

Department of Basic Science

Doctoral Degree 1999

Author	:	Adel Rashad Ahmed.
Title	:	Nerve tension mobilization versus active exercises in lumbar radiculopathy.
Dept.	:	Department of Basic Science.
Supervisors	1.	Soad Mahmoud Mohamed.
	2.	Samir Ahmed El Sabbahi.
	3.	Mohamed Hany Gamal El-Dine.
Degree	:	Doctoral.
Year	:	1999.
Abstract	:	
<p>The purpose of this study was to determine the effect of neural mobilization and spinal extension exercises in decreasing pain , hastening neural excitability and increasing straight leg raising range in patients with L5-S1 lumbar radiculopathy . 80 patients with a history of disc prolapsed were involved in the study. Their age ranged from 30-60 years . They divided randomly into 4 equally groups. Group 1 received neural mobilization, group 2 received spinal extension exercises , Group 3 received both neural mobilization and spinal extension exercises and Group 4 is the control group . Results showed that the greatest effect after treatment was in group 3 followed by group 1 followed by group 2 . It was concluded that neural mobilization and spinal extension exercises are safe , effective and low cost techniques in treating patients with lumbar radiculopathy.</p>		
Key words	1.	Nerve tension mobilization.
	2.	Exercises.
	3.	lumbar radiculopathy.
Arabic Title Page	:	ليونة الشد العصبى مقابل التمرينات الايجابية فى حالات اعتلال الجذور العصبية القطنية.
Library register number	:	676-677.

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

Author	:	Amal Fawzi Ahmed.
Title	:	Effect of low power laser on tensile strength of injured tendons.
Dept.	:	Department of Basic Science.
Supervisors	1.	Awatef Mohamed Labib.
	2.	Mohamed Helmy Al-Batanony.
	3.	Omaima Mohamed Ali Kattabei.
Degree	:	Doctoral.
Year	:	1999.
Abstract	:	<p>The purpose of this study was to investigate the effect of low power laser therapy on tendon healing . 53 male white newzealand rabbits were used in this study , 8 rabbits were kept as normal group with intact tendons and the remaining 45 rabbits with their right achilles tendons were tenotomized , sutured and immobilized , after that were assigned to 3 equal groups control group received no laser irradiation , laser group I irradiated with He - Ne laser and laser group II irradiated with combination of IR & He - Ne laser . Laser treatment improved tendon healing , the percentage of tensile strength of tendons in control , laser I and laser II groups were 38.6% , 55.7% & 68.1% respectively . It is concluded that the process of tendon healing is enhanced by laser irradiation.</p>
Key words	1.	low power laser.
	2.	tensile strength.
	3.	injured tendons.
	4.	Lasers.
Arabic Title Page	:	تأثير الليزر المنخفض القوى على قوة شد الاوتار المصابة.
Library register number	:	692-693.

PHYSICAL THERAPY
LIBRARY
THESES 1999

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

Author	:	Naglaa Mohamed El-Hafez.
Title	:	Influence of magnetic field on bone density of osteoporotic patients.
Dept.	:	Department of Basic Science.
Supervisors	1.	Fatma Sedik Amin.
	2.	Bahaa Ali Kornah.
	3.	Hesham Mohamed Ezzat
Degree	:	Doctoral.
Year	:	1999.
Abstract	:	
<p>This study was conducted to investigate the effect of magnetic therapy on bone density of osteoporotic patients. Forty five patients (both sex) . They were divided into three equal groups . The investigations and treatment were done at out clinic, physiotherapy department , 6th October Hospital , Giza . Group I (magnetic group) were given magnetic therapy by using an alternating current of magnet for three days . Group II (calcium group) received calcium therapy for one month . Group III (exercises group) received weight bearing exercises only three times per week . The results of this study has shown that magnetic therapy was effective in increasing bone mineral density of osteoporotic patients and also the serum calcium . It can be concluded that , magnetic field had an important role in management of osteoporosis with weight bearing exercises and calcium.</p>		
Key words	1.	Magnetic field.
	2.	Bone density.
	3.	Osteoporotic patients.
Arabic Title Page	:	تأثير المجال المغناطيسي على كثافة العظام في مرضى العظام الهشة .
Library register number	:	680-681.

PHYSICAL THERAPY
LIBRARY
THESES 1999

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

Author	:	Ragia Mohamed Kamel.
Title	:	The role of low intensity laser therapy on shoulder and arm pain in postmastectomy patients.
Dept.	:	Department of Basic Science.
Supervisors	1.	Soad Mahmoud Mohamed.
	2.	Moustafa Abdel Aziz El-Sharkawi.
	3.	Omaima Mohamed Ali Kattabei.
Degree	:	Doctoral.
Year	:	1999.
Abstract	:	
<p>The purpose of this study was to investigate the effect of low intensity laser therapy and analgesic medications on post mastectomy shoulder and arm pain by using an objective measurement , plasma cortisol level and 5-Hydroxindoleacetic acid (5-HIAA) level . Forty female patients with postoperative mastectomy participated in this study with average age from 40-60 years . The patients were selected from Kaser Al-Aini The patients were randomly divided into two equal groups , each 20 patients , in the first patients were treated by laser , and in the second patients were treated by drugs . Drugs used were a combination of paracetamol and aspirin , twelve hourly for 10 days . Members of the laser group were irradiated by LILT for shoulder and arm area on the same side of the operation . The treatment started after approximately three months of termination of radiotherapy / Findings-Pain is decreased in both groups . The reduction of pain was significant in drug group and highly significant in laser group - The level of plasma cortisol decreased in both groups . The reduction of plasma cortisol level was significant in drug group and highly significant in laser group - Range of motion at shoulder joint for flexion , abduction and horizontal adduction increased in both groups . It was significant in drug group and highly significant in laser group - Urinary output of 5-HIAA increased after LILT.</p>		
Key words	1.	low intensity laser therapy.
	2.	Shoulder.
	3.	arm pain.
	4.	postmastectomy patients.
	5.	Lasers.
Arabic Title Page	:	دور الليزر المنخفض الشدة على آلام الكتف و الذراع بعد عمليات استئصال الثدي.
Library register number	:	708-709.