ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL THERAPY DEPARTMENT FOR CADIOPULMONARY DISORDER AND GERIATRICS AND ITS SURGERY

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and Its Surgery

Doctoral Degree

2018

Author	**:**	**Asmaa Mohamed Mohamed**
Title	**:**	**Polarized Light Therapy Versus Aerobic Training On Peripheral Arterial Insufficiency**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Halamohamedezzeldin**
	2.	**Basanthamdy el-refay**
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Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

This study was conducted to investigate and compare between the applications of Polarized light therapy versus aerobic exercise program on blood flow velocity in peripheral arterial disease patients.Forty males, suffering from intermitten claudication from peripheral arterial disease, were selected from out clinic of vascular department in Matariya Teaching hospital in Cairo. Their ages were ranged from 40 to 50 years old. They were divided randomly into two groups, equal in number, Exercise group (A), consisted of 20 males, who were treated with aerobic exercise program (treadmill exercise program), 3 times/week for two months. Each session lasted for 45-60 minutes, in addition to their medical treatment , Light therapy group (B), consisted of 20 males, who received their medical treatment and received 20 min session of light therapy three times/week for two months .Ankle brachial index(ABI), Ankle peak systolic velocity (APSV), Claudication onset time(COT), Maximum claudication time (MCT), Maximum claudication distance (MCD), walking impairment questionnaire were used for assessment pre and post treatment for both groups . The results showed that, there was a significant improvement in both groups . So, it could be concluded that there is a good effect of aerobic exercise and application of polarized light therapy (bioptron) on patient with intermittent claudication pain from peripheral arterial occlusive disease.

Key words	**1.**	**intermittent claudication**
	2.	**polarized light therapy**
	3.	**aerobic exercise**
	4.	**peripheral arterial occulsive disease**
Classification number	**:**	**000.000.**
Pagination	**:**	**102 p.**
Arabic Title Page	**:**	**العلاج الضوئي المستقطب مقابل التدريبات الهوائية على مرضى قصور الشرايين الطرفية**
Library register number	**:**	**6101-6102.**

ELECTRONIC GUIDE TO THESES APPROVED BY PHYSICAL THERAPY DEPARTMENT FOR CADIOPULMONARY DISORDER AND GERIATRICS AND ITS SURGERY

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	**:**	**El Sayed Mohammed Atwa Ali Hanoura.**
Title	**:**	**Effect Of Soft Tissues Manipulation On Patients With Chronic Bronchitis.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Akram Abd El Aziz Sayed**
	2.	**Awny Foad Rahmy**
	3.	**Mohammed Sayed Hantera**
	4.	**Mohammed Abd El Halim Mohammed Shendy**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

The purpose of this study: to determine the effectiveness of soft tissues manipulation on chronic bronchitis; diaphragmatic and thoracic excursion, pulmonary function tests (PFT_S) and patient's symptoms. Subjects and methods: nighty chronic bronchitis male patients with grade II (moderate) and III (severe) severity index, with stable condition and under medications, they all were selected from Kafr El sheikh chest hospital. The ages of all patients ranged from 50 to 60 years, Patients were randomly assigned into two groups. Group (A) is the control group and consisted of 30 chronic bronchitis patients received a placebo treatment in form of light touch to the same anatomical regions and for the same time as study group. Group (B) is the study group and consisted of 60 chronic bronchitis patients received a soft tissues manipulation treatment consisted of four manual therapy techniques with the following sequence; rib raising , doming the diaphragm, sub occipital release and thoracic lymphatic pump for 15 to 25 minutes, once weekly and for three consecutive weeks. Data measured included, chest expansion by measurement tape, diaphragmatic excursion evaluated by M .mode ultrasound, PFT_S (FEV1, VC, FEV1/VC) measured using spirometry and patient's symptoms (Dyspnea, emotional state and quality of life) guided by Guyatt's Chronic Respiratory Disease Questionnaire (GCRDQ), all were measured at baseline and half hour after the third treatment. Results: The results of this study demonstrated that application of soft tissues manipulation in form of rib raising, doming the diaphragm, sub occipital release and thoracic lymphatic pump in chronic bronchitis male patients with age ranging between 50 and 60 years old had a significant effect on chest expansion as it increased by (20.7%), diaphragmatic excursion increased by (22.25%) and highly significant on patient's symptoms, as it improved by (98.83%) for dyspnea (shortness of breath) and by (90.94%) for patient's emotional state, with a change of FEV 1from 0.99Litre to 1.10Litre (13%) which is noteworthy even though not reaching statistical significance, for study group. While application of placebo treatment in form of a light touch to the same anatomical regions and for the same time as the study group had no significant effect on chest expansion, diaphragmatic excursion and PFT_S, with a significant change on patient's symptoms, as it improved by (24.72%) for dyspnea (shortness of breath) and by (33.21%) for patient's emotional state, for the control group. Conclusion: It was concluded that chest expansion, diaphragmatic excursion, PFT_S and patient's symptoms in patients with chronic bronchitis showed better response after application of soft tissues manipulation techniques than who received a placebo.

Key words	**1.**	**Chronic Bronchitis.**
	2.	**Patient's Symptoms.**
	3.	**Soft Tissues Techniques**
	4.	**Diaphragmatic Excursion.**
	5.	**Chest Expansion.**
Classification number	**:**	**000.000.**
Pagination	**:**	**86 p.**
Arabic Title Page	**:**	**تـأثير العلاج اليدوي للانسجة الرخوة على مرضى التهاب الشعب الهوائية المزمن.**
Library register number	**:**	**6021-6022.**

Author	**:**	**Emam Khadregy Abdelmoniem.**
Title	**:**	**Interval Load Versus Constant Load Aerobic Training On The Bode Index In Copd Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Nagwa Mohamed Badr**
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	3.	**EhabAbdElatef el Gendy**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

Many parameters were used to assess the survival rate and hospitalreadmissions of COPD patients. Recently a multidimensional grading system that includes (the body mass index, degree of airflow obstruction, dyspnea and exercise capacity) – the BODE index - started to be used. Sixty men patients with COPD with age ranged from 45-60 years old Patientss were divided randomly to two groups; Group A; received high intensity interval training. Group B; received moderate intensity constant load training. They trained for forty five minutes/session, three sessions/week over a period of twelve weeks in order to compare the impact of high intensity interval training versus that of the constant load training on BODE score, The mean values of BODE score was significantly decreased from seven to three with a percentage of improvement about 38,57% in group A and also decreased from seven to five with a percent of improvement about 25% in group B and with a significant difference between both groups after treatment so it is suggested that high intensity interval training is more effective in improving BODE score than constant load training in patients suffering from COPD.

Key words	**1.**	**COPD**
	2.	**BODE index**
	3.	**Interval load**
	4.	**constant load**
	5.	**Load Aerobic Training.**
Classification number	**:**	**000.000.**
Pagination	**:**	**125 p.**
Arabic Title Page	**:**	**التمرينات الهوائية متقطعة الحمل مقابل الثابتة الحمل على مؤشر بود في مرضى السدة الرئوية.**
Library register number	**:**	**6125-6126.**

Author	**:**	**Entesar Hussain Zaky Ahmed**
Title	**:**	**High intensity interval training versus continuous training on ventricular remodeling in chronic heart failure patients**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Zeinab Mohammed Helmy**
	2.	**Bassant Hamdy Elrefaey**
	3.	**Bassem Sobhy Ibrahim**
	4.	**Eman Hassan**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

Background and purpose: Cardiac remodeling involves changes that manifest clinically as changes in size, shape, and function of the heart in chronic heart failure. Aerobic exercise training has been shown to reverse remodeling in patients with stable CHF. Which exercise intensity yields maximal beneficial adaptations is controversial.Aim of the study: to compare the effect of training programs with high intensity interval versus continuous training on ventricular remodeling, endothelial function, and quality of life in chronic heart failure patients. Materials and methods: forty male patients with chronic heart failure secondary to ischemic heart disease were selected and referred by the cardiologist from the outpatient heart failure clinic National Heart Institute (NHI). Their ages ranged from 50 to 60 years old and ejection fraction< 40% they were randomly assigned into two groups group A who received (high intensity interval training (90-95% of peak heart rate) and group B who received moderate continuous training (50-70% of peak heart rate) 3 times per week for 12 weeks. Before and after training the following measures were obtained: 2D echocardiography for assessment of left ventricular systolic dysfunction (EF%, and left ventricular internal systolic and diastolic dimension and FS %), brachial artery flow-mediated dilation (FMD) for assessment of endothelial function and quality of life (SF-36, Minnesota living with HF questionnaire (MLHFQ). Results : the statistical analysis revealed that ejection fraction increased more with high intensity interval than moderate continuous training (30.41% versus15.01%, *P*<0.001), LVEDD and LVESD improved significantly in both groups with no significant difference between groups, Improvement in brachial artery flow-mediated dilation (endothelial function) was greater with high intensity interval training(P<0.0001).(SF-36, Minnesota living with HF questionnaire (MLHFQ)) improved significantly in both groups. Conclusion: it was concluded that High intensity interval training was superior to moderate continuous training in improving systolic function and endothelial function in patients with chronic heart failure.

Key words	**1.**	**High intensity interval training.**
	2.	**ventricular remodeling.**
	3.	**endothelial function.**
	4.	**continuous training.**
	5.	**chronic heart failure.**
Classification number	**:**	**000.000.**
Pagination	**:**	**150 p.**
Arabic Title Page	**:**	**التدريب المتقطع عالي الشدة مقابل التدريب المستمر علي اعادة هيكلة البطين في مرضي فشل القلب المزمن.**
Library register number	**:**	**6163-6164.**

Author	**:**	**Gehad Ali Abdelhaseeb Glal.**
Title	**:**	**Diaphragmatic thickness response in relation to inspiratory and expiratory muscles training in adults**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hala Mohammed Ezz Eldin**
	2.	**Nesreen Ghareeb Elnahas**
	3.	**Khaled Mahmoud Kamel**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

Purpose: to determine the summative effect of strength training of both inspiratory and expiratory muscles on diaphragmatic thickness as well as ventialatory function test, which all express the diaphragmatic power and strength in adults. Method: Thirty seven adults (non athletics) participated in this study on the period between the first of April 2017 to the middle of January 2018. They were chosen from Faculty of Physical Therapy, Cairo University, students and 2 therapists. The subjects were assigned into two groups. Group A includes 19 subjects (10 women-9 men) and group B which includes 18 subjects (9 women-9 men).Their age ranged from 20-30 years old and with normal body mass index ranged from (18 to 25 kg/m²). For group A received a training program by the powerlung device (trainer), 3 sessions/week for 6 consecutive weeks, 10:15 minutes for each session.While group B received routine chest physiotherapy, 3 sessions/week for 6 consecutive weeks, 15:20 minutes for each session. Ultrasonography was used to evaluate the changes in diaphragmatic excursion, inspiratory thickness and expiratory thickness and spirometric measurements were used to evaluate the change in FEV1, FVC, FEV1/FVC and PEF before and after training program for both groups. Results: Statistical analysis revealed there was no significant change in inspiratory thickness in both groups at the end of the study; although there was significant change in expiratory thickness in the study group relative to the control group. Regarding diaphragmatic excursion showed no significant difference after the training in both groups; also there was significant increase in FVC L in both group, although FVC % perd., FEV1 % perd showed significant increase in group A and no significant increase in group B .There was no significant change in FEV1/FVC in both groups at the end of the study. Finally PEF/ L showed significant increase in group A and no significant increase in group B and the same for PEF % pred. Conclusion: it can be concluded that respiratory muscles need training like skeletal muscles in normal adults.

Key words	**1.**	**Powerlung device.**
	2.	**Respiratory muscles**
	3.	**breathing exercises**
	4.	**Diaphragmatic thickness.**
	5.	**Adults - Respiratory muscles.**
Classification number	**:**	**000.000.**
Pagination	**:**	**118 p.**
Arabic Title Page	**:**	**أستجابه سمك الحجاب الحاجز لتدريب عضلات الشهيق والزفير لدى البالغين.**
Library register number	**:**	**6001-6002.**

Author	**:**	**Heba Mahmoud Taha Hussin Mady**
Title	**:**	**Erythrocytes and fatigue level responses to moderate intensity of endurance training in different age groups in anemic women**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hala Mohammed EzEldin Hamed**
	2.	**Shawky Abd Elhamed Fouad**
	3.	**Mona Mohamed Taha**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

Background and purpose: Exercises are often recommended for patients suffering from anemia to improve physical conditioning and hematologic parameters. This study aimed to assess the effect of moderate endurance training on erythrocytes and fatigue level in different age anaemic women. Subjects& procedures: Forty women were divided in two groups: group (A) included old women and group (B) included young women. All Patients performed moderate endurance exercise program using electronic treadmill. The session consisted of warming up phase of about five minutes followed by conditioning phase of about 20 min then cooling down phase about five minutes at frequency of three times per week for three months. All variables measured pre and post training including Hb, Rbc, Hct, Spo2 endurance level, response to fatigue and level of exertion. Results: the results showed significance difference between both groups (p value <0.05) in relation to Hb, Rbc and Hct in favor of group (A). On the other hand, there was significant differences post treatment between both groups in relation to endurance level, response to fatigue and level of exertion in favor of group (B). Also, results showed significant post treatment differences in the mean value of Spo2 between both groups after training for one month and three months but there were non-significant differences in the mean value of Spo2 between both groups at two months of training. Conclusion: aerobic moderate endurance training had significant effect on erythrocytes and fatigue response in women with different ages.

Key words	**1.**	**Erythrocytes.**
	2.	**endurance training.**
	3.	**Anemia**
	4.	**fatigue response.**
	5.	**women in anemic**
Classification number	**:**	**000.000.**
Pagination	**:**	**82 p.**
Arabic Title Page	**:**	**إستجابة مستوى كرات الدم الحمراء والاجهاد للتدريب متوسط الشدة للفئات العمرية المختلفة لدي السيدات المصابات بفقر الدم.**
Library register number	**:**	**5991-5992.**

Author	**:**	**Marwa Elhelali Elsherbeni**
Title	**:**	**Abdominal Visceral -to- Subcutaneous Fat Ratio Response to Low Level Laser Therapy**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hala Mohmed Ezz Eldeen Hamed**
	2.	**Elhadidy Elhadidy Mohamed**
	3.	**Maha Mohamed Saber**
	4.	**Fatma Aboelmagd M. Hamid**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Obesity with excessive abdominal visceral and subcutaneous fat accumulation affects a person's quality of life, increased rate of morbidity and mortality. Purpose of the study: To objectively evaluate the effect of low level laser therapy (LLLT) on abdominal visceral to subcutaneous (V/S) fat ratio. Methods: Sixty obese women were included with ages ranged from 40-50 years. They were divided into two groups (study and control) of equal number (each 30 women). Procedures: The mean of body mass index (BMI) in the study group was 32.75 ± 1.29 (Kg/m^2) and in the control group it was 33.19 ± 1.48 (Kg/m^2). Both groups received healthy low caloric diet, brisk walking one hour; three times per week. In addition, study group received LLLT, for 20 minutes, 3 times per week for 4weeks. Weight, BMI, waist circumference (WC), hip circumference (HC), waist hip ratio (WHR) and abdominal V/S ratio were measured before and after finishing the study. Results: There was a noticeable improvement in the mean of anthropometric measurements, abdominal visceral fat (AVF) and abdominal subcutaneous fat (ASF) after completion of the study within each group and in the mean of abdominal V/S fat ratio in the study group only. Conclusion: Low level laser therapy is effective, noninvasive & safe method for improving in patient's anthropometric measurements and abdominal fat thickness loss.

Key words	**1.**	**Obesity.**
	2.	**Ultrasonography.**
	3.	**low level laser therapy**
	4.	**subcutaneous fat,**
	5.	**visceral fat.**
Classification number	**:**	**000.000.**
Pagination	**:**	**80 p.**
Arabic Title Page	**:**	**استجابة نسبة دهون الأحشاء مقابل دهون تحت الجلد في البطن إلى العلاج بالليزر منخفض الشدة.**
Library register number	**:**	**6191-6192.**

Author	**:**	**Mina Atef Georgui Elias**
Title	**:**	**Response of vertebral artery blood flow to laser versus electromagnetic field in elderly**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Azza A. Abdel-Hady**
	2.	**Gamal Salaheldin Elmorsy**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

Background and Objective: This study targeted at finding out the response of the vertebral artery (VA) blood flow to Low Level Laser therapy (LLLT) versus pulsed electromagnetic field therapy (PEMFT) in elderly with cervical spondylosis (CS). Subjects and Methods: Research involved 60 patients, both genders, aged (60 to 75) years, diagnosed as chronic CS associated with vertigo, selected from the outpatient clinic of Elmatareya and Ahmed Maher Teaching Hospitals, as well as Elmahaba Specialized Polyclinics. Patients were assigned to 3 equivalent groups. Group (1) received (LLLT) (830 nm wavelength, 200 mW power) on VA bilaterally in addition to myofascial release (MFR). Group (2) received (PEMFT) (rectangular pulse, 50 mT, 20 Hz, 30 minutes/session) plus same technique of myofascial release. Group (3), control group, received MFR only. Groups received 3 sessions per week for 2 months. Blood flow in both VAs was estimated pre and post treatment by measuring Resistivity Index (RI), time averaged mean blood velocity (TAMV), & blood flow volume (VF) using ultrasound Doppler and vertigo was assessed by visual vertigo analogue scale (VVAS). Results: Highly significant difference resulted between pre & post treatment values of all measured variables in G1 and G2 ($p<0.05$) while no significance in G3 ($p>0.05$). Percentages of improvement of (RI, TAMV & VF) in G1 were (↓12.28%), (↑17.24%) & (↑20.34%) respectively for the Lt VA, and (↓13.98%), (↑19.01%), & (↑27.84%) respectively for the Rt, while (↓64.24%) improvement in vertigo. Similarly, in G2, (RI, TAMV & VF) improved by (↓11.73%), (↑20.23%) & (↑22.93%) respectively for the Lt VA, and (↓10.69%), (↑26.35%), & (↑20.25%) respectively for the Rt, while vertigo improved by (↓50.35%). On the other hand, there was some improvement in G3 with no statistical significance, where (RI, TAMV & VF) improved by (↓0.73%), (↑1.15%) and (↑1.86%) respectively in Lt VA, and (↓1.06%), (↑2.84%), & (↑5.38%) in the Rt, while vertigo improved by (↓10.22%). Additionally, no significant difference detected in any group between men and women ($p>0.05$) whether pre or post treatment. Meanwhile, no significance detected in post treatment results between G1 & G2 ($p>0.05$), while highly significance ($p<0.05$) between G1 & G3 as well as between G2 & G3. Conclusion: Both LLLT and PEMFT with parameters used in this study, improved blood flow through vertebral artery bilaterally and decreased vertigo in elderly with cervical spondylosis.

Key words	**1.**	**Low level laser therapy.**
	2.	**vertebral artery.**
	3.	**resistivity index.**
	4.	**Vertigo.**
	5.	**cervical spondylosis.**
	6.	**Elderly.**
	7.	**Electromagnetic field.**
Classification number	**:**	**000.000.**
Pagination	**:**	**106 p.**
Arabic Title Page	**:**	**استجابة تدفق الدم بالشريان الفقاري للعلاج بالليزر مقابل المجال المغناطيسي في المسنين.**
Library register number	**:**	**5715-5716.**

Author	**:**	**Mohamed Mohamed Mady Shedid**
Title	**:**	**Effect of aerobic and resisted exercise on body composition and optimal health for overweight women**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Nagwa Mohamed Hamed Badr**
	2.	**Wafaa Ahmed Fahmy**
	3.	**Hany Ezzat Obaya**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

The purpose of this study was to assess the effect of aerobic and resisted exercise on body composition and optimal health. The study was done on forty Overweight women chosen randomly from employees in police hospital al agoza and dar el salam general hospital Cairo with body mass index (BMI) from 25 kg/m^2 to 29.9 kg/m^2; apparently, they were free from disease their ages ranged from 50 to 60 years, the subjects were assigned into one group, they received caloric diet according to harris benedict equation, aerobic exercise (walking on treadmill), whole-body vibration and resisted exercise to both lower limbs , the study done for four months to each subject during the period from May 2016 till June 2017 in police hospital al agoza, initial evaluation to weight, BMI, muscle mass, fat mass, whole body water content, lower limbs muscle mass (right and left), 6 minutes' walk distance and optimal health questionnaire, was done, re-evaluation after two months of therapy and then final evaluation after four months of therapy , results showed that weight decreased by 4.75 kg , BMI decreased by 1.81 kg/m^2, muscle mass increased by 2.04 kg, fat mass decreased by 7.67 kg, whole body water content increased by 2.04 liter, right lower limb muscle mass increased by 0.45 kg, left lower limb muscle mass increased by 0.46 kg, 6 minutes' walk distance increased by 30.37 meter and optimal health questionnaire increased by 50.25 points at the end of the study calculated from mean and ±SD, so from this results diet, aerobic exercise, resisted exercise and whole-body vibration are effective means to improve body composition and optimal health for overweight women.

Key words	**1.**	**Optimal Health.**
	2.	**Exercise.**
	3.	**Whole body vibration**
	4.	**Body Composition.**
	5.	**Diet.**
	6.	**overweight women**
Classification number	**:**	**000.000.**
Pagination	**:**	**106 p.**
Arabic Title Page	**:**	**تاثير التمرينات الهوائية والمقاومة على مكونات الجسم والكفاءة الصحية للسيدات البدينات.**
Library register number	**:**	**5981-5982.**

Author	**:**	**Mohamed Mohammed Tharwat.**
Title	**:**	**Impact of upper versus lower extremities resistive exercise on plasma lipoprotein in elderly women**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Nagwa M. Hamed Badr**
	2.	**Maha Moustafa Mohammed**
	3.	**Ahmed Hassan Waly**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

Objective: The aim of this study was to compare the impact of upper versus lower extremities resistive exercise on plasma lipoprotein and quality of life (QoL) in elderly women. Methods: sixty elderly women their age ranged from 65-75 years old were participated in this study, and they were selected randomly from physical therapy Department at General Imbaba Hospital in Imbaba, Giza, Egypt. The study was conducted from April, 2016 to December, 2017. They were assigned into two groups equal in number. Both groups enrolled in resistive exercise program (started with 5 minutes warming up, followed by 20 minutes active phase, ended by 5 minutes cooling down), 3 times per week for 12 weeks. Group (A) included thirty participants (women) that had been received upper extremities resistive exercise in a form of: Bench press, overhead elbow extension, Shoulder press and Arm curl. Weight resistance was performed using free weights. Group (B) included thirty participants (women) that had been received lower extremities resistive exercise in a form of: inclined treadmill training program. Lipid ile, BMI and QoL were assessed before the exercise program and after three months, quality of life (QoL) was assessed by short form 36 (SF-36) questionnaires. Results: There were significant improvements in lipid ile, BMI and sf-36 questionnaires of both study groups, while there was no significant difference between both groups in lipid ile or BMI at the end of the study, percent of changes were [lipid ile (TC 5.87 %↓ and 6.52%↓, TG 8.49%↓ and 11.76%↓, LDL 4.74%↓ and 5.05%↓, HDL 12.22%↑ and 18.92 %↑), BMI 2.45%↓ and 4.07%↓, Sf-36 scores 9.69%↑ and 16.31%↑] for study group (A) and group (B) respectively. While group (B) that received inclined treadmill training program for lower limbs showed more significant improvement in sf-36 scores than group (A) resistive exercise training program for upper limbs at the end of the study. It was concluded that resistive exercise training had a significant improvement on lipid ile, BMI and quality of life of elderly women and more significant improvement with resistive exercise training for lower limbs than resistive exercise training program for upper limbs in QoL.

Key words	**1.**	**Resistive exercise training.**
	2.	**body mass index.**
	3.	**quality of life.**
	4.	**elderly women.**
	5.	**Dyslipidemia.**
	6.	**plasma lipoprotein**
Classification number	**:**	**000.000.**
Pagination	**:**	**114 p.**
Arabic Title Page	**:**	**تأثير تمرينات المقاومه للأطراف العلويه مقابل السفليه علي دهون الدم لدي النساء المسنات.**
Library register number	**:**	**5881-5882.**

Author	**:**	**Mona Abdelraouf Moursy Ghallab**
Title	**:**	**Effect of pulsed electromagnetic field on ejection fraction after induced myocardial infarction**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Aziz Guirguis Aziz**
	2.	**Ashraf Aly Shamaa**
	3.	**Fatma Aboelmaged Mohamed Hamed**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Extensive loss of cardiac muscle after ischemic attacks impedes cardiac function leading to impairement patients' life quality. Objective:The present study was designed to investigate effect of pulsed electromagnetic field (PEMF) on cardiac systolic function in myocardial infarction. Subjects and methods: Ten dogs were subjected experimentally to ligation of left anterior descending coronary artery; only seven were treated with PEMF with frequency 30 ± 3 Hz and a magnetic flux density increasing from 0 to 50/60 guss, 5 sessions / week for 4 weeks. The other dogs who did not subjected to PEMF served as controls. Echocardiographic assessments for ejection fraction (EF) and fractional shortening (FS) were performed preoperative, 1 week postoperative "pretreatment", 7 days post treatment and 1 month post treatment. Results: There were significant decrease in EF (t=12.64; p=0.0001) and FS (t=8.69; p=0.0001) in control group relative to study group at 1 month post treatment. Regarding study group EF increased from 64.44 ± 1.24% to72.96 ± 3.79 with a 13.22 % change (p< 0.005) and FS increased from 38.78 ± 1.95% to 43.86 ± 2.19 with a 13.09 % change (p=0.002) at 1 month post treatment compared with pretreatment. Conclusions:These results indicate that PEMF improves cardiac systolic function and help early reperfusion of affected myocardium.

Key words	**1.**	**Coronary arteries.**
	2.	**myocardial infarction.**
	3.	**ejection fraction**
	4.	**pulsed electromagnetic field.**
Classification number	**:**	**000.000.**
Pagination	**:**	**86 p.**
Arabic Title Page	**:**	**تأثير المجال المغناطيسي الكهربائي المتقطع علي انقباض القلب بعد إحداث الإحتشاء لعضلة القلب.**
Library register number	**:**	**5883-5884.**

Author	**:**	**Mona Ahmed Mohamed Abd El Wahab**
Title	**:**	**Aerobic versus resistive training on selected hematological Parameters in elderly**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hala Mohamed EzzEldin**
	2.	**ShawkyAbdElhamidFouad**
	3.	**Aisha Abdel MonemHagag**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	

Background: Aging is related to a wide assortment of changes, incorporating alterations in blood profile: immunological and hematological functions are down-regulated. Some studies have shown that different exercise ways can enhance the hematological parameters Objective: The present study was designed to compare the effect of aerobic versus resistive training on selected hematological parameters in elderly Subjects and methods: Forty male and female elderly subjects, with age, range from 65-75 years were selected and randomly divided into two groups of 20 subjects. Group (A) participated in moderate aerobic training (walking on the treadmill) and Group (B) (participated in a progressive resistive training program .Both resistance and aerobic training were performed three sessions /week for 8 weeksResults: the results of results of this study revealed that patient participated in either resistance or aerobic exercise showed a significant decrease in their BMI associated with significant increase in their Hb with no significant changes among or between the two groups as regarding WBCs, RBCs and PLT. Conclusions: It was concluded that both endurance and resistance exercises showed a significant decrease in BMI and a significant increase in Hb post-treatment compared with that pre-treatment. These results indicate that both endurance and resistance exercises should be recommended in old aged persons, as both exercises can be considered to limit and reverse some of the age-related changes and enhance some hematological parameters

Key words	**1.**	**Elderly – hematological.**
	2.	**Aerobic training**
	3.	**Resistive training**
	4.	**Hematological parameters**
Classification number	**:**	**000.000.**
Pagination	**:**	**82 p.**
Arabic Title Page	**:**	**تأثير التمرينات الهوائية مقارنة بتمرينات المقاومة على مقاييس الدم المختارة في كبار السن.**
Library register number	**:**	**6003-6004.**

Author	**:**	**Nadia Saad Sayed Ahmed El Gressy**
Title	**:**	**Quality Of Life Response To Resistive Airflow Training In Patients With Chronic Obstructive Pulmonary Disease**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
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	3.	**NahedHusseinyTaha**
	4.	**MohebWadea El Faizy**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	
Purpose: This study was conducted to determine the quality of life response to resistive airflow training in patients with chronic obstructive disease. Subjects: 60 male patients with moderate chronic obstructive pulmonary disease with age ranged from 45-55 years enrolled in the study for twelve weeks. They were from El-Sahel Teaching Hospital outpatient chest clinic and were assigned into two groups with equal numbers. Both groups received traditional chest physical therapy in the form of relaxed positions, breathing retraining exercises (diaphragmatic, pursed lip breathing),and postural drainage ,in addition to resistive airflow training using expand-a-lung for study group for twelve weeks . The FVC, FEV1, FEV1/FVC, 6MWT(walking distance and SPO2),and HRQL was measured for the two groups before and after 12 weeks of training. Results: There was significant increase of all ventilatory functions (FVC 21.67%↑,FEV1 36.3%↑,and EFV1/FVC 12.31%↑), 6MWT(walking distance 91.21%↑ and SPO2 4.34%↑),and HRQL 75%↓ with the study group when compared with the control group .conclusion: Resistive airflow training with expand-a-lung is an effective rehabilitative method for COPD patients in combination with traditional chest physical therapy improves HRQL, walking distances, peripheral oxygen saturation as well as ventilatory functions.		
Key words	**1.**	**Expand–a-lung**
	2.	**Resistive airflow training**
	3.	**Quality of life**
	4.	**Ventilatory functions**
	5.	**Chronic Obstructive Pulmonary Disease (COPD)**
Classification number	**:**	**000.000.**
Pagination	**:**	**125 p.**
Arabic Title Page	**:**	**نوعية استجابة للحياة لتدريب تدفق الهواء المقاوم في المرضا لذين يعانون من مرض الانسداد الرئوي المزمن.**
Library register number	**:**	**5989-5990.**

Author	**:**	**Rana Hesham Mohamed El-Banna.**
Title	**:**	**High Intensity Interval Training versus Inspiratory Muscle Training on modulating Blood Rheology in Coronary Artery Disease Risk Factors.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Nagwa Mohamed HamedBadr**
	2.	**Heba Ahmed Ali Abdeen**
	3.	**Mary Wadea**
Degree	**:**	**Doctoral.**
Year	**:**	**2018.**
Abstract	**:**	
Background: Coronary heart disease risk factors are conditions or habits that raise the risk for coronary heart disease and heart attack. The West of Scotland Coronary Prevention Study showed that levels of haemorheological variables were related to incidence of coronary artery disease. Purpose: To compare between the effects of the High Intensity Interval Training versus Inspiratory Muscle Training on modulating blood rheology in coronary artery Disease risk factor patients. Methods: Forty male patients with age ranged from 45 to 55-year-old. They had been selected from Ibri and Rustaq hospital /South Batanah /Sultanate Oman. They had been randomly divided into two equal groups. HIIT group (A) underwent high intensity interval training program once daily, three times per week for four weeks. IMT group (B) underwent Inspiratory muscle training program once daily, three times per week for four weeks. Measurement of hematocrit value, lipid profile in addition to resting heart rate and six-minute walking test were done pre and post treatment program. Results: Statistical analysis revealed a significant improvement in hematocrit value, triglyceride level, LDL level, resting heart rate and six-minute walking distance test in HIIT group (A) with percentage of improvement 0.1%, 0.01%, 0.16%, 3.3% and 23.9% respectively while IMT group (B) showed a statistical significant effect on resting heart rate and six-minute walking distance test with percentage of improvement 0.9% and 21.3% respectively. Conclusion: Theusage of High interval intensity training program had a significant positive effect more than inspiratory muscle training on modulating blood rheology in Coronary Artery Disease Risk Factor patients		
Key words	**1.**	**High interval intensity training.**
	2.	**Blood Rheology.**
	3.	**Coronary Artery Disease Risk Factor**
	4.	**Inspiratory Muscle Training.**
Classification number	**:**	**000.000.**
Pagination	**:**	**89 p.**
Arabic Title Page	**:**	**التمارين المتقطعه عاليه الشده مقابل جهاز تقويه عضلات التنفس علي فيزيائيه حركه الدم في عوامل الخطر التاجيه.**
Library register number	**:**	**5999-6000.**