mobilization
	4.	post surgical of flexor tendon laceration
Classification number	:	000.000.
Pagination	:	182 p.
Arabic Title Page	:	التدخل المبكر للموجات فوق الصوتية والتحرك الإيجابي بعد الإصلاح الجراحي لتمزق الوتر القابض لليد.
Library register number	:	5773-5774.

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

Author	:	Amr Mohamed Esam Eldin
Title	:	Gallium Arsenide Laser Therapy as An Adjunctive Modality In treatment Of Cellulite after Liposuction
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Wafaa Hussein Burhan
	2.	Haidy Nady Asham
	3.	Sameh Al Taher Abd Elrahman
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Background: Cellulite is a consequence of alterations that develop in the lymphatic system and lead to an accumulation of substances in subcutaneous tissue, in particular in the cellular interstices. These alterations may be influenced by hormones or by any other mechanism that predisposes the individual to an accumulation of fluids and other substances in the cellular interstice. Purpose: to determine the therapeutic efficiency of Gallium Arsenide Low Level Laser Therapy on cellulite after liposuction. Method: thirty Female patients had cellulite in their thigh after liposuction were assigned into two equal groups: Group A consisted of 15 females who underwent liposuction followed by Low Level Laser Therapy received Gallium Arsenide Low Level Laser Therapy (wavelength 904 nm, 30 minutes session, 2 times per week for 6 weeks). Group B consisted of 15 females who underwent liposuction only. Cellulite grading scale and skin fold caliper was measured for each patient before and after treatment. Results: T-test revealed that there was a significant difference ($p= 0.0000$) between experimental and control group in skin fold (mm) post treatment as well as in the cellulite grading scale post treatment. Conclusion: Gallium Arsenide Low Level Laser Therapy is efficient for cellulite reduction after liposuction.</p>		
Key words	1.	Cellulite.
	2.	gallium arsenide.
	3.	Liposuction.
	4.	skin fold caliper.
	5.	low level laser.
	6.	cellulite grading scale.
Classification number	:	000.000.
Pagination	:	86 p.
Arabic Title Page	:	استخدام الجاليوم ارسنيد ليزر كوسيلة اضافية في علاج التكتلات الدهنية بعد عملية شفط الدهون.
Library register number	:	5743-5744.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Aya Salah El Din Fouad Rostom.
Title	:	Aerobic exercises and weight loss after bariatric surgery (A Systematic Review).
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Mohamed Mahmoud Abd El Khalek Khalaf
	2.	Naglaa Abd El-Moneim Morad
	3.	Walid Ahmed Ibrahim Abouelnaga
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Objective: The aim of this work was to systematically review the studies Which assess the effects of aerobic exercises and weight loss on post bariatric patients Methods: Systematic review of all published studies with all research designs except expert opinions. A search was made in Medline, Cochrane library, Pedro and Google scholar; from the earliest date to September 2018 Intervention: aerobic exercises programs performed by the physical therapist in post bariatric patients with age between twenty to forty years Outcome measures: body weight loss and Improvement in some quality-of-life scales Results: Only three studies met the inclusion criteria. So, Meta-analysis was done to three studies as they are homogenous and descriptive analysis was done to two studies as they are heterogenous. First showed the feasibility of an HVEP in obese post bariatric surgery patients, other showed that There is a growing consensus that bariatric surgery is currently the most efficacious and long-term treatment for clinically severe obesity ,third showed that Participants randomized to surgical therapy were more likely to achieve remission of type 2 diabetes through greater weight loss. Conclusion: The current level of evidence in supporting the effectiveness of Aerobic exercises and weight loss on post bariatric patients.</p>		
Key words	1.	Systematic Review.
	2.	weight loss.
	3.	Bariatric surgery0
	4.	Aerobic exercises.
Classification number	:	000.000.
Pagination	:	126 p.
Arabic Title Page	:	التمرينات الهوائية و انقاص الوزن عقب جراحات السمنة.
Library register number	:	6055-6056.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Dalia Mohamed Ibrahim El-Tawil.
Title	:	Relationship Between Body Mass Index and Intraocular Pressure.
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Mohamed Mahmoud Abd El Khalek Khalaf.
	2.	Mohamed Yasser Sayed Saif.
	3.	Ashraf Hassan Mohamed Soliman.
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Background: Obesity is considered a major public health problem and it has been linked with eye diseases such as cataract and glaucoma, as it has an effect on intraocular pressure. The purpose: of the current study was to investigate the relationship between body mass index and intraocular pressure. Subjects: 450 Egyptian subjects their age ranged from 30 to 60 years old clinically and medically stable during the study without any known systemic diseases were included in this study. Materials and Methods: Investigation was done to evaluate BMI and IOP. BMI was calculated by dividing weight in kilograms by the square of height in meters and IOP was measured in mmHg by using Goldmann Applanation Tonometer. Subjects were assigned into three groups according to their BMI: group (A): their BMI was $< 25 \text{ Kg/m}^2$ (underweight and normal subjects), group (B): their BMI was $(25 \text{ to } < 30) \text{ Kg/m}^2$ (overweight subjects) and group (C): their BMI was $\geq 30 \text{ Kg/m}^2$ (obese subjects), their mean age was (48.91 ± 9.142) years, mean BMI was $(28.4006 \pm 6.21380) \text{ Kg/m}^2$ and mean IOP was $(17.7416 \pm 3.39424) \text{ mmHg}$. Data obtained from all groups to examine intraocular pressure in relation to BMI were statistically analysed and compared with each other. Results: The study results showed a significant effect of BMI on IOP where P value was (0.001) (less than 0.005) while there was a non-significant effect of age on IOP where P value was (0.961) and there was a non-significant effect of both BMI and age on IOP where P value was (0.718) where the last two P values were greater than (0.005). Conclusion: Obesity has been reported to be an independent risk factor for high IOP.</p>		
Key words	1.	Body mass index
	2.	Intraocular pressure.
	3.	Obesity.
Classification number	:	000.000.
Pagination	:	61 p.
Arabic Title Page	:	العلاقة بين معامل كتلة الجسم والضغط داخل العين.
Library register number	:	6179-6180.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Esraa Ahmed Mohamed Abdelmotaleb
Title	:	Validity And Reliability Of Arabic Version Of The Patient And Observer Scar Assessment Scale With Burned Patients
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Adel Abd El Hamid Nossier
	2.	Samia Mohamed Ahmed Saied
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Background: Post Burn Scar are probably the scars with the highest impact on the quality of life both physical and psychological effects related to excessive scarring may hamper the quality of life. Therefore, there is a need for a simple, reliable and a valid assessment scale to use.</p> <p>Objective: This study was conducted to evaluate the validity and reliability of an Arabic version of Patient and Observer Scar Assessment Scale (POSAS). Subjects and Methods: This study was conducted in three steps, as follows: Step 1: POSAS was translated from English to Arabic (examining both forward and backward translations); Step 2: the test-retest reliability of the scale was investigated; and Step 3: the scale was validated against VSS prospectively on 60 patients who attending outpatient clinic and had their scar assessment by Arabic version of POSAS Results: the Arabic version of (POSAS)demonstrated a high degree of internal consistency and stability over time, the cronbach's alpha for observer scale of (POSAS) = 0.894. and for patient scale of (POSAS) = 0.9044, validation of the POSAS(observer scale) against the VSS was strong (with r-value= 0.892 and p-value= 0.0001). Conclusion: the Arabic version of the(POSAS) is an easy-to-administer, simple, reliable and valid tool for assessment of burn scar and for use on Egyptian population. It is advised to be used in clinical practice as well as scientific researches</p>		
Key words	1.	Burn.
	2.	Validity
	3.	Arabic Version Of Patient
	4.	Scar
	5.	Reliability
	6.	Observer Scare Assessments Scale
Classification number	:	000.000.
Pagination	:	75 p.
Arabic Title Page	:	صلاحية وفعالية الاصدار العربي من مقياس تقييم الندبات بواسطة المريض والملاحظ مع مرضى الحروق.
Library register number	:	5971-5972.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Haytham Mohammed Darwish Selim
Title	:	Effect of Extracorporeal Shock Wave Therapy on Non-Inflammatory Chronic Pelvic Pain Syndrome in Men
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Wafaa Hussein Borhan
	2.	Maha Abd El Monem
	3.	Hesham Moustafa Ban
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Background: Chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) is a clinical syndrome characterized by pain in the perineum, pelvis, suprapubic area, or external genitalia and variable degrees of voiding and ejaculatory disturbance. The analgesic effect of extracorporeal shock wave treatment (ESWT) was an interesting phenomenon with an unclear mechanism discovered by chance in the applications for urolithiasis, on which ESWT has become an increasingly popular therapeutic approach as an alternative option for the treatment of a number of soft tissue complaints. Purpose: to evaluate the efficacy of extracorporeal shockwave therapy on treatment of non-inflammatory chronic pelvic pain syndrome in men. Methods of evaluation (National Institute of Health - Chronic Prostatitis Symptom Index (NIH-CPSI)). Methods:- thirty male patients with non-inflammatory chronic pelvic pain and all suffering from chronic pelvic pain for at least three months were randomly divided into two groups. Group 1 received shockwave therapy in addition to traditional medical treatment. Group 2 received medical treatment only. Results :- the results showed the shockwave therapy is more beneficial in decreasing score of National Institute of Health - Chronic Prostatitis Symptom Index (NIH-CPSI) in patients of non-inflammatory chronic pelvic pain syndrome than the control group. Conclusion:- shockwave therapy is effective in treating non-inflammatory chronic pelvic pain syndrome in men.</p>		
Key words	1.	Chronic pelvic pain in Men.
	2.	Chronic Prostatitis Symptom Index (NIH-CPSI).
	3.	Chronic Prostatitis .
	4.	National Institute of Health.
	5.	Shock Wave Therapy.
	6.	Non- Inflammatory Pelvic.
	7.	Men - Chronic pelvic pain.
Classification number	:	000.000.
Pagination	:	89 p.
Arabic Title Page	:	تأثير علاج الموجات التصادمية على متلازمة آلام الحوض المزمنة غير الالتهابية عند الرجال.
Library register number	:	5849-5850.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Heba Abd El-Hady Moustafa.
Title	:	Effect of phonophoresis on axillary hyper hidrosis.
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Zakria Mowafy Emam Mowafy.
	2.	Hamed Abd Allah Hamed.
	3.	Maha Abd EL-Monem Hassan.
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Background: Combination of ultrasonic with topical medications was previously used in the treatment of axillary hyper hidrosis with good results. Purpose: The current study was conducted to evaluate the effect of aluminium chloride phonophoresis on Axillary hyperhidrosis . Material & methods: Thirty patients with Axillary hyperhidrosis attending Department of Dermatology at monofeyaTeaching Hospital were enrolled in this study; there were randomly divided into two groups A ,B .Group (A): received Aluminium chloride phonophoresis therapy (Acp). Sessions were performed within average 3 sessions per week for 1 months. Group (B): they received only medication twice daily for1months. Pre and post sweat out put mass was recorded. Result: There was greater improvement in patients treated with aluminium chloride phonophoresis than those treated with topical medications as evidence by sweat out put mass and HDSS Scale. Conclusions: From the finding of the current study we concluded that Aluminium chloride phonophoresis treatment has variable success in the treatment of Axillary hyper hidrosis, than other topical therapies.</p>		
Key words	1.	Phonophoresis
	2.	Hyper hidrosis.
	3.	Aluminium chloride phonophoresis (Ac p).
Classification number	:	000.000.
Pagination	:	104 p.
Arabic Title Page	:	تأثير التداخل بالموجات فوق الصوتية على فرط التعرق في منطقة الإبط.
Library register number	:	6015-6016.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Heba Alaa Eid
Title	:	Efficacy of polarized light on hair regrowth in patients with alopecia areata
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Mohamed Mahmoud Abd. El Khalek Khalaf
	2.	Heba Mahmoud Diab
	3.	Walid Ahmed Ibrahim AbouElnaga
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Purpose: to determine the effect of polarized light therapy on patients with Alopecia Areata. Methods of evaluation: 7- point assessment scale and hair counting was used to measuring the progress of hair growth on the participated patients. Subject : Thirty patients (10 males and 20 females) with ages ranging from 18-35 years suffering from alopecia areata were participated in this study. They were selected randomly from Cairo University Hospitals, they were randomly divided into 2 equal groups in number, one study group (A) and a control one (B). The study group (A) who received the polarized light therapy (Biopton light therapy) for 10 minutes every session, application was done 2 times per week for 2 months as a total period of treatment. The control group (B) who not received the polarized light therapy (Biopton light therapy) but they only use the minoxidil, and they were instructed about their nutrition, Measurements were conducted before starting the treatment as a first record and at the end of the second month of treatment as a second (final) record. Results :-Result showed that the polarized light therapy was effective in increasing hair regrowth in alopecia as evidenced by the highly significant increase in the 7- point assessment scale and hair counting. Conclusion: - polarized light therapy is beneficial in improving hair regrowth in alopecia.</p>		
Key words	1.	Polarized light therapy
	2.	Alopecia areata
	3.	Hair regrowth
Classification number	:	000.000.
Pagination	:	96 p.
Arabic Title Page	:	فاعلية الضوء المستقطب على إعادة نمو الشعر في مرضى الثعلبة.
Library register number	:	5979-5980.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Islam Mostafa Kamel
Title	:	Effect of Estrogen Iontophoresis and Stem Cells Therapy Versus Stem Cells Therapy in Treatment of Lower Limb Chronic Wound
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Adel Abd El Hamid Nosseir.
	2.	Wafaa Hessin Borhan.
	3.	Wael Abo Elkher.
Degree	:	Master.
Year	:	2018.
Abstract	:	<p>Purpose: to determine and compare between the effectiveness of estrogen iontophoresis as physical therapy modality and stem cell therapy in the treatment of diabetic foot ulcers. Methods: Forty-five patients who had diabetic and venous ulcers for longer than three months. Their ages were ranged from 40-50 years, with mean value of 45.99 ± 4.147 years. The patients were selected from El Maady Military Hospital (Department of General Surgery) in the period between Jan 2015 and Dec 2016. Patients who met the selection criteria were divided randomly into three equal groups, Group (A) received estradiol iontophoresis (-ve) electrode by intensity 1-5 mA for 10 min, , 3 sessions per week for 4 weeks and medical treatment. Group (B) received stem cell therapy for wound and estradiol that transmitted through iontophoresis (-ve) electrode for 4 weeks. Group (C) received stem cell therapy (Using Bone marrow-derived fibrocytes). Measurements: Wound surface area (WSA) was assessed by Digital Camera and ImageJ 1.49. v computer software, and wound volume using volumetric method were assessed before treatment and after 4 weeks of treatment. Results: The findings of this study indicated significant decrease in WSA and wound volume after treatment in all groups A, B and C ($P < 0.0001$). There was significant difference between group B and C after treatment in WSA and wound volume (with favored results in group B. Conclusion: results showed that estrogen iontophoresis for 4 weeks in combination with stem cell is an effective adjuvant therapy, better than each method alone, in treatment of chronic lower limb ulcers through accelerating wound healing and reducing WSA, wound volume.</p>
Key words	1.	Estrogen iontophoresis.
	2.	Stem cell therapy
	3.	Lower Limb Chronic Wound
Classification number	:	000.000.
Pagination	:	92 p.
Arabic Title Page	:	تأثير توصيل الاستروجين بالتيار الكهربائي مع العلاج بالخلايا الجذعية مقابل العلاج بالخلايا الجذعية.
Library register number	:	6093-6094.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Islam Reda El Said.
Title	:	Effect of exercises on incontinence after radical prostatectomy: a systematic review
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Zakaria Mowafy Emam Mowafy
	2.	Ahmed Abd El Lateef Moharram
	3.	Maha Abd Elmonem Hasan,
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Background: Urinary incontinence (UI) after radical prostatectomy (RP) is a common and potentially devastating problem. Despite various improvements of the surgical technique and a better understanding of pelvic anatomy, studies indicate that 8% to 56% of men have UI at 1 year after RP. Several studies investigated the conservative treatment of urinary incontinence after RP. Most of these studies have compared pelvic floor training (PFT) with no therapy, intensive instructions or biofeedback by trained therapists, with the primary end point generally the number of continent patients or early recovery. All studies examined the effects of pelvic floor/sphincter training on the incontinence of prostate cancer patients in the aftercare of the disease. Pelvic floor/sphincter training programs during aftercare significantly reduce incontinence in patients with prostate cancer. Aim of study: The purpose of this study was to systematically review the effects of exercises on Incontinence after radical prostatectomy. Material and Methods: Systematic review of all published studies with all research designs except expert opinions. A search was made in PubMed, Cochrane library, Pedro and Google scholar Results: The four studies show the effectiveness of exercises on incontinence after radical prostatectomy. Conclusion: It was concluded that the current level of evidence to support the effectiveness of effect of exercises on incontinence after radical prostatectomy.</p>		
Key words	1.	Systematic review.
	2.	Incontinence.
	3.	radical prostatectomy
	4.	Exercises.
Classification number	:	000.000.
Pagination	:	77 p.
Arabic Title Page	:	تأثير التمرينات العلاجية في علاج السلس البولي بعد الاستئصال الجذري للبروستاتا: مراجعة منهجية.
Library register number	:	6041-6042.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Lamiaa Mostafa Okiel Abdel kawie.
Title	:	Effect of aerobic exercises on the incidence of gestational diabetes mellitus in obese pregnant women.
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Khadyga Sayed Abdul Aziz
	2.	Hossam Aldin Hussein Kamal
	3.	Afaf Mohamed Mahmoud Botla
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Aim: This study was conducted to determine the effect of aerobic exercises on the incidence of gestational diabetes mellitus on obese pregnant women, Forty pregnant women were selected randomly from obstetric department at El Fayoum university hospital and private clinic of obstetric and gynaecology to share in this study. Their age ranged from 20-40 years , their BMI ranged from 30-35 kg//m². and their gestational age from 24-28 weeks . They were divided randomly into two equal groups (A&B):Group (A) received a healthy diet program (2400-2800 kcal/day) and aerobic exercises (Treadmill) for 30 minute/session, 3 session/week for 4 weeks, each session lasted 30 minutes as follow: 5min warming up exercise by walking on treadmill at low speed, 20 min walking at sub maximal intensity (60-70 % of maximal heart rate) and 5 min cooling down by walking on treadmill at low speed as in warming up. While, group (B) received a healthy diet program only (2400-2800 kcal/day) for 4 weeks . Assessment of all women in both groups was carried out before and after treatment program through measuring fasting blood sugar ,post prandial blood sugar and random blood sugar . The results showed that there was no statistical significant difference between mean value of fasting blood sugar ,random blood sugar and post prandial blood sugar in both group (A&B) in pre and post treatment .So it can concluded that their is no effect of aerobic exercises on the incidence of gestational diabetes mellitus on obese pregnant women.</p>		
Key words	1.	Gestational diabetes.
	2.	aerobic exercises.
	3.	blood sugar.
	4.	Obesity.
	5.	
Classification number	:	000.000.
Pagination	:	97 p.
Arabic Title Page	:	تأثير التمرينات الهوائية علي معدل سكر الحمل لدي السيدات الحوامل البدينات .
Library register number	:	6011-6012.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Mohamed Atef abo el Foutoh Omar.
Title	:	Efficacy of diethyleamin salcylate gel phonophoresis on hand functions in psoriatic arthritis.
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Wafaa Hussein Burhan
	2.	Hany Mohamed Ezz El Dien El Nazer
	3.	Khadra Mohamd Ali
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>The purpose of this study was to investigate the efficacy of Di ethyle amin salcylate phonophoresis on hand functions in psoriatic arthritic patients. Subjects and Methods: Thirty patients were recruited from outpatient clinic of dermatology, Cairo University Hospitals. Their ages ranged from 30 to 50 years. The patients were randomly divided into two equal groups Group (1) (Study group) Patients in this group received routine physical therapy in the form of hot bags therapy, stretching and strengthening exercises in addition to di ethyle amin salcylate phonophoresis .using ultrasonic phonophoresis, Group (2)(Control group) patients in this group received the same physical therapy program and topical application of thin layer of di ethyle amin salcylate gel each patient was evaluated for grip strength, tender, swollen joint count and MAP hand questionnaire before and after one month of treatment 3 sessions a week. The results revealed that there was a significant difference between both groups regarding to grip strength, tender, swollen joint count and measurements of activity performance MAP-HAND questionnaire with the percentage of improvement in group 1, hand grip strength range by 33.72% and 9.77% respectively, improved tender joint count by 49.1% and 27.46% respectively, improved swollen joint count by 55.42% and 35% respectively and decreased median value of MAP-HAND questionnaire from 3 to 1 and from 3 to 2 respectively. Conclusion: It was concluded that Phonophoresis is an effective method to enhance the delivery of di ethyle amin salcylate and so enhance the hand functions in psoriatic arthritis patiens.</p>		
Key words	1.	Phonophoresis.
	2.	Hand function.
	3.	diethyleamin salcylate gel phonophoresis
	4.	Psoriatic arthritic.
	5.	Hand grip strength.
Classification number	:	000.000.
Pagination	:	78 p.
Arabic Title Page	:	فعالية العلاج بالاسترشاد الصوتي بمادة الداى إيثايل أمين سالسليت على وظائف اليد فى مرضى التهاب المفاصل الصدفي.
Library register number	:	6105-6106.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Mohamed Galal Ahmed.
Title	:	Effect Of Preoperative Abdominal Training On Abdominal Muscles Strength Outcomes After Ventral Hernia Repair.
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Wafaa Hussien Borhan
	2.	Salah Eldin Abd Elghany Mohamed
	3.	Walid Ahmed Abouelnaga
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Purpose: to investigate the effect of pre-operative abdominal training on abdominal muscle strength outcomes after ventral hernia repair by using isokinetic dynamometer as a method of evaluation. Methods: 30 patients their age ranged between 20-45 years with ventral hernia, they were directed to operative hernia repair. The patients were randomly divided into two groups: group (A) (control group) and group (B) (study group). Isokinetic dynamometer was used to evaluate abdominal muscle strength at 3 occasions, first (initial, pre-exercise assessment), second (pre-operative assessment), and third (6 months post-operative assessment). For Group (A) (control group); they were instructed to presume their activities of daily living pre-operatively. For Group (B) (study group); they received selective abdominal training program for 30 min.3times per week for 6 weeks pre-operatively. Results: The result showed that there was a significant increase in abdominal muscle strength post-operatively in study (abdominal training) group compared to control group. Conclusion: It was concluded that pre operative abdominal muscle training was effective for strengthening abdominal muscles after ventral hernia repair</p>		
Key words	1.	ventral hernia.
	2.	Isokinetic
	3.	abdominal training
	4.	Muscles Strength.
Classification number	:	000.000.
Pagination	:	129 p.
Arabic Title Page	:	تأثير تمارين البطن ما قبل جراحه رأب الفتق البطني علي قوة عضلات البطن بعد الجراحة.
Library register number	:	6017-6018.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Mohamed Ragab Gomah Abdul Alim
Title	:	Efficacy of whole body vibration on strength of calf and quadriceps muscles post burn
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Ashraf Hassan Mohamed Soliman
	2.	Heba Mohamed Mohamady
	3.	Ayman Abdul Hameed Mohamed
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Purpose: This study was conducted to investigate the efficacy of whole-body vibration on strength of calf and quadriceps muscles post burn. Subjects: Thirty patients (18 male and 12 female) had second degree burn of lower limb with surface area about (20-35%) suffering from weakness of quadriceps and calf muscles. Their ages ranged between (20-35) years were participated in this study. The study conducted during the period between March and July 2017 at Makka Hospital and Al Nada Hospital, El-Fayoum Governorate, Egypt. Methods: They were assigned randomly into two groups (A and B) equal in number: Group (A) patients had received vibration training on vibration platform (The frequency of vibration was set at 30 Hz, amplitude ranging from 4 to 7 mm and an acceleration of 2.28 g. The total duration of the whole body vibration training stimulus was 10 min in 1st week and progress gradually to 25 min in the 8th week. 3 times/week) plus home based physical therapy program (eight weeks, three times a week). Group (B) patients had received the same home based physical therapy program only. Evaluations of both groups were done before the treatment and at the end of study after eight weeks using hand held dynamometer and manual muscle test. Treatment: Treatment started immediately post wound closure. This study showed a statistically significant increase in calf and quadriceps muscle strength after eight weeks of receiving whole body vibration in addition to home based physical therapy program, compared with group B who received home based physical therapy program only. Comparison between both groups before starting the study revealed that there was a statistically non-significant difference in calf and quadriceps muscle force between them. At the end of the study, There was a significant increase in the muscle force in the study group (group A) compared with control groups (group B). Conclusion: Participation in whole body vibration program resulted in a greater improvement in quadriceps and calf muscle strength in adults with healed thermal burn compared to base line values; a whole body vibration program is an effective for strength gain in rehabilitation of burned patients.</p>		
Key words	1.	Whole body vibration.
	2.	Manual muscle test.
	3.	Thermal burn,.
	4.	Hand held dynamometer.
Classification number	:	000.000.
Pagination	:	87 p.
Arabic Title Page	:	فاعلية اهتزاز الجسم كله على تقوية العضلة الرباعية وعضلة السمانة بعد الحروق.
Library register number	:	5845-5846.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Mohamed Said Abdo Dobal
Title	:	Efficacy Of Diclofenac Sodium Phonophoresis On Frozen Shoulder Postmastectomy
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Ashraf Hassan Mohamed Soliman
	2.	Yasser Mostafa Elkerm
	3.	Khadra Mohamed Ali
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Purpose: to evaluate the efficacy of diclofenac sodium phonophoresis on frozen shoulder postmastectomy.Methods: 30 female patients with postmastectomy frozen shoulder were divided into two equal groups.Group (A) received diclofenac sodium phonophoresis and traditional physiotherapy.Group (B) received topical application of diclofenac sodium and traditional physiotherapy, duration of treatment was 30 minutes, three sessions per week, for 4 weeks.Results: Results showed that application of diclofenac sodium phonophoresis had a valuable effects on postmastectomy frozen shoulder as evidenced by the significant decreases in visual analouge scale and The electronic goniometer measurement. Conclusion: diclofenac sodium phonophoresis had a valuable effects on frozen shoulder postmastectomy .</p>		
Key words	1.	diclofenac sodium phonophoresis
	2.	frozen shoulder postmastectomy
	3.	Visual analouge scale.
	4.	Electronic goniometer measurement
Classification number	:	000.000.
Pagination	:	98 p.
Arabic Title Page	:	فاعلية التأين بالموجات فوق الصوتية لديكلوفيناك الصوديوم على الكتف المتجمد بعد استئصال الثدي.
Library register number	:	5747-5748.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Moshira Medhat Mahmoud.
Title	:	Low-level laser versus pneumatic compression pump on lymphedema post mastectomy
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Adel Abd El Hamid Nossier
	2.	Samy Ramzy Shahata
	3.	Ereny Sobhy Wahba
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Purpose: This study was designed to provide a guide line about the difference between these two methods on the reduction of limb size (circumference) in Post-mastectomy lymphedema and to assist in planning an ideal treatment regimen for reducing limb volume in lymphedema. Subjects: This study was carried out on 30 patients (females) with post mastectomy lymphedema their ages ranged from 40-55years, they were free from any other diseases that might affect or influence the results and they were selected from National Cancer Institute, Cairo University and randomly distributed into two equal groups. Methods Patients assigned randomly into two groups (A and B) equal in number: Group (A): This group included 15 patients who received 2 hours of compression therapy in addition to their physical therapy program (active range of motion and elevation), hygiene and skin care for four weeks. Group (B): This group included 15 patients who received 20 minutes of laser therapy in addition to their physical therapy program (active range of motion and elevation), hygiene and skin care for four weeks. Evaluation: evaluations of both groups (A and B) were done before starting the treatment and at the end of study by tape measure. Results: The results of this study showed that there was a statistically significant decrease in ΔC after 4 weeks of treatment application in both groups but there was no significant difference in ΔC after 4 weeks of application of compression therapy in the group (A) when compared with laser therapy in the group (B). Conclusion: pneumatic compression and Low Level Laser are effective in reduction of limb size in Postmastectomy lymphedema.</p>		
Key words	1.	Mastectomy.
	2.	Low- level laser.
	3.	Pneumatic compression pump
	4.	Lymphedema.
Classification number	:	000.000.
Pagination	:	67 p.
Arabic Title Page	:	الليزر منخفض الشده مقابل الانضغاط الهوائي علي التورم الليمفاوي بعد استئصال الثدي.
Library register number	:	6173-6174.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Samah Gameil Fakhry
Title	:	Cryolipolysis versus liposuction in abdominal adiposity in females.
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Wafaa Hussein Borhan
	2.	Ashraf El Sebaie Mohammed
	3.	Rokaia Ali Zain El-Abedeem Mohamed Toson
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Purpose: The current study was conducted to compare between the effects of cryolipolysis and liposuction in abdominal adiposity in females. Subjects and Methods: Thirty females suffering from localized fat deposits at the abdominal area were involved in the study. Their Body Mass Index(BMI) was between 30 kg\m2 -34.9 kg\m2. Participants age was ranged from 30-40 years .They were classified randomly and equally in numbers into two groups Group A : This group was composed of fifteen females suffering from localized fat deposits at the abdominal area. They were received cryolipolysis program for three months one session every two weeks plus aerobic exercise training three times/week for six month. Group B: This group was composed of fifteen females suffering from localized fat deposits at the abdominal area. They had liposuction for the treatment of abdominal adiposity The study was started from the 2nd week after the operation. They were received aerobic exercise training three times/week for six months .Both groups were received the same dietary regimes. Results : Group A,B showed significant reduction in body weight, BMI, skin fold, and waist circumferences but there was no significant differences between both groups. Conclusion: Cryolipolysis plus aerobic exercise training showing the same effect of liposuction plus aerobic exercise training in the treatment of abdominal adiposity in females .</p>		
Key words	1.	Obesity.
	2.	Liposuction.
	3.	Cryolipolysis.
	4.	liposuction in abdominal.
	5.	abdominal adiposity in females.
	6.	females - abdominal adiposity.
Classification number	:	000.000.
Pagination	:	110 p.
Arabic Title Page	:	تجميد الدهون مقابل شفط الدهون على أنسجة البطن الدهنية لدى السيدات.
Library register number	:	6159-6160.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Sanaa Adel Abd El Moneam Mostafa
Title	:	Neuromuscular Electrical Stimulation Versus Resisted Exercises On Muscular Arm Strength Post Dermolipectomy
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Wafaa Hussien Borhan
	2.	Ahmed Mohamed Kenawy
	3.	Ashraf Hassan Mohammed
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Background: Dermolipectomy is removing the extra skin and fats from upper arm , and regular exercise regimn improves the results of this surgry by saving the muscular strength by using resisted exercises or neuromuscular stimulation on upper arm postoperatively. Aim of study: This study was conducted to strenghtening upper arm flexors,extensors and abductor groups post upper arm dermolipectomy by comparing between resisted exercises and neuromuscular electrical stimulation. Methods: 30 females who had arm dermelipectomy. They were selected from surgical department from "New kasrAiny hospital" ,their age ranged from 25-55 years ,and divided randomly into two equal groups of fifteen patient after seven weeks post arm dermolipectomy,group A received neuromuscular electrical stimulation on upper arm flexors,extensors and abductors groups for 2 months , two sessions per week with 20 min per session , while group B received strengthening Resisted exercises exercise post operatively on the same muscle groups for same time and the assesment was done by subjective manual muscle test for the evaluation of the function and strength of upper arm flexors ,extensors and abductors groups depending on the frequency distribution of the grades manual muscle test for both groups pre and post treatment program, also goniometer was used to measure the range of motion of upper arm flexion,extension and abduction pre and post treatment program for both groups. Results: The study helped early rehabilitation of the weaken upper arm muscles post operatively and regaining normal tone ,results showed that resisted exercises are better than neuromuscular electrical stimulation to improve upper arm muscles strength and performance post dermolipectomy . Conclusion: Resisted exercises are preferred than neuromuscular electrical stimulation in post-operative dermolipectomy on arm muscles to improve the muscle strength and performance.</p>		
Key words	1.	Neuromuscular electrical stimulation.
	2.	dermolipectomy .
	3.	Brachioplasy
	4.	resisted exercise.
	5.	Muscular Arm Strength
Classification number	:	000.000.
Pagination	:	91 p.
Arabic Title Page	:	التبنيه الكهربى العضى العصبى مقابل التمارين العلاجية ذات المقاومة على القوة العضلية لعضلات الذراع بعد عمليه استئصال الخلايا الدهنية الجلدية .
Library register number	:	5921-5922.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Sherif Essam Bazan.
Title	:	Effect of pulsed ultrasound on Discoid Lupus Erythematosus.
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Mohamed Mahmoud Khalaf
	2.	MarwaAbd El MutilbEid
	3.	Ibrahim El RekabyTaha
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Purpose: The current study was conducted to investigate the effect of pulsed ultrasound in improving Discoid Lupus Erythematosus in patients affected with Systemic Lupus Erythematosus. Subjects: Thirty patients suffering from Discoid Lupus Erythematosus (male and female) with age ranging between 20 and 40 years, were involved I the study. Method: These patients were divided into two equal groups in number. Group A(Control Group) was composed of 15 patients who received only medical treatment for Discoid Lupus Erythematosus. Group B (Study Group), in this group 15 patients received therapeutic ultrasound in addition to medical treatment of the Discoid Lupus Erythematosus.The application of the ultrasound lasted from 5-7 minutes 3 times per week for 12 sessions with a gap of 2 days interval between each session. Measurements were done before and after the study for both groups using Vancouver Scar Assessment Scale (VSS) Results:The study showed non –significant differences in the mean values of age (years) within the two groups , but showed increased degree of improvement in T-Score mean value for the study group (low -intensity pulsed ultrasound treatment) more than the control group. It also supported that the low –intensity pulsed ultrasound was significantly effective in treating Discoid Lesions in patients suffering from Discoid Lupus Erythematosus. Conclusion: Low intensity pulsed ultrasound is important in healing Discoid Lesions in patients with Discoid Lupus Erythematosus.</p>		
Key words	1.	Low Intensity
	2.	Pulsed Ultrasound
	3.	Discoid
	4.	Lupus Erythematosus
	5.	Vancouver Scale.
Classification number	:	000.000.
Pagination	:	100 p.
Arabic Title Page	:	تأثير الأشعة فوق الصوتية المتقطعة على ذنبه حمامية القرصية.
Library register number	:	6033-6034.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Walaa Mohamed Anwar
Title	:	Efficacy of Mirror Therapy on Complex Regional Pain Syndrome after hand surgeries .A systematic review
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Wafaa Hussein Burhan
	2.	Ashraf Hassan Mohammed
	3.	Mona Ahmed El Awady
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Background: Complex regional pain syndrome is a disabling pain condition with sensory, motor and autonomic manifestations. Mirror visual feedback therapy aims to restore normal cortical organization and is applied in the treatment of chronic pain conditions. Purpose: This review gives an overview regarding the effectiveness of mirror therapy on complex regional pain after hand surgeries. Methods: Five studies were identified and reviewed: three randomized controlled trials focused on the effect of graded motor imagery on complex regional pain syndrome, two cases report focused on mirror therapy in patients with causalgia, and a small open-label case series focused on virtual reality mirror visual feedback therapy and its application for the treatment of complex regional pain syndrome. The participants with complex regional pain syndrome aged from 25-75 years. Results: There was a significant difference in the pain intensity on VAS and NPS and in the functional level on NRS post treatment between groups. Conclusion: The present review showed a trend that mirror therapy is effective in upper limb treatment of patients with CRPS.</p>		
Key words	1.	complex regional pain syndrome.
	2.	mirror visual feedback.
	3.	hand surgery
	4.	mirror therapy
	5.	A systematic review
Classification number	:	000.000.
Pagination	:	74 p.
Arabic Title Page	:	فاعلية العلاج بالمرآة على متلازمة الألم الموضعي المعقد بعد جراحات اليد. مراجعة منهجية.
Library register number	:	5737-5738.

**ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL
THERAPY DEPARTMENT OF SURGERY
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

Author	:	Yassmin Mohamed Saad Eltabakh.
Title	:	Low load prolonged stretch versus high load brief stretch in treatment of knee contracture after burn
Dept.	:	Physical Therapy Department for Surgery.
Supervisors	1.	Haidy Nady Ashem
	2.	Ahmad Abd Alaziz Mohamed
	3.	Khadra Mohamed Ali
Degree	:	Master.
Year	:	2018.
Abstract	:	
<p>Purpose: This study was conducted to Evaluate the effect of low load prolonged stretch vs. high load brief stretch in knee contracture post burn . Subjects: Thirty patients with Knee contracture post burn injury ,their age ranged from 25 to 45 years old were conducted in current study they were selected from Om Al-masreen Hospital, and kasr al-ainy Hospital. Methods: They were assigned randomly into two groups (A and B) equal in number: Group (A) consisted of 15 patients who received low load prolonged stretch using weights (sand bags) 3 times/ week for 4 successful weeks. Group (B) consisted of 15 patients who received manual stretch 3 times/week for 4 successful weeks. Evaluations of both groups (A and B) were done before starting the treatment and at the end of study after 4 weeks through Goniometer and Foot print to measure range of motion and cadence pre and post treatment. Results: This study showed a statistically difference in knee joint ROM and cadence between both groups. Conclusion: The present study concluded that low load prolonged stretch is more effective than high load brief stretch in treatment of knee contracture after burn.</p>		
Key words	1.	Low load prolonged stretch.
	2.	High load brief stretch.
	3.	Footprint
	4.	knee contracture.
	5.	burn of knee contracture.
Classification number	:	000.000.
Pagination	:	82 p.
Arabic Title Page	:	الشد المنخفض مقابل الشد المرتفع علي الاتكماش الجلدي لمفصل الركبة بعد الحروق.
Library register number	:	6077-6078.