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
Master Degree 2019

Author	**:**	**Alaa Abdelmonem Ahmed Hegazy.**
Title	**:**	**Effect of Early Mobilization on Routine Chest Physiotherapy on Ventilatory Functions In Open Heart Surgery Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Akram Abd El Aziz Sayed.**
	2.	**Lotfy Mohammed Aissa.**
	3.	**Mina Atef Georgui Elias.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Purpose: **This study was designed to determine the effect of early mobilization in improving ventilatory functions in individuals undergoing open heart surgery.** ***Methods:*** **Forty patients of both sexes (31 males and 9 females) who underwent open heart surgery were selected from National Heart Institute in the duration from April to July 2019. Their age ranged from 45-65 years. They were randomly assigned into two groups equal in number, twenty in each group. Group I (intervention group) received early mobilization and routine chest physiotherapy(deep breathing exercises and splinted coughing); and Group II (control group) received only routine chest physiotherapy. Patients in both groups underwent two sessions of physical therapy for the first two pre and post-operative day and once per day on the third and up to the tenth post-operative day. All of them underwent evaluation of ventilatory functions: Forced Vital Capacity (FVC), Forced Expiratory Volume in the First Second (FEV1) and Peak Expiratory Flow (PEF) before treatment application and after ten days post-operatively.** ***Results:*** **The results showed that there was a significant improvement of ventilatory functions (FVC, FEV1 and PEF) in both groups but the improvement was more greater in group I when compared to the control group.** ***Conclusions:*** **Early mobilization is more effective in improving ventilatory functions after open heart surgery.**

Key words	**1.**	**Chest –Physiotherapy.**
	2.	**ventilatory function.**
	3.	**Early mobilization.**
	4.	**Open Heart Surgery Patients.**
Classification number	**:**	**000.000.**
Pagination	**:**	**165 p.**
Arabic Title Page	**:**	**تأثير تمارين الحركة المبكرة والعلاج الطبيعي الروتيني للصدرعلى وظائف الرئة ما بعد جراحات القلب المفتوح .**
Library register number	**:**	**6753-6754.**

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	**:**	**Alaa Mohamed Naguib Ashry.**
Title	**:**	**Flutter versus active cycle of breathing techniques on blood gases in COPD patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hala Mohamed EzzEldin Hamed.**
	2.	**Heba Ahmed Ali Abdeen.**
	3.	**Maryam Ali Abdelkader.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

The purpose of this study was designed to compare between the efficacy of Flutter device versus active cycle of breathing technique on arterial blood gases in COPD patients. Methods: Forty male patients with moderate to severe level of COPD (FEV1/FVC<0.7), were included in this study their age was > 40 years old. They were selected from El-Demrdash hospital, they were assigned into two groups equal in number: Group (A): received Flutter device for 4 weeks, 3times/ week, and Group (B): received ACBT for 4 weeks, 3times/ week. Evaluation was done for all patients by blood gases analysis test, 6minute walk distance and COPD Assessment test (CAT), all these measures were taken before starting and after finishing treatment program. The results of this study revealed that there was significant difference between Flutter and ACBT in these parameters (PH, SaO_2, $PaCO_2$, PaO_2, 6MWD, CAT). There was significant increase in all the previous parameters in Flutter group more than ACBT group. Group (A) showed a statistical significant improvement in ABG parameters (PH, , SaO_2, $PaCO_2$, PaO_2,), 6MWD and CAT that was (0.5%, 3.3%, -15.1%, 13.2%, 23.1% and -28.6%) respectively, more than the improvement in group (B), that was (0.1%, 1.1%, -7.2%, 4.5%, 10.1% and -15.0%) respectively. Conclusion: The Flutter device is more effective than ACBT in improving arterial blood gases in COPD patients who had chronic sputum production, as Flutter device help in airway clearance and improving lung oxygenation, 6MWD and CAT.

Key words	**1.**	**Flutter device.**
	2.	**arterial blood gases.**
	3.	**6 minute walk test.**
	4.	**COPD Assessment Test.**
	5.	**Active cycle breathing technique.**
	6.	**blood gases in COPD.**
Classification number	**:**	**000.000.**
Pagination	**:**	**104 p.**
Arabic Title Page	**:**	**تأثير الفلاتر مقابل الدورة النشطة لتقنية التنفس على غازات الدم لدى مرضى الانسداد الرئوي المزمن.**
Library register number	**:**	**6313-6314.**

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	**:**	**Ali Mohamed Ali Ismail**
Title	**:**	**Hyposalivation response to transcutaneous electrical nerve stimulation in diabetic type 2 patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hala Mohamed Ezz-El deen.**
	2.	**Mona Mohamed Morsy.**
	3.	**Mariam Elsayed Mohamed Abdel Aal.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

The aim of this study was to find out hyposalivation response to transcutaneous electrical nerve stimulation (TENS) in diabetes mellitus type 2 (DM) patients.The study was done on 100 hyposalivated diabetic type 2 patients from both sexes with whole resting salivary flow rate ≤ 0.16 milliliters per five minute (ml/minute). Their age ranged from 44 to 74 years and selected from the outpatient clinic of internal medicine (Cairo University Hospitals). All patients were assigned randomly into one study group receiving only one extraoral 5-minutes TENS session applied bilaterally on skin over parotid gland with frequency 50 Hz and pulse duration 250μs and intensity of TENS was gradually increased to the maximum intensity tolerated to every patient. Measurement of whole resting saliva using low forced spitting method for 5 minutes done before the study and TENS stimulating saliva collected during 5 minutes stimulation in graduated test tube. Pre and post study measurement of eight-item visual analogue scale xerostomia (subjective mouth dryness) questionnaire (8-item VAS-XQ) were done for each patient. Results revealed that 90 out of 100 patients responded positively to TENS by increased both salivary volume and flow rate with mean 0.68 ± 0.26 ml, 0.15 ± 0.09 ml/minute respectively with improvement percentage 80.65%, 50.00% respectively, compared to mean whole resting salivary volume and flow rate 0.43 ± 0.29 ml, 0.10 ± 0.10 ml/minute respectively. Improved saliva production and xerostomia symptoms by adding TENS to mainstream therapy course of hyposalivation may be a hopeful device for preventing oral complications DM.

Key words	**1.**	**Transcutaneous electrical nerve stimulation (TENS)**
	2.	**Hyposalivation.**
	3.	**Diabetes mellitus type 2.**
	4.	**Electreostimulation.**
Classification number	**:**	**000.000.**
Pagination	**:**	**131 p.**
Arabic Title Page	**:**	**استجابة نقص اللعاب للتنبيه الكهربي العصبي عبر الجلد في مرضي النوع الثاني من البوال السكرى.**
Library register number	**:**	**6367-6368.**

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	**:**	**Amina Fadl Hosny Abozethar.**
Title	**:**	**Response of Parathyroid Hormone and Blood Calcium Level to Moderate Intensity Aerobic Exercise In Elderly.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Mariam El-Sayed Mohamed.**
	2.	**Hany Farid Eid Morsy Elsisi.**
	3.	**Walaa Arafa Keshk.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	
Background: One of the main aging biological changes is bone deterioration which affected more by estrogen deficiency in elderly women, Parathyroid hormone is one of the osteoporotic indices and a major regulator of bone metabolism and calcium homeostasis, the objective is to determine the response of parathyroid hormone and total calcium level to moderate aerobic training in elderly. Methods: Thirty-five female subjects were selected from out-patient clinic in Um El-Masryeen General Hospital /Giza/Egypt, their age ranged between 60 to 70 years with mean age is 64.45, and study was conducted between October 2017 and April 2018. All subjects had participated in moderate intensity aerobic training calculated as 60% to 70% of their predetermined maximum heart rate. The program was applied for three times per week for 12 weeks. Parathyroid hormone and calcium level were measured before and after the training program in laboratory analysis. Results: Statistical analysis showed a significant decrease in parathyroid hormone by 5.98% and a significant increase in total calcium level in the blood by 0.44%. Conclusion: It was concluded that moderate aerobic training decreases parathyroid hormone and increase total calcium serum level in elderly.		
Key words	**1.**	**Calcium.**
	2.	**Blood Calcium Level.**
	3.	**Elderly.**
	4.	**Osteoporosis.**
	5.	**Aerobic Exercise In Elderly.**
Classification number	**:**	**000.000.**
Pagination	**:**	**79 p.**
Arabic Title Page	**:**	**استجابة هرمون الغدة الجاردرقية و مستوى الكالسيوم فى الدم للتمرينات الهوائية متوسطة الشدة لدى المسنين.**
Library register number	**:**	**6607 -6608.**

Author	**:**	**Amr Nageh Abdelmwgod Abotaleb**
Title	**:**	**Ultrasound Cavitation versus Cryolipolysis on Liver Functions in Central Obese Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Akram Abd El Aziz Sayed.**
	2.	**Heba Ahmed Ali Abdeen.**
	3.	**Marry Wadea Fawzy.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Central Obesity is one of the most common worldwide diseases afflicting humans. It is a major health problem throughout the world because of its high prevalence and its association with increased risk of cardiovascular and liver diseases. The purpose of this study was to determine the effect of ultrasound cavitation versus cryolipolysis on liver functions in central obese patients. Subjects: Thirty (30) patients of both sexes with Body Mass Index (BMI) > 25 Kg\m2 and Waist circumference (WC) ≥ 102 cm in men & 88cm in women, 15 men and 15 women were assigned into two groups equal in number. Their ages ranged from 45 to 55 years. Group A with mean age (50.47 ± 3.31) years and Group B with mean age (49.47 ± 3.89) years. Methods: Body mass index (BMI), waist circumference (WC), abdominal fat percentage and liver functions was measured before and after performing ultrasound cavitation and cryolipolysis sessions in both groups, The study period was 4 weeks. Every patient in Group A received 8 ultrasound cavitation sessions, Every patient in Group B received 1 cryolipolysis session. Results: The results revealed that there was statistically significant change in central obesity and liver functions in both Group A and Group B. but there wasn't statistically significant difference in central obesity and liver functions between two groups. In Group A, the percentage of reduction (improvement) for BMI, abdominal fat% and WC was 2.94% ↓, 11.07% ↓ and 5.59% ↓, respectively. In Group B, the percentage of reduction (improvement) for BMI, abdominal fat% and WC was 3.62% ↓, 19.11% ↓ and 4.68% ↓ respectively. In Group A, the percentage of liver functions changes (increase) for ALT (Alanine Transaminase), AST (Aspartate Transaminase) and ALP (Alkaline phosphatase) was within normal range as 8.94% ↑, 10.48% ↑ and 3.12% ↑ respectively. In Group B, the percentage of liver functions changes (increase) for ALT (Alanine Transaminase), AST (Aspartate Transaminase) and ALP (Alkaline phosphatase) was within normal range as 11.02% ↑, 12.37% ↑ and 3.04% ↑ respectively. Conclusion: There was improvement in central obesity after applying ultrasound cavitation and cryolipolysis sessions with better results in cryolipolysis than ultrasound cavitation and mild changes in liver functions within its normal range.

Key words	**1.**	**central obesity.**
	2.	**ultrasound cavitation.**
	3.	**Ultrasound Cavitation versus**
	4.	**Cryolipolysis.**
	5.	**Liver Functions.**
	6.	**Central Obese Patients.**
Classification number	**:**	**000.000.**
Pagination	**:**	**69 p.**
Arabic Title Page	**:**	**تأثير التجويف بالموجات فوق الصوتية مقابل تكسير الدهون بالتجميد على وظائف الكبد في مرضى السمنة المركزية.**
Library register number	**:**	**6399- 6400.**

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	**:**	**Bassem Salah el din Mohamed.**
Title	**:**	**Effect of quake device training on enhancement of drainage in patients with chronic Bronchitis.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Azza Abd El Aziz Abd El Hady**
	2.	**Hoda Ibrahim Fahim**
	3.	**Nesreen Ghareeb El Nahass**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

This study was conducted to determine the Effect Of Quake Device Training On Enhancement Of Drainage In Patients With Chronic Bronchitis. Subjects: Forty patients of both sexes (22 women and 18 men) were diagnosed clinically according to GOLD 2016 by having moderate (GOLD 2) Chronic Obstructive Pulmonary Disease with age ranged from 40-60years enrolled in the study. They were chosen from outpatient clinic of chest department in Internal Affairs Police Hospitals. Methods: They were assigned into two groups equal in numbers. Group (A): Twenty patients (12 women, 8 men) received Quake device twice daily, 3times/week for 8 weeks plus breathing exercises (diaphragmatic and localized breathing exercises), Group (B) : Twenty patients (10 women, 10 men) received postural drainage twice daily that was carried out according to sputum anatomical presentation revealed in the chest radiograph (x- ray)., 3times/week for 8 weeks plus breathing exercises (diaphragmatic and localized breathing exercises). They were assessed by taking blood samples to measure arterial blood gases (Pao2, Paco2, pH, Hco3) using arterial blood gases analyzer. Results: There was significant difference when comparing between pre and post-treatment mean values of the measured arterial blood gases as for *group A* it showed percentage of improvement in Pao2(mmHg) (23.27%), Paco2 (mmHg) (12.89%),pH (3.87%) and Hco3 (mmHg)(35.3%) improvement while *group B* The results showed much lesser significant improvement as Pao2 (mmHg) (14.25%), Paco2 (mmHg)(6.18%), PH (mmHg) (2.4%) and forHco3 (mmHg) (16.74%).Conclusion: It was concluded that management of removing secretions with quake and posture drainage is likewise important by both methods with furthermore noticeable enhancement in quake training than in posture drainage.

Key words	**1.**	**Quake Device .**
	2.	**Chronic Bronchitis**
	3.	**Posture Drainage**
Classification number	**:**	**000.000.**
Pagination	**:**	**88 p.**
Arabic Title Page	**:**	**تأثير التدريب بجهاز الكواك لتحسين النزح الوضعى فى علاج مرضى الألتهاب الشعبى المزمن.**
Library register number	**:**	**6251-6252.**

Author	**:**	**Doaa Mohamed Mahmoud Allam.**
Title	**:**	**Irisin Response To Continous Versus Interval Aerobic Training In Type 2 Diabetic Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Basant Hamdy Elrefaey.**
	2.	**Mohamed Abd El-Motaal Safa.**
	3.	**Heba Ali Abd El-Ghaffar.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Purpose: The aim of the study was to investigate irisin response to continuous versus interval aerobic training in type 2 diabetic patients. Subjects and methods : Thirty type 2 diabetic patients (26 women and 4 men) , their age ranged from 45 to 60 years with body mass index ranged from class I and class II obesity participated in the study. Patients were selected from the Out-Patient Clinic, Tanta University Hospital. The patients were randomly assigned into two equal groups: Group A (Continous Exercise Group) which included 15 patients with type 2 diabetes mellitus (13 women, 2 men). They participated in 8 weeks program of continous moderate aerobic exercise training (3 sessions per week) and Group B (Interval Exercise Group) which included 15 patients with type 2 diabetes mellitus (13 women, 2 men).They participated in 8 weeks program of interval moderate intensity aerobic exercise training (3 sessions per week). Results: the results of this study in Group (A) (Continuous Exercise Group) and Group (B) (Interval Exercise Group), showed significant improvement in (FBG, 2hpp, 6MWD and decrease in max HR) and non-significant changes in irisin, spo2 and resting HR after 8 weeks of exercise training. Between groups comparison showed non-significant differences in all variables except in FBG which showed greater improvement in Group A than group B. Conclusion: irisin expression is not augmented by aerobic exercise. Glycemic control and functional capacity of type 2 diabetes can be improved by aerobic exercise.

Key words	**1.**	**Irisin.**
	2.	**Type2 diabetes.**
	3.	**Aerobic exercise.**
Classification number	**:**	**000.000.**
Pagination	**:**	**122 p.**
Arabic Title Page	**:**	**أستجابة الإيريزين للتدريبات الهوائية المستمرة مقابل المتقطعه لدى المرضى النوع الثانى من السكري.**
Library register number	**:**	**6651-6652.**

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	**:**	**Eman Rashad Ali Elsayed.**
Title	**:**	**Effect Of Aerobic Exercise On Metabolic Profile In Diabesity Patients Under Intermittent Fasting 16/8 Protocol.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Azza Abdel Aziz Abdel hady.**
	2.	**Nesreen Ghareeb Mohamed El-Nahas.**
	3.	**Sally Adel Hakim.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Background: The increased number of patients suffers from diabesity provoke the scientific research to decrease its complications either acute or chronic and the debate about the way of performing intermittent fasting 16/8 protocol or other types of fasting protocols to reach this goal had to be studied. Purpose: To determine the effect of aerobic exercise on metabolic profile in diabesity patients under intermittent fasting16/8 protocol. Methods: Forty women diabesity patients, age ranged from 35-45 years old. They were diabetic since 5-7 years with class II obesity according to their body mass index classification. They were assigned randomly using the sealed envelope method of randomization into two matched groups (A and B) equal in numbers. Group A: received intermittent fasting 16/8 protocol with controlled diet regimen and received treadmill aerobic exercise during the fasting (window). Group B: received intermittent fasting 16/8 protocol with controlled diet regimen and received treadmill aerobic exercise during the eating period (window). Both groups recieved treadmill exercises with intensity of 40-60% of the maximum heart rate (MHR) 3 times/ week for 12 weeks participated in the study. Weight, BMI, HbA1c, total cholesterol, LDL, HDL and 6MWT were used for assessment before and after training. Results: The results revealed that there was significant reduction in BMI by 9.19 % and 7.12% in group A and B respectively. While the results of HbA1c there was reduction by 20.7 % and 13.91% in group A and B respectively. For the lipid profile the results showed reduction in LDL by 47.8 % and 43.58% in group A and B respectively, and in Triglyceride 33.01 % and 26.59% in group A and B respectively and in total cholesterol 21.46 % and 16.53% in group A and B respectively. While the results of HDL there was increase by 79.74% and 42.46% in group A and B respectively and there was increase in 6MWT by 23.8% and 18.36% in group A and B respectively at post training compared to pre training results in all patients. In relation to between group differences intermittent fasting 16/8 protocol with controlled diet regimen and treadmill aerobic exercise during the fasting period (window) has significant decrease of HbA1c, total cholesterol, triglyceride and LDL and significant increase of HDL values and 6MWT distance (group A) . There was no statistical difference between both groups in weight and BMI but there was clinical difference and higher percent of improvement in favor to group A (9.19 %) than group B (7.12%). Conclusion: Exercise with intermittent fasting 16/8 protocol in fasting period is a good way to decrease body weight and modulate metabolic profile in diabesity women .

Key words	**1.**	**Aerobic exercise.**
	2.	**metabolic profile.**
	3.	**Diabesity.**
	4.	**Intermittent Fasting 16/8 Protocol.**
Classification number	**:**	**000.000.**
Pagination	**:**	**125 p.**
Arabic Title Page	**:**	**تأثير التمارين الهوائية علي الملف الايضي فى مرضي السكري البدينات تحت نظام الصيام المتقطع ٨/١٦.**
Library register number	**:**	**6321-6322.**

Author	**:**	**Gelan Ali.**
Title	**:**	**Effect Of Laser Therapy On Immunity For Acute Lymphatic Leukemic Patients During Chemotherapy.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Zahra Mohamed Serry.**
	2.	**Hany Ezzat Obaya.**
	3.	**Ola Mohamed Reda Khorshid.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Objective: To assess the therapeutic efficacy of laser therapy on immunity for acute lymphatic leukemic patients during chemotherapy. **Material and Methods:** Forty patients have Acute Lymphatic Leukaemia (ALL) were participating in the study. They were recruited from the Medical Oncology department in (National Cancer Institute Cairo University). Their ages ranged from 25 to 40 years, patients of both genders were randomly subdivided into two equal groups in number .Group (A) Study group=Laser group: (11 men, 9 women). They received the laser in addition to physical exercise in the form of (chest physiotherapy, manual active free exercises, and home program). Group (B): Control group (7 men,13 women). They received physical exercise in the form of (chest physiotherapy, manual active free exercises, and home program) This study started and continued for three months as the ALL patients received two sessions per week, they were assessed in (PaO2, PaCO2, leukocytes, B-lymphocytes and neutrophils) assessment applied 3 times (pretreatment followed up after six weeks (post-1 treatment) and the end of the study after twelve weeks (post-2 treatment). *Result,* there was a significant increase in (PaO2, B-lymphocytes and neutrophils) and there was significant decrease in (PaCO2 , leukocytes) post-1 treatment and post-2 treatment values of group A (laser group) in comparing with group B post treatment, percentage of improvement were 9.23 % and 6.78% respectively. *Conclusion*: it was concluded that laser therapy had significant effect on immunity for acute lymphatic leukemic patients during chemotherapy.

Key words	**1.**	**Acute Lymphatic Leukaemia.**
	2.	**manual therapy.**
	3.	**physical therapy chemotherapy.**
	4.	**arterial blood gases.**
Classification number	**:**	**000.000.**
Pagination	**:**	**119 p.**
Arabic Title Page	**:**	تأثير العلاج بالليزر على المناعة لدى مرضى سرطان الدم الليمفاوي الحاد خلال فترة العلاج الكيميائي.
Library register number	**:**	**6493-6494.**

Author	**:**	**Hasnaa Ahmed Abdel-Aziz**
Title	**:**	**Effect of laser acupuncture on Ankle-Brachial index and functional status of the patients with peripheral arterial disease.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Abeer Ahmad Farghaly.**
	2.	**Ahmad Mahdi Ahmad.**
	3.	**Hesham Mostafa.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Laser acupuncture has produced promising results in the management of many medical conditions; it has been used as a non-invasive therapy with no puncture pain. This study aims to investigate the effect of Aluminum Gallium Arsenide (AlGaAs) LASER acupuncture on the lower limb blood supply and functional walking ability in patients with peripheral arterial disease (PAD). Thirty male patients with PAD were recruited from Kasr El-ainy Hospital, and were randomly divided into two groups: study group (n=15) and control group (n=15). Both groups received the routine medical treatment whereas study group received laser acupuncture therapy twice weekly for five weeks. Ankle brachial pressure index (ABPI), six-minute walk test (6MWT), and rating of perceived exertion using modified Borg scale were measured. The results showed that laser acupuncture has induced highly statistically significant improvements in all the measured outcomes ($p < 0.01$). However, results revealed no significant difference between the two groups except for modified Borg scale. Accordingly, AlGaAs Laser acupuncture could be an effective non-pharmacological intervention for improving circulation.

Key words	**1.**	**Laser acupuncture.**
	2.	**ABPI, 6-MWT**
	3.	**peripheral arterial disease.**
	4.	**Ankle-Brachial index.**
	5.	**functional status - peripheral arterial disease.**
Classification number	**:**	**000.000.**
Pagination	**:**	**114 p.**
Arabic Title Page	**:**	**تأثير استخدام الليزر في أماكن الوخز بالإبر الصينية علي المعامل الشرياني الكاحلي العضدي و القدرة الوظيفية لمرضي الشرايين الطرفية.**
Library register number	**:**	**6499-6500.**

Author	**:**	**Hazem Mohamed Yasin Abbas.**
Title	**:**	**Effect of incentive spirometer on oxygen saturation in patient in intensive care unit.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Samah Mahmoud Ismail.**
	2.	**Emad Mohamed Ibrahim.**
	3.	**Gomma Abdel-Razk.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Previous studies have revealed that incentive spirometer has effect on oxygen saturation, highlighted in many studies, however there is a lack of literature concerning its effect on renal patients in intensive care unit. Purpose of the Study: to find out the effect of incentive spirometer on oxygen saturation in patient in ICU. Subjects and Methods: Forty male patients with renal failure grade II were selected from intensive care unit department, El-Fayoum General Hospital and El-Fayoum university Hospital. Their mean ages range between 60 to 65 years old, mean height 170 to 177 Cm, mean weight 70 to 79 Kg and body mass index range between 22.86 to 26.33 Kg/m2 . They were assigned in to 2 groups (A,B) equally in number. Group (A): Twenty patients received Incentive spirometer and traditional physiotherapy (circulatory ex, early mobilization and turning in bed) in addition to their routine medical treatment, group (B): Twenty patients received traditional physiotherapy (circulatory ex, early mobilization and turning in bed) and their routine medical treatment .they participated in a physical therapy program for two sessions per day for six days. oxygen saturation was measured before and after the study . Results: The results of this study found that, there was a statistically highly significant difference (P<0.19) in Sa02 ,% of improvement in oxygen saturation in group A and group B by 3.9% and 2.7% respectively. Conclusion: the effect of Incentive spirometer and early mobilization is better than effect of early mobilization alone.

Key words	**1.**	**Incentive spirometer.**
	2.	**rade II, oxygen saturation.**
	3.	**early mobilization.**
	4.	**oxygen saturation in patient in**
	5.	**intensive care unit.**
	6.	**renal failure g.**
Classification number	**:**	**000.000.**
Pagination	**:**	**102 p.**
Arabic Title Page	**:**	تأثير جهاز الحافز التنفسي علي نسبة الأوكسجين بالدم علي مرضى الرعاية المركزة.
Library register number	**:**	**6405-6406.**

Author	**:**	**Hend Hassan Sayed Salm.**
Title	**:**	**Efficacy Of Ventilator Hyperinflation Versus Manual Resucistator Bag On Mechanically Ventilated Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Zahra Mohamed Hassan Serry.**
	2.	**Hany Ezzat Obaya.**
	3.	**Mohammed Shehata Abdullah.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Objective: the aim of this study was to compare the efficacy of ventilator hyperinflation versus manual resuscitator bag hyperinflation on mechanically ventilated patients. Methods: Forty mechanically ventilated patients (30 men & 10 women) their age ranged from 40-50 years were selected from Cairo University Hospitals (185 new emergency unit) This study conducted from march 2018 to July 2018 Cairo, Egypt. The forty patients were classified into two groups equal in number ; each group consisted of twenty patients. group (A) received manual hyperinflation and traditional physiotherapy, group (B) received ventilator hyperinflation and traditional physiotherapy. Both groups would be evaluated through: amount of septum production, dynamic compliance and arterial blood gases 3 times per week, the duration of the study last for two weeks.Results: there were significant difference in pao2 in ABGs in manual hyperinflation group (A), percentage of changes pre- Pao2 was (84.86 ±15.41), while the mean value of post- Pao2 after receiving manual hyperinflation and traditional physiotherapy treatment was (114.13 ±16.67), and significant difference in secretion the mean value of first-session was (16.66 ±6.17), while the mean value of final-session post- secretions after receiving manual hyperinflation and traditional physiotherapy treatment was (41.66 ±8.16), while non- significant difference in total compliance in both groups independent t-test of the patient for post-treatment, group A (107.65±5.09) and Post-treatment, group B (101.45±4.27) revealed that there was no statistical significant differences.Conclusion: It was concluded that group (A) with manual hyperinflation had a significant improvement group (B) ventilator hyperinflation.

Key words	**1.**	**mechanical ventilator.**
	2.	**ventilator hyperinflation.**
	3.	**manual hyperinflation.**
	4.	**Manual Resucistator Bag.**
Classification number	**:**	**000.000.**
Pagination	**:**	**67 p.**
Arabic Title Page	**:**	**تأثير تضخم التنفس الاصطناعي مقابل تضخم كيس الإنعاش اليدوى علي مرضي جهاز التنفس الصناعي.**
Library register number	**:**	**6285-6286.**

Author	**:**	**Maha Ahmed Mohamed Habib.**
Title	**:**	**Effect Of Progressive Exercise Program On The Bleeding Frequency In Haemophilic Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hala Mohamed Ezz EL dein Hamed.**
	2.	**Talaat Abd El Hamed Al Kemary.**
	3.	**Gihan Samir Mohamed.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	
Purpose: The purpose of this study was to assess the effect of progressive exercise program on the bleeding frequency in haemophilic patients. Subjects: Thirty men with haemophilia were selected randomly from the out-patient clinic of internal medicine in Damanhour Medical National Institute in Egypt, their age ranged from 20 to 40 years were participated in this study. Materials and Methods: Participants were assigned into two equal groups 1-Group (A) received their medical treatment with their normal activities and participated in progressive strengthening exercise program for eight weeks 2-Group (B) received their medical treatment and on their normal activities. All had experienced at least one episode of bleeding last month. Data of clotting time, bleeding frequency, pain and muscle strength were collected from each patient in both group pre and post the eight weeks of treatment program. Results: Statistical analysis using paired student t-test and unpaired student t-test revealed that there was no significant difference regarding mean values of the measurable variables pretreatment between both groups A and B. However, there was significant difference in improvement in mean values of clotting time, pain and bleeding frequency in group (A) than in group (B) after eight weeks of treatment. There was significant decreasing (P<0.05) in clotting time (P-Value was 0.042) post treatment (9.48 ٪) compared to group (B) (1.64 ٪). Conclusion:The selected physiotherapy program is not only effective with good result in patients with haemophilia, but also would reflect much better result with improvement in values of pain and bleeding if added to the medical treatment program.		
Key words	**1.**	**Bleeding.**
	2.	**Exercise.**
	3.	**Clotting time.**
	4.	**Haemophilia.**
	5.	**Pain.**
Classification number	**:**	**000.000.**
Pagination	**:**	**144 p.**
Arabic Title Page	**:**	**تأثير برنامج التمرين التدريجي على تكرار النزيف في مرضى نزف الدم الوراثي.**
Library register number	**:**	**6323-6324.**

Author	**:**	**Maha M. Azzam.**
Title	**:**	**Efficacy of High Intsnesty Interval Exercise on nicotine in hypercholeserolemic smoker.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Zahraa M. Hassan.**
	2.	**Samah M. Ismail.**
	3.	**Maha H.Saber.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Objective: The purpose of this study was to find out the effect of interval training on serum nicotine and lipid profile in male smokers. Background : Tobacco overtaking , sedentary lifestyle and low fitness considered as the main risk factors for diseases that leads to death, such as, coronary heart disease, stroke, obesity and hypertension which are the most common causes of morbidity and mortality. Aim of the study: The purpose of this study was to find out the effect of interval training on serum nicotine and lipid profile in male smokers. Subject and Methods: The study was conducted on thirty smokers, their age ranged from 20 to 40 years Their BMI ranged from 25 to 29.9 kg/m2 All subjects were thoroughly evaluated before and after the exercise protocol application. Initial assessment were included measurements of BMI (weight and height) ,lipid profile, and nicotine blood levels, all were free from musculoskeletal disorders or cardiovascular disorders, Then subjects started treatment program ,in New Cairo hospitals , as following, performing a supervised running on treadmill in pattern of high intensity interval training 3 sessions per week for 8 weeks. Each training session was consisted of warming up phase conducted by walking on treadmill (5min) at 30% of maximum heart rate (MHR),Then Active phase of exercise in which the patient exercise about 10 minutes of high intensity interval training consist of 2 repeats of (1min running at 85- 95% of MHR then followed by 4 min recovery at 60-70% of MHR) followed by cooling down (5min) of gradual decrease of treadmill intensity till reach 30 % of MHR. Results: statistical analysis showed a significant improvement (decrease) in cotinine level nicotine by 39.94%, (decrease) in LDL by 7.13%, (decrease) in TC by 4.72% and (increase) in HDL by 17.07% .Conclusion: It is recommended for smokers to participate in high intensity interval training to decrease serum nicotine and lipid profile

Key words	**1.**	**high intensity interval training.**
	2.	**lipid profile**
	3.	**nicotine in hypercholeserolemic smoker.**
	4.	**hypercholeserolemic smoker.**
Classification number	**:**	**000.000.**
Pagination	**:**	**90 p.**
Arabic Title Page	**:**	**كفاءة التمارين المتقطعةعالية الشدة على نسبة النيكوتين والكوليسترول عند المدخنين.**
Library register number	**:**	**6703-6704.**

Author	**:**	**Mahmoud Ahmed Mohamed Hassan.**
Title	**:**	**Effect of Bilateral Arm Exercises on Motor Control of Hemiparetic Cerebral Palsy Children.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Emam Hassan El-Negamy.**
	2.	**Abdelrahim Abdrabou Sadek.**
	3.	**Mohamed Isamail Attia Elassal.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Children with hemiparetic cerebral palsy often have difficulty in performing activities which rely on the coordinated use of both hands because of movement difficulties of the affected hand. This study aims to determine the effect of bilateral arm exercises on motor control of hemiparetic cerebral palsy children. Methods: Twenty-six hemiparetic cerebral palsy children of both genders participated in this study. Their age ranged between 3and 7 years with spasticity ranged from 1 to 2 according to Modified Ashworth Scale and they could follow the order during testing and training. None of them had visual or auditory defect or previous orthopedic surgery of the affected upper extremity and they shouldn't have any structural deformities in any joint or bone. They were randomly assigned into two groups (A&B) of equal number 13 patients each, group (A) received a selected physical therapy program for one and half hours and group (B) received the selected physical therapy program for one hour in addition to bilateral arm exercises for half an hour. Both groups received the selected treatment program 3 times per week for 3 successive months from November 2018 to January 2019. All the patients were evaluated with Modified Ashworth Scale to evaluate the spasticity, Functional Independence Measure for children to assess functional independence and Pneumatic Squeeze Bulb Dynamometer to assess grip and pinch strength at pre- and post- treatment. Results: The results of this study revealed statistically significant difference between the two groups after the treatment in favor of group B in Wee Functional Independence Measure motor subtotal score and grip /pinch strength score ($p < 0.05$). Conclusion: Bilateral arm exercises are effective in improvement of motor control of the affected side for the children with hemiparetic cerebral palsy.

Key words	**1.**	**Cerebral palsy.**
	2.	**Hemiparetic.**
	3.	**Bilateral arm exercises.**
	4.	**Motor Control of Hemiparetic.**
	5.	**Children in Cerebral Palsy.**
Classification number	**:**	**000.000.**
Pagination	**:**	**105 p.**
Arabic Title Page	**:**	**تأثير تمرينات الذراعيين الثنائية على التحكم الحركى فى اليدين لدى الأطفال المصابين بالخدل النصفى.**
Library register number	**:**	**6451-6452.**

Author	**:**	**Marwa Adel El Said Tayel.**
Title	**:**	**Efficacy Of Resisted Exercise On Chronic Renal Failure Diabetic Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Azza AbdelAziz Abdel Hady.**
	2.	**Mabrouk Ramadan El sheik.**
	3.	**Samah Mahmoud Ismail.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Abstract: Background: Patients with advanced chronic kidney disease, especially those on long-term dialysis, often suffer from muscle wasting and excessive fatigue. By enhancing the strength through exercising of their muscles, bones, and joints through exercising, people with can improve their balance and coordination. protect their independence as they age. purpose: this study was to find out the effect of resisted exercise on chronic renal failure in type 2 diabetic women. Methods: Forty diabetic women with chronic renal failure was enrolled in this study from El-Manshawy Hospital Tanta Egypt their age ranged from 55 - 65 years old they were assigned into two groups of equal number :Group(A) participated in resisted exercise (40min, 2times/week,12weeks) in addition to medications. Group(B) :controlled by their medications only .Blood creatinine and urea was measured before and after the study . RESULT: Resisted exercise lead to significant improvemet (decrease) in fasting, post prandial blood glucose , creatinine and urea by 5.35%, 7.16% , 6.89% and 9.11% respectively only in study group) A) conclusion: resisted exercise has significant effects on chronic renal failure in type 2diabetic women .

Key words	**1.**	**Chronic Renal Failure.**
	2.	**Creatinine.**
	3.	**Diabetes.**
	4.	**Resisted Exercise.**
	5.	**Diabetes.**
	6.	**Urea.**
Classification number	**:**	**000.000.**
Pagination	**:**	**66 p.**
Arabic Title Page	**:**	**تاثير تمرينات المقاومة على الفشل الكلوى المزمن لمرض البوال السكرى.**
Library register number	**:**	**6649-6650.**

Author	**:**	**Marwa Saeed Moahmed Mansour.**
Title	**:**	**Efficacy Of Respiratory Muscles Training On Arterial Blood Gases In Patients Under Hemodialysis.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Awny Fouad Rahmy.**
	2.	**Mohamed Mahmoud NasrAllah.**
	3.	**Samah Mahmoud Ismail.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Hemodialysis (HD) is a protein catabolic procedure. During dialysis the diaphragm as a skeletal muscle is affected by protein breakdown leading to its weakness and limitation of its movement and affecting the oxygenation .The purpose of this study: was to find out the efficacy of respiratory muscle training on arterial blood gases in patients undergoing hemodialysis sessions. Subject and Methods: The study was conducted on thirty patients of both genders undergoing hemodialysis, their age ranged from 35-45 years old. Thirty patients participated in respiratory muscle training for 5 times a day for 12 weeks. Blood gases assessments were done before and after the study. Results: This study showed statistical significant difference between pre-treatment and post-treatment in blood oxygenation, oxygen saturation, partial pressure of carbon dioxide, bicarbonate ion and pH by percentage of improvement (1.2%), (1.53%), (2.25), (0.44) and (0.14%) respectively .Conclusion: It is recommended for patients undergoing hemodialysis to perform respiratory muscle training to enhance blood oxygenation.

Key words	**1.**	**Hemodialysis.**
	2.	**Arterial blood gases.**
	3.	**Diaphragm.**
	4.	**respiratory muscle training.**
Classification number	**:**	**000.000.**
Pagination	**:**	**83 p.**
Arabic Title Page	**:**	**التنبؤ بالإصابات العضلية الهيكلية الناتجة عن الاستخدام المفرط المصاحبة للعدو.**
Library register number	**:**	**6245-6246.**

Author	**:**	**Mohamed Ahmed Mostafa**
Title	**:**	**Response of diaphragmatic excursion to resisted inspiratory exercises using pneumatic compression in elders with low back pain.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Samir Abdelfatah Algazar.**
	2.	**Khaled Mahmoud Kamel.**
	3.	**Heba Ali Abdelghaffar.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	
Purpose: The aim of this study was to determine the response of diaphragmatic excursion to resisted inspiratory exercises using pneumatic compression in elders with low back pain. Subjects and Methods: forty patients (twenty males and twenty females) with chronic low back pain. Their ages ranged from 60 to 70 years, their height ranged from 1.71 to 1.75m and their weight ranged from 71 to 79kg with body mass index were ranged from 23.4 to 26.4 kg/m^2. The patients were selected randomly from Outpatient clinic of Department of Rheumatology and Rehabilitation of Kasr El-Aini Hospitals and randomly divided into two equal groups: Group A (Resisted inspiratory exercises group): composed of twenty patients (nine males and eleven females) with low back pain who received resisted inspiratory exercises using pneumatic compression and traditional physical therapy in form of transcutaneous electrical nerve stimulation (TENS) and Ultrasound on lower back and Group B (Traditional physical therapy group): composed of twenty patients (eleven males and nine females) with low back pain who received traditional physical therapy in form of TENS and Ultrasound on lower back only. Results: The results of this study revealed that there was significant increase of Diaphragmatic excursion after treatment in comparison to pre-treatment in the Group A not in the Group B. There was clinical difference and higher percent of improvement in favor to Group A more than Group B. Also there was significant reduction of Visual Analouge Scale (VAS) after treatment in both Groups and it was significant in Group A more than Group B. Also there was significant reduction of Roland and Morris Disability Questionnaire after treatment in comparison to pre-treatment in both Groups and it was significant in Group A more than Group B. Conclusion: Resisted Inspiratory Exercises using Pneumatic Compression can improve diaphragmatic excursion in elders with low back pain and can improve their life style.		
Key words	**1.**	**Diaphragmatic Excursion.**
	2.	**Pneumatic Compression and Low Back Pain**
	3.	**Inspiratory Exercises.**
	4.	**elders with low back pain.**
Classification number	**:**	**000.000.**
Pagination	**:**	**155 p.**
Arabic Title Page	**:**	**استجابة ازاحة عضلة الحجاب الحاجز لتمرينات مقاومة الشهيق باستخدام جهاز الضغط الهوائى لدى المسنين الذين يعانون من ألم أسفل الظهر.**
Library register number	**:**	**6565-6566.**

Author	**:**	**Reda Gomaa Mohamed El-kot.**
Title	**:**	**Relationship between chronic neck pain and diaphragmatic dysfunction.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Samir Abdel-Fatth Al gazzar.**
	2.	**Khaled Mahmoud kamel.**
	3.	**Ahmed Mahdi Ahmed.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Chronic neck pain (CNP) occurs due to poor posture of cervical spine that may develop from long term use of smart phones and personal computers. Recently, an association between CNP and deterioration in pulmonary functions has been reported, especially when CNP coexisted with forward head posture. There have been recent suggestions to add respiratory assessment to the routine physiotherapy assessment for chronic neck pain patients. Purpose: The main purpose of this study was to assess for a correlation that could exist between CNP and either diaphragmatic excursion or diaphragmatic thickness fraction (DTF) in patients with chronic neck pain. Methods: Fifty subjects with chronic neck pain were recruited to this study (11 males and 39 females). The mean value of age of the subjects was 41.14±8.11 years, and the mean value of BMI was 25.57±2.85 Kg/m^2. The inclusion criteria were middle-aged patients, both males and females, patients with nonspecific chronic neck pain, and patients with craniovertebral angle of less than 50 degrees. The exclusion criteria were patients with neck pain due to disc prolapse or trauma, patients with cardiopulmonary problems, or smokers. The outcome measures in this study were diaphragmatic excursion and DTF measured by ultrasonography, Visual Analogue Scale (VAS) for pain, and Neck Disability Index (NDI). Results: Both VAS and NDI had no significant correlation with either diaphragmatic excursion or DTF in subjects with CNP. Conclusion: The co-relation between diaphragmatic excursion and DTF, in middle-aged adults with chronic neck pain is not statistically significant

Key words	**1.**	**chronic neck pain.**
	2.	**diaphragm excursion.**
	3.	**forward head posture.**
	4.	**diaphragmatic thickness fraction.**
Classification number	**:**	**000.000.**
Pagination	**:**	**69 p.**
Arabic Title Page	**:**	**تأثير الام الرقبة المزمنة والخلل الوظيفي الحجاب الحاجز.**
Library register number	**:**	**6407-6408.**

Author	**:**	**Saher Lotfy Mohammed Elgayar.**
Title	**:**	**Active versus Passive Stretching Exercises on Blood Glucose Level in Elderly Diabetic Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Aisha Abdelmonem Hagag.**
	2.	**Hossam Arafa Ghazi.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Background: The prevalence of diabetes is rapidly rising all over the globe at an alarming rate. The aim: This study aimed to compare the effect of active and passive stretching exercises on blood glucose level in elderly diabetic patients. Methods: Fifty elderly type 2 diabetic men participated in this study. Their age ranged from 60 to 70 years. They were assigned randomly into 3 groups. The first group (A) included 20 patients who participated in an active stretching exercise program. The second group (B) included 20 patients who participated in a passive stretching exercise program. The third group (C) was the control which included 10 patients who didn't participate in any exercise program. The stretching exercises were conducted three times per week for a total period of 12 weeks. Venous blood sample was analyzed to determine level of Hemoglobin A1c (HbA1c) before and after twelve weeks. Glucometer was used to measure post prandial blood glucose (PPBG) acutely after the first session and after twelve weeks. Six minute walk test (6MWT) was preformed to assess the functional capacity. The results: Before the study, there was no significant difference in the mean values of all variables among all groups. After the end of the intervention, there was significant decrease in mean values of HbA1c, acute and chronic PPBG levels with significant increase in the mean value of the distance walked in 6MWT in groups (A and B). In group (C) there was non-significant change in all variables. Among groups comparisons, there were no-significant differences in the mean values of all variables between groups (A and B) with significant difference between either of them and group (C) ($p<0.05$). Conclusion: Both active and passive stretching exercises have positive effects on blood glucose levels and functional capacity in elderly diabetic patients with no difference between them.

Key words	**1.**	**Diabetes.**
	2.	**Passive stretching.**
	3.	**Elderly.**
	4.	**Blood Glucose Level.**
	5.	**Elderly.**
	6.	**Active stretching.**
Classification number	**:**	**000.000.**
Pagination	**:**	**106 p.**
Arabic Title Page	**:**	**تمرينات الشد النشط مقابل الشد السلبي علي مستوي سكر الدم لدي كبار السن المصابين بمرض السكري.**
Library register number	**:**	**6481-6482.**

Author	**:**	**Sara Ahmed Abdel Tawab Abdel Halim.**
Title	**:**	**Response of Arterial Stiffness with Interval Aerobic Training in Hypertensive Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Azza Abd El-Aziz Abd El-Hady.**
	2.	**Mona Mohamed Taha.**
	3.	**Mohamed Shafiq Awad.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Background: Arterial stiffness increases with aging and hypertension. Regular physical activity has been recommended as an important management component of hypertension. Purpose: To examine the response of high-intensity interval aerobic training program in reducing arterial stiffness and blood pressure in hypertensive patients. Methods: Forty women hypertensive patients referred medically, ages ranged from 40: 65 years old, their BMI ranged from 32.3 to 35.5 Kg/m^2 were assigned into two equal in number groups (Group A and B): group A was stage I- mild grade essential hypertension (EH) while group B was stage II-moderate essential hypertension (EH) and both groups received the same high-intensity aerobic interval training program. The duration of treatment was twelve weeks, three times weekly, forty minutes per session. Patients were assessed their arterial stiffness using Non-invasive blood pressure measurement system (Pulse Wave Velocity [PWV] analysis equipment) and peripheral arterial blood pressures using an automated digital electronic BP monitor. Results: Within group comparison, a significant improvement of measured variables with greater improvement in all variables in favor of group B. The percentage ↓ in the value of PWV in both groups A and B were (12.14%) and (13.95%) and in the value of AIx 75 HR in both groups A and B were (22.46%) and (28.07%), respectively. The percentage ↓ in the value of SBP in both groups A and B were (12.24%) and (14.37%) and in the value of DBP in both groups A and B were (11.49%) and (13.52%), respectively. Between group comparison, a significant difference in only values of PWV(pulse wave velocity) in group B (1.32 ± 0.49) when compared with its corresponding value in group A (0.97 ± 0.39), there was no significant in AIx @75 HR (augmentation index), SBP(systolic blood pressure) and DBP(diastolic blood pressure). Conclusion: The use of aerobic interval training can effectively improve arterial stiffness and blood pressure in both stages (I&II) hypertensive female patients, with better improvement change of arterial stiffness parameters and blood pressure much more in group B(stage II) than group A(stage I).

Key words	**1.**	**Hypertension.**
	2.	**Arterial Stiffness.**
	3.	**Blood pressure.**
	4.	**Aerobic Interval Training.**
Classification number	**:**	**000.000.**
Pagination	**:**	**95 p.**
Arabic Title Page	**:**	**استجابة تصلب الشرايين للتمرينات الهوائية متغيرة الشدة في مرضى ارتفاع ضغط الدم.**
Library register number	**:**	**6471-6472.**

Author	**:**	**Shahinaz Mohamed Erfan Abdella.**
Title	**:**	**Efficacy of Inspiratory Muscle Training On Ventilatory Function In Hemophilic Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Awny Fouad Rahmy.**
	2.	**Ayman Adel Sadek.**
	3.	**Basant Hamdy Elrefaey .**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Purpose: the purpose of this study was to assess the effect of inspiratory muscle training on ventilatory function in hemophilic patients. Subjects: Thirty men patients suffering from hemophilia type A (mild and moderate) were selected randomly from the Blood Diseases Out-Patients Clinic in Damanhour Medical National Institute, their age ranged from 20 to 40 years. The study was conducted at physical therapy department of Damanhour Medical National Institute, and it was carried out from March 2016 to April 2018.Materials and methods: The patients were randomly divided into two groups equal in number. Both groups participated in an appropriate physical therapy program. However, group (B) participated in the exercise program of inspiratory muscle training and aerobic exercise. All patients in both groups received their medical treatment and on their normal activities and do pulmonary function test before and after the exercise program duration of four weeks. Results: statistical analysis revealed that there was significant difference of the mean values of the "post" test between both groups. There was significant increase of FVC,FEV1, FEV1/FVC ratio, PIF, PEF & MVV at post treatment in comparison to pre-treatment (P-value =0.0001*) and this significant increase in favour to group B(study group).Conclusion: The results of this study concluded that inspiratory muscle training improved pulmonary function in hemophilic patients.

Key words	**1.**	**Hemophilia.**
	2.	**Aerobic Exercise.**
	3.	**Pulmonary Function.**
	4.	**Inspiratory Muscle Training.**
	5.	**Ventilatory Function In Hemophilic.**
Classification number	**:**	**000.000.**
Pagination	**:**	**77 p.**
Arabic Title Page	**:**	**فاعلية تدريب عضلات الشهيق على وظيفة التهوية الرئوية في مرضى نزف الوراثى.**
Library register number	**:**	**6449-6450.**

Author	**:**	**Sumaya Serag-Eldin Mohamed Abdel-Aziz.**
Title	**:**	**Ventilatory Functions Response to Training of Cervical Muscles in Mechanical Neck Pain.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Aisha AbdelMonem Hagag.**
	2.	**Mohamed Mahmoud El-Batanony.**
	3.	**Mohamed Abd Elhalim Mohamed Shendy.**
Degree	**:**	**Master.**
Year	**:**	**2019.**
Abstract	**:**	

Background Neck pain is a common musculoskeletal complaint with tremendous impact on health and quality of life. Neck pain also leads to pulmonary function restrictive disorder. Aim This study aimed to determine the effect of deep cervical muscle training using pressure biofeedback device on ventilatory functions in patients with chronic mechanical neck pain. Subjects Forty subjects with chronic mechanical neck pain of both sexes (twenty six females and fourteen males) with mean age 24.8± 1.87 years were participated in this study. They were selected from faculty of physical therapy, cairo university students. They were randomly assigned into two groups equal in number; the study group (A) and the control group (B) who were suffering from chronic mechanical neck pain. Methods Group A received deep cervical flexor strengthening exercises and traditional physical therapy modalities. Group B received only traditional physical therapy modalities. Both groups were assessed using the neck disability index questionnaire for functional disability, visual analogue scale for pain intensity, craniocervical flexion test for deep cervical flexor muscle strength and spirometric tests for ventilatory functions (forced vital capacity , forced expiratory volume in 1 second, maximum voluntary ventilation and peak expiratory flow rate). Subjects were assessed before and after treatment. All subjects received three sessions per week for a total treatment duration of four weeks. Results The results of this study showed that there was significant improvement in craniocervical flexion test, maximum voluntary ventilation and peak expiratory flow rate in the study group only (p = 0.0001). There was a statistically significant improvement in neck disability index (p = 0.0001) , visual analogue scale (p = 0.0001), forced vital capacity (p = 0.002) and forced expiratory volume in 1 second(p = 0.01) in both groups, however, there was no statistically significant difference between both groups. Conclusion It is concluded that deep cervical flexor strengthening exercise combined with traditional physical therapy modalities have better clinical effects on the mechanical neck pain and ventilatory function improvement, than traditional physical therapy modalities alone in patients with chronic mechanical neck pain.

Key words	**1.**	**mechanical neck pain.**
	2.	**ventilatory functions.**
	3.	**deep cervical flexors.**
	4.	**Cervical Muscles in Mechanical Neck Pain.**
Classification number	**:**	**000.000.**
Pagination	**:**	**182 p.**
Arabic Title Page	**:**	**استجابة وظائف التهوية لتدريبات عضلات الرقبة في الام الرقبة الميكانيكية.**
Library register number	**:**	**6389-6390.**