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

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Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and Its Surgery

Master Degree 2020

Author	**:**	**Abdelrahman Salah Abdellah.**
Title	**:**	**Effect of intradialytic cycling exercise on C-reactive protein for patients with chronic kidney disease.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
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Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Chronic kidney disease (CKD) is the progressive deficiency of renal function for months and years and frequently present with elevation in markers of inflammation especially serum C-Reactive Protein (CRP) that may have a clinical prediction for risk of cardiovascular disease (CVD) which is the leading cause of morbidity and mortality in patients with CKD. Patients on maintenance hemodialysis usually have poor exercise capacity and are less physically active, which have been identified as independent risk factors of mortality. Aim the Study: This study was conducted to evaluate the effect of 2 months intradialytic aerobic exercise on (CRP) for patients with chronic kidney disease. Subjects and Methods: Forty hemodialysis patients of both sexes with chronic renal failure participated in the study, their age ranged from 55 to 65 years old and recruited randomly from hemodialysis unit of October 6 University hospital. They were randomly assigned into two groups (A&B). Study group (A) (17 males and 13 females) received 3 sessions per week for 2 months of intradialytic aerobic exercise while Control group (B) (6 males and 4 females) received only their medical treatment. All patients in both groups were assessed through serum CRP, Blood urea, creatinine lab tests and Borg rating of perceived exertion scale was used to assess functional activity before and after treatment. Results: Results showed that in the study group there was significant decrease in CRP, Urea 36.62%, 22.2% respectively and in the control group CRP, Urea decreased by 11.39%, 7.33% respectively. While creatinine decreased by 5.04% in the study group and by 7.33% in the control group, Borg scale scores increased by 48.43% significantly in the study group and increased by 2.88% in the control group. Conclusion: Intradialytic cycling exercise has a significant role in decreasing CRP, Urea and increasing Borg RPE scores for CKD patients on maintenance hemodialysis.

Key words	**1.**	**Intradialytic exercise**
	2.	**Aerobic exercise**
	3.	**Hemodialysis.**
	4.	**C-Reactive protein.**
	5.	**Chronic kidney disease.**
	6.	**Urea.**
Classification number	**:**	**000.000.**
Pagination	**:**	**106 p.**
Arabic Title Page	**:**	**تأثير تمارين العجلة اثناء جلسة الغسيل الكلوي على البروتين التفاعلي سي في مرضى الكلي المزمن.**
Library register number	**:**	**7093-7094.**

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

Author	**:**	**Amgad Mohamed Mahmoud Ahmed Hazzaa.**
Title	**:**	**Wet Cupping Versus Manual Therapy In Hypertensive Patients With Irritable Bowel Syndrom**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Azza Abd-Elaziz Abdel-hady**
	2.	**Neseren Ghareeb El Nahas**
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Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Introduction : Wet cupping therapy is also known as Al-Hijamah in Arabic, meaning expansion, sucking, and bloodletting to return the body to its natural condition. Objective: The aim of this study was to determine the effect of cupping therapy versus manual therapy on patients with hypertension (HT) associated with irritable bowel syndrome (IBS), and its potential effect on Systolic blood pressure , Diastolic blood pressure , hemoglobin , pain and the subsequent improvement in their QoL. Methods: sixty patients of both sexes (men and women) had subjected to this study. They were selected from ministry of health and population hospitals in the period from May to August 2020. Their ages ranged from of 40-60 years old with mean age (53.6 ± 4.75). They were assigned into 2 equal groups. Group A (30 pts) had been received manual therapy for three months, Three Manual Therapy massage sessions per week on back and abdomen for 12 weeks plus one session of wet cupping every month (3 sessions / 3 months). Group B: (30 pts) had been received Three Manual Therapy massage sessions per week on back and abdomen for 12 weeks only. The data obtained indicated that, both groups were matched before the study with no significant differences between them (P>0.05). Results: In the study group (A) Systolic Blood Pressure decreases 11.4%↓, also Diastolic Blood Pressure In the study group (A) decreases 12.3%↓. but, In the study group (B) or Control Group, Systolic Blood Pressure decreases 2.9%↓, also Diastolic Blood Pressure In the study group (B) decreases 2.8%↓. In the study group (A) Hemoglobin count decreases 2.8%↓ but, In study group (B) Hemoglobin count increases 1.4%↑ In the study group (A) Pain decreases 58.5%↓ but, In study group (B) or control group Pain decreases 24.1%. The quality of life Percents of changes were (29.8% ↑and 21.4% ↑for physical functioning, 78.6% ↑ and 24.5%↑for role limitations due to physical health, 79.2% ↑and 19.4% ↑for role limitations due to emotional problems, and 27.9% ↑and 12.5% ↑for energy/ fatigue, 13.4% ↑and 4.1% ↑for emotional wellbeing, 32.6% ↑and 8.9%↑for social functioning, 22.1% ↑and 8.3% ↑for pain, and 52.5% ↑and 41%↑for general health) for study group A and B respectively. Conclusion: It was concluded that wet cupping therapy was more effective, and using of cupping therapy with manual therapy may help to control blood pressure , decreasing pain and improving quality of life in hypertensive with irritable bowel syndrome

Key words	**1.**	**Cupping Therapy**
	2.	**Manual Therapy**
	3.	**Hypertension**
	4.	**Irritable Bowel Syndrome**
	5.	**quality of Life**
Classification number	**:**	**000.000.**
Pagination	**:**	**122 p.**
Arabic Title Page	**:**	**الحجامة مقابل العلاج اليدوي في حالات الضغط العالي المصاحب بمتلازمة القولون العصبي.**
Library register number	**:**	**7291-7292.**

Author	**:**	**Eman Mohamed Abd-Elsalam.**
Title	**:**	**Efficacy of acupressure versus resistive exercise on intraocular pressure in elderly.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Zahra Mohamed Hassan Serri.**
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	3.	**Tarek Mohamed Abdul Aziz.**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Background: Elevated Intra-ocular Pressure (IOP) is one of the major risk factors for developing glaucoma or glaucomatous optic neuropathy and its progression. Glaucoma is a common ophthalmic disease worldwide and it is a significant cause of visual impairment and blindness. Blindness leads not only to a reduced economical and social status, but it may also result in premature death. Purpose: To determine the effect of acupressure versus resistive exercises on intraocular pressure in elderly. Subjects: Forty (40) elderly volunteers of both sexes participated in this study. All subjects with age range between 60-70 years old. They will be chosen from outpatient clinic, El-Demerdash hospital, Ain shams university. Methods: The subjects were assigned randomly in two equal groups in number. Group 1: Twenty subjects (men and women) participated in a supervised regular resistive exercise training program (3 sessions /week, 30 minutes/per session for 8 weeks) where intraocular pressure was measured before and after treatment protocol application. Group 2: Twenty subjects (men and women) received Acupressure therapy (3 sessions /week, 20 minutes/per session for 8 weeks) where intraocular pressure was measured before and after treatment protocol application. Conclusion: Subjects received acupressure therapy have significant decrease in intraocular pressure compared to those who received resistive exercise training program.

Key words	**1.**	**Resistive exercise training program.**
	2.	**Intraocular pressure.**
	3.	**elderly.**
	4.	**Acupressure therapy.**
Classification number	**:**	**000.000.**
Pagination	**:**	**90 p.**
Arabic Title Page	**:**	**تأثير الضغط الوخزي مقابل تأثيرتمارين المقاومة علي ضغط العين في كبار السن.**
Library register number	**:**	**7077-7078.**

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

Author	**:**	**Eman Mohamed Amin.**
Title	**:**	**Continous versus interval training on urinary albumin excertion in type 2 diabetes mellitus patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hala Mohamed Ezz eldeen Hamed**
	2.	**Samah Mahmoud Ismaeil**
	3.	**Ahmed Mohamed abd el Hamid Soliman**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Background: Diabetic nephropathy is one of the major microvascular complications of diabetes which eventually manifests into end-stage renal disease. One-third of the diabetic population is prone to develop nephropathy and it represents the major cause of morbidity and mortality. Objective: The purpose of this study was to find out the effect of continous training versus interval training on urinary albumin excretion protein in type 2 diabetes mellitus. Methods: the study was conducted on forty patients, their age ranged from 45 to 55 years. Divided into two groups. Group (A) They part4cipated in Continous moderate aerobic exercise (50-70% of Maximum Heart Rate) for 30-40 minutes on electronic bicycle ergometer, 3 sessions per week for 12 weeks in addition to their medical treatment. Group (B) participated in Interval moderate training exercise (50 and 70%of MHR) for 30-40 minutes on electronic bicycle ergometer, 3 sessions per week for 12 weeks in addition to their medical treatment Microalbuminurea, HBA1C, Fasting blood glucose, blood pressure was measured before and after the study. Results: our result showed that there was a significant difference between (Group A) and (Group B) in post training values. There was a significant improvement (decrease) in HbA1C By 1.26%, Fasting blood glucose by 5.21% , Systolic & diastolic blood pressure by 4.78% &6.79% respectively and albuminuria level by 9.68%. in favor of (Group B)Conclusion: it was concluded that, Interval training is more effective than continuous training in improving urinary albumin excretion . so it is recommended for patient of diabetic nephropathy to practice interval training aerobic exercise to avoid diabetic complication

Key words	**1.**	**diabetic nephropathy**
	2.	**fasting blood glucose,**
	3.	**Aerobic exercise.**
	4.	**urinary albumin excertion.**
	5.	**Micro albumin urea, HBA1C**
Classification number	**:**	**000.000.**
Pagination	**:**	**86 p.**
Arabic Title Page	**:**	**التدريب المتصل فى مقابل التدريب المتقطع على بروتينات البول لمرضى النوع الثانى من السكرى.**
Library register number	**:**	**7359-7360.**

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

Author	**:**	**Fatma Mokhtar Mahmoud.**
Title	**:**	**Ventilatory Fucntion And Exercise Apacity Response to Inspiratory Muscle Training In Interstitial Lung Disease Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Samir Abd El Fatah El Gazar**
	2.	**Fatma Aboelmagd Mohamed**
	3.	**Maha Fathy Mohammed Shehata**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Background: Interstitial lung diseases (ILD) impair gas exchange resulting in exertional dyspnea and reduced lung function which limit daily activities and impair quality of life. All these changes are related to respiratory muscles dysfunction. Aim of this study: to investigate the effect of inspiratory muscles training on ventilatory function and functional capacity in patients with Interstitial lung diseases. Methods: Thirty female patients with Interstitial lung diseases with mean of age of 48.57 years were recruited from outpatient chest clinic of Beni Seuf University hospital. The study lasted from July 2018 to August 2019. patients received threshold inspiratory muscles training for 8 successive weeks, 3 sessions/week. The outcome measures were forced vital capacity (FVC), forced expiratory volume in one second (FEV1), FEV1/FVC ratio, maximum ventilatory ventilation (MVV) and the distance walked in 2 min which were measured before and after the intervention. Results: A significant increase was found from pre to post intervention in FVC by 14.28% , FEV1 by 18.94 %, MVV by 4.53%, oxygen saturation by 4.55%, and the distance walked in 2 min walk test by 60.08%, while a non-significant difference was found in FEV1/FVC ratio by 3.42%. Conclusion: Based on the results it can be concluded that inspiratory muscles training can be adjunctive to the rehabilitation program for patients with ILD aiming for improving their ventilatory function and functional capacity.

Key words	**1.**	**Interstitial lung disease**
	2.	**Threshold inspiratory muscle training**
	3.	**ventilator function**
	4.	**Functional capacity**
	5.	**Inspiratory Muscle Training.**
Classification number	**:**	**000.000.**
Pagination	**:**	**87 p.**
Arabic Title Page	**:**	**استجابة وظائف التهوية الرئوية والقدرة التمرينية لتدريب عضلات التنفس فى مرضى الداء الرئوى الخلالى.**
Library register number	**:**	**7287-7288.**

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

Author	**:**	**Kareem Mohsen abdeltawwab**
Title	**:**	**Effect of aerobic exercise on uric acid in hyperuricemic elderly.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Zeinab Mohamed Helmy**
	2.	**Emad Mohamed Ibrahem Taha**
	3.	**Yasser Abdel Monem Elhendy**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Elevated serum uric acid is more common in elderly. There are many serious complications which are associated with increased serum uric acid such as gouty arthritis, metabolic syndrome, renal calculi and cardiovascular problems. Purpose: The aim of this study was to determine the effect of aerobic exercise on uric acid in hyperuricemic elderly. Subjects and Methods: thirty old patients, assigned into two equals groups. group A which consist of fifteen males and group B which consist of fifteen female patient had elevated serum uric acid levels were selected randomly from Outpatient clinic of Department of physiotherapy and rehabilitation at Al-Ahrar Teaching Hospital, Zagazig-Egypt, their ages ranged from 65 to 75 years old and their body mass index (BMI) < 30kg/m2. The participants were assigned into two groups of equal in numbers. Group (A) (15 males patients) and group (B) (15 females patients) treated by moderate intensity aerobic exercise in form of walking on treadmill for 45 mintes 3 sessions per week for 8 weeks. All patients in both groups were assessed through serum uric acid level test, visual analogue scale (VAS) to measure pain intensity and borg rating of perceived exertion was used to assess functional activity before and after treatment. Results: It was revealed that there was a statistically significant improvement in serum uric acid level, pain and physical activity in both groups. Conclusion: The aerobic exercise was effective in reducing serum uric acid level, pain intensity and physical activity on hyperuricemic elderly patients.

Key words	**1.**	**Aerobic exercise**
	2.	**Hyperuricemic complications**
	3.	**Elderly**
	4.	**Uric acid in hyperuricemic elderly.**
Classification number	**:**	**000.000.**
Pagination	**:**	**95 p.**
Arabic Title Page	**:**	**تأثير التمارين الهوائية علي حمض اليوريك في كبار السن الذين يعانون من فرط حمض يوريك الدم.**
Library register number	**:**	**7013-7014.**

Author	**:**	**Lamis Samir Ahmed.**
Title	**:**	**Effect Of Kinesotaping On Ventilatory Function In Patient With Chronic Obstructive Pulmonary Disease.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hany E. Obaya**
	2.	**Nagy L. Nassef**
	3.	**Mounir H. Bahgat**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Background : Respiratory and peripheral muscle dysfunctions seen in Chronic Obstructive Pulmonary Disease (COPD) cause ventilatory limitation and dyspnea. Kinesio Taping (KT) is a rehabilitative technique performed by the cutaneous application of a special elastic tape, thus increasing muscle activation and blood circulation Aim: To detect the effect of kinesotaping in ventilatory function in patient with chronic obstructive pulmonary disease . Methods: Forty COPD patients ranged age from 40-55 years (20 in KT group, 20 in control group) were included. breathing exercises were applied to both groups. Kineso tape applied on diaphragmatic muscle and sternocleidomastoid muscle changed every 5 days through 4 weeks. Ventilatory function test (FEV1,FVC,FEV1\FVC) and Severity of dyspnea were assessed with Modified Medical Research Council dyspnea scale Pre and post study after four weeks. Results: There was a significant increase in FEV1, FVC and FEV1/ FVC post treatment in both groups with great significant in study group more than control group (p > 0.001). Conclusions: Kineso tape beneficial for improving ventilatory function and dyspnea score in patients with chronic obstructive pulmonary disease.

Key words	**1.**	**Respiratory muscle dysfunction.**
	2.	**Kinesio Taping.**
	3.	**Ventilatory.**
	4.	**Breathing exercise.**
	5.	**Chronic obstructive pulmonary disease (COPD).**
Classification number	**:**	**000.000.**
Pagination	**:**	**100 p.**
Arabic Title Page	**:**	**تأثير شريط الكاينزو على وظيفة التهوية في مرضى السدة الرئوية.**
Library register number	**:**	**7049-7050.**

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

Author	**:**	**Manar Abdelgwad Abdelghfar.**
Title	**:**	**Acute Effect Of Whole Body Vibration Versus Resistance Exercises In Hypertensive Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Samir Abdulfattah Elgazzar**
	2.	**Shwaky Abd elhamid fouad**
	3.	**Saif Eldeen Ahmed Ragab**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Purpose: The purpose of the study was to compare the acute effect of whole body vibration (WBV) to acute effect of resistance exercises on blood pressure in hypertensive patients. Methods: fifty patients of both sexes (24 men and 26 women) were selected and their age were ranged from 40 to 50 years old selected from Beni-seuf Health Insurance Hospital and they were assigned into two equal groups in number: Group (A): Twenty-five men and women performed 6 sets,10 repetitions of dynamic squatting exercise on WBV platform with frequency of 35 HZ and amplitude 5-6 mm .Group (B): Twenty-five men and women performed resistance exercises composed of 6 sets,10 repetitions of dynamic squatting exercise holding hand bar with intensity (20 % of 1 repetition maximum). The duration of each method was 25 minutes performed for one session. Systolic blood pressure (SBP), diastolic blood pressure (DBP) and heart rate (HR) were measured before and after the session by thirty minutes. Results: In Group (A) there were significant decrease in SBP, DBP and HR with percentage of improvement by 3.32%, 7.41% and 6.94% respectively. In Group (B) there were significant decrease in mean values of SBP and DBP with percentage of improvement by 2.50% and 6.24%, while there was no significant difference in mean values of HR. In addition, Group A results versus Group B results there was significant difference in mean values of SBP, DBP and HR. Conclusion: In this study, acute effect of WBV is more effective than resistance exercises in reducing blood pressure and heart rate in hypertensive patients.

Key words	**1.**	**Whole body vibration**
	2.	**Resistance exercises**
	3.	**Blood pressure.**
Classification number	**:**	**000.000.**
Pagination	**:**	**73 p.**
Arabic Title Page	**:**	**التأثير الحاد للاهتزاز الكلي للجسم مقابل تمرينات المقاومة في مرضي ضغط الدم العالي.**
Library register number	**:**	**7151-7152.**

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

Author	**:**	**Mohamed AL-sayed AL-sayed Ali Dossoki.**
Title	**:**	**Effect Of Moderate Aerobic Exercises On Liver Functions in Non-Alcoholic Fatty Liver Disease In University Students.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**AzzaAbd-AlazizAbd-Alhady**
	2.	**Kamal Ahmed Amer**
	3.	**Emad Mohamed Ibrahim Taha**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Purpose: The aim of this study was to investigate the effect of moderate aerobic exercises on liver functions in students of university with non-alcoholic fatty liver. Subjects and methods: Sixty students were suffering from Non-alcoholic fatty liver disease (NAFLD) and they were recruited in this study with age ranged from 18-28 years old from both sexes 30 patients male and 30 patients female , were selected from internal medicine department at Zagazig university hospital and from students hospital in Zagazig. They were divided into two Groups equal in number. (group A= 30 students, 18 male and 12 female) received their standard medications and low calorie diet In addition to moderate aerobic exercises 3 times per week for 8weeks.(group B =(30 students 12 male and 18 female) received their standard medications in Addition to low calorie diet for 8 weeks. Lab investigations of: Aspartate aminotransferase (AST), Alanine aminotransferase (ALT), and Triglycerides (TG) were applied to evaluate patients. Fatigue severity scale (FSS) and body mass index BMI were calculated for patients at two intervals (pre-treatment and post-treatment). Results: Statistical significance was set at P < 0.05. In (group A): there were significantly decrease of all variables at post treatment compared to pre-treatment with improvement percentage in BMI (8.6%), ALT(15.97%), AST (16.3%), TG (17.99%) and FSS(35.38%). in (group B): there were significantly decreased of all variables at post treatment compared to pre-treatment with improvement percentage in BMI(5.9%), ALT(11.4%) ,AST(7.68%) , TG (11.15%) and FSS(5.66%). In between groups post treatment, there were no significant difference in BMI, ALT, AST and TG. However, there was significant difference in FSS. Conclusions: It was concluded that moderate aerobic exercises has no effect on ALT, AST, TG and BMI when low calorie diet is a part of standard management of non-alcoholic fatty liver in students of university. While it is effective method for decreasing fatigue level.

Key words	**1.**	**Moderate aerobic exercises.**
	2.	**non-alcoholic fatty liver disease.**
	3.	**Liver function.**
	4.	**University Students.**
Classification number	**:**	**000.000.**
Pagination	**:**	**85 p.**
Arabic Title Page	**:**	**تأثير التمرينات الهوائية متوسطة الشدة على وظائف الكبد فى طلاب الجامعة المصابين بمرض الكبد الدهنى.**
Library register number	**:**	**6987-6988.**

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

Author	**:**	**Mohamed Naguib Hussein Ibrahim.**
Title	**:**	**Effect of Kinesiotape Versus Resistive Exercise on Dorsiflexors Functional Performance In Diabetic Peripheral Neuropathy.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Mariam Elsayed Mohamed**
	2.	**Ahmed Mohamed Bahaa El-Din**
	3.	**Ahmed Abdel Momen Al Shehawy**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Background: Diabetic peripheral neuropathies (DPN) are a heterogeneous group of disorders caused by neuronal dysfunction in patients with diabetes. DPNs cause pathological changes in sensory, Motor and Function levels in Diabetic patients. Aim: the purpose Of the study was to determine the effect of Kinesio tape versus resistive exercise on dorsiflexors' strength and functional performance in DPN. Subjects and procedures: Forty Diabetic patients -Type II- with Diabetic Polyneuropathy selected from diabetes institute cairo university. Their ages ranged from 50 -60 years old were participated in the study ,They were assigned to two Groups equal in number (Group A) who were treated with resistive exercise program for eight weeks, three times per week. And (Group B) who were treated with kinesioTape as a therapeutic method that was applied to dorsiflexors 24 hours a day and was replaced every 5 days for eight weeks. For Evaluation of the muscle strength Hand held Dynamometer were used (Lafayette Muscle Tester, Model #01163),while the Functional performance was evaluated using The six minutes walking Test. Results: pre and post treatment mean values of muscle strength and functional performance showed significant improvement in both groups but without significant differences between both groups. The mean value of percentage Of improvement in right dorsiflexors was 14.8± 25.7 in group A and 31.2± 25.1 in Group B ,the mean value of percentage Of improvement in left Dorsiflexors was 11.5± 39.7 in group A and 26.9± 31.2 in Group B and The mean value of percentage Of improvement in Six minutes walking test was 9.2± 10.3 in group A and 13.3± 15.8 in group B Conclusion: Both kinesiotape and resistive exercise improve the muscle strength and functional performance and There is no significant Difference between the effect of KinesioTape and the resistive exercises on Dorsiflexors' Strength and patient's Functional Performance in diabetic Polyneuropathy.

Key words	**1.**	**Diabetic Polyneuropathy.**
	2.	**6 Minutes Walking Test,**
	3.	**Hand-Held Dynamometer**
	4.	**Kinesiotape Muscle Strength.**
	5.	**Resistive Exercise**
	6.	**Dorsiflexors Functional Performance**
Classification number	**:**	**000.000.**
Pagination	**:**	**84 p.**
Arabic Title Page	**:**	**تأثير شريط كينيسيو مقابل تمرينات المقاومة على الأداء الوظيفي لعضلات شد الكاحل للامام في اعتلال الاعصاب الطرفيه بداء السكري.**
Library register number	**:**	**7341-7342.**

Author	**:**	**Mona mahmoud Mohamed.**
Title	**:**	**Interfrential electrical stimulation versus pulsed electromagnetic field in management of intermittent claudication.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Nesreen Gharib EL-Nahas**
	2.	**Mohamed Hamza Hamed**
	3.	**Nagy Louis Nassif**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Aim: This study was conducted to compare between the therapeutic efficacy of Interfrential electrical stimulation versus pulsed electromagnetic field in management of intermittent claudication (IC).Subjects: Forty five patients of both sexes, participated in this study, were selected from out patients clinic of vascular department in Ahmed Maher Teaching Hospital. Their ages ranged from 50 to 60 years old. Methods: All patients were evaluated by Ankle Brachial pressure Index (ABPI), Graded Treadmill exercise testing to determine (ACD,PWT), Walking impairement questionnaire (WIQ). The patients were randomly assigned into three equal groups; group (A) 15 patients received 30 min of pulsed electromagnetic field for 8 weeks in addition to heel raise exercise and calf stretch exercise and their medical treatment, (B) 15 patients received 20 min of interfrential electrical stimulation for 8 weeks in addition to heel raise exercise and calf stretch exercise and their medical treatment. (C) Control group: 15 patients received their medical treatment only. Results: results of this study showed that there were significant difference for all groups of the study in a favor of group (A) and the percentage of improvement was represented in values of each (55.94 % of ACD, 64.44 % of PWT, 3.9% of ABPI ,WIQ distance score 88.23%, 74.01 of speed score, 22.45 of symptoms impairement). Conclusion: On the basis of this study, it could be concluded that pulsed Electromagnetic field more effective than interfrential electrical stimulation in management of patients with intermittent claudication and that is through improving their walking efficiency and functional capacity .

Key words	**1.**	**Pulsed electromagnetic field.**
	2.	**Intermittent claudication.**
	3.	**Interfrential electrical stimulation.**
Classification number	**:**	**000.000.**
Pagination	**:**	**125 p.**
Arabic Title Page	**:**	**التحفيز الكهربائى التداخلى مقابل الموجات الكهرومغناطيسية المتقطعة فى علاج العرج المتقطع.**
Library register number	**:**	**7047-7048.**

Author	**:**	**Mostafa Omar Alfarouk Badie Mohamed.**
Title	**:**	**Effect Of Shockwave Therapy On Diabetic Frozen Shoulder.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Akram Abdelaziz Sayed**
	2.	**Hany Ezzat Obaya**
	3.	**Youssef Salah Sweify**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Background: Frozen shoulder is one of the most common complications in patients with diabetes. Frozen shoulder causes severe pain, restricts joints' range of motion, and disturbs sleep when the pain is severe. Recently, radial extracorporeal shock-wave therapy was presented as a new way to treat frozen shoulder. Purpose: The aim of this study was to determine and compare the effect of shockwave therapy versus traditional physiotherapy on diabetic frozen shoulder in type 2 diabetic patients. Subjects: Forty diabetic patients of both genders were selected from Elsahel Teaching Hospital. The patient's age ranged from 45 to 60 years. They were randomly assigned into two groups equal in number. Group (A) who received radial extracorporeal shockwaves and home routine. Group (B) who received traditional physiotherapy (composed of ultrasound and aerobic, range of motion and mobility exercises). The treatment program continued two weeks (3 sessions per week). Range of motion was assessed before and after course of treatment using inclinometer. Visual analogue scale was used in the assessment of level of shoulder pain before and after the course of treatment. Results: a significant increase in range of motion in both groups. There is no significant difference between group (A) and group (B) in improved range of motion. There is a significant decrease in the mean value of visual analogue scale in both groups. Group (A) decreased significantly than group (B). Conclusions: radial extracorporeal shockwaves decreased pain in diabetic frozen shoulder in type 2 diabetic patients.

Key words	**1.**	**Diabetes type 2.**
	2.	**Shock wave therapy.**
	3.	**frozen shoulder.**
	4.	**Shock wave therapy.**
Classification number	**:**	**000.000.**
Pagination	**:**	**102 p.**
Arabic Title Page	**:**	**تأثير الموجات التصادمية على الكتف المتجمد السكري.**
Library register number	**:**	**7153-7154.**

Author	**:**	**Nahla Tharwat Mousa Ahmed El-Rawi.**
Title	**:**	**The effect of combined respiratory muscle training and ketogenic diet on obesity hypoventilation syndrome risk.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Heba Ahmed Ali Abdeen**
	2.	**Mariam Ali Abdel-Kader**
	3.	**Heba Ali Abdel-Ghafar**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Back ground: Obesity hypoventilation syndrome (OHS) is defined as a combination of obesity, daytime hypercapnia and sleep disordered breathing. Aim of the study :was to investigate the effect of of combined Respiratory muscle training and Ketogenic diet on obesity hypoventilation syndrome risk. Methods: Forty five obese patients from both sexes (20 males& 25 females)at risk to develop obesity hypoventilation syndrome aged from 30-40 years old and recruited from out patients clinic in Ain Shams Hospital. They were assigned into three groups: Group A :included 15 patients who practiced respiratory muscle training by using threshold inspiratory muscle training(IMT) combined with ketogenic diet for 12 weeks. Group B: included 15 patients who followed ketogenic diet only for 12 weeks. Group C:included 15 patients who followed low caloric diet for 12 weeks .They were assessed by BIA device ,Acid base analyzer ,BMI and WHR . Results: Group (A), showed a statistical significant improvement in ABG parameters (increase in PH & Pao_2 (0.82%&36.6%), decrease in $Paco_2$ (14.52%) and showed decrease in (WHR and BMI) (17.2%,14.12%) respectively, more than the improvement in group (B) and group (C), for group B PH & Pao_2 (0.41%, 21.2%) and $paco_2$ (5.22%), and WHR & BMI (14.8%,11.52%) respectively. And for group C PH & Pao_2 (0.54%,15.7%) $Paco_2$ (3.37%) and WHR & BMI (8.13%,5.8%). Conclusion: there was a significant effect of combined Respiratory muscle training and Ketogenic diet on obesity hypoventilation syndrome risk.

Key words	**1.**	**Respiratory muscle trainer**
	2.	**ketogenic diet**
	3.	**Obesity hypoventilation syndrome**
Classification number	**:**	**000.000.**
Pagination	**:**	**110 p.**
Arabic Title Page	**:**	**تأثير التدريب العضلي التنفسي مع النظام الغذائي الكيتوني علي العرضة للإصابة بمتلازمة سمنة نقص التهوية.**
Library register number	**:**	**7053-7054.**

Author	**:**	**Rana Ayman Abd El Fattah.**
Title	**:**	**High intensity interval training versus circuit weight training on glycated Hemoglobin in type 2 Diabetic patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Nagwa Mohamed Hamed Badr**
	2.	**Heba Ali Abd El Ghafar**
	3.	**Laila Ahmed Rashad**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	
Background: Diabetes is a fast-growing health problem in Egypt With a significant impact on morbidity, mortality, and health care resources. while increasing physical activity is an essential component of all effective lifestyle-based trials for the prevention of type 2 DM. Objectives: the purpose of the study was to compare between High intensity interval training and circuit weight training on type 2 DM. Methods: Sixty men had participated in this study. their ages ranged from 40 to 50 years were selected from Manshyet El-Bakry Hospital. Group(A): included 30 men received high intensity interval training program on treadmill 3 sessions/ week for 12 weeks training. Group(B): included 30 men received circuit weight training exercises for 3 sessions/ week for 12 weeks. Each participant had undergo measurements for Fasting Blood Glucose, Glycated Hemoglobin (HbA1c) and 6MWT before and after the study. Results: The results of this study revealed that there was significant reduction in FBG by 17.68 % and 14.18 % in group A and group B respectively. While the results of HbA1c there was reduction by 20.77 % and 13.37 % in group A and group B. there was increase in 6MWT by 10.28 % and 4.54 % in group A and B respectively. Conclusion: Within the limitation of the current study it could be concluded that both types of exercises significantly improve HBA1c,Fasting blood glucose and 6 minute walk distance after 12 weeks of training in favour of high intensity interval training.		
Key words	**1.**	**Diabetes Mellitus.**
	2.	**Circuit weight training.**
	3.	**High intensity interval training.**
	4.	**glycated Hemoglobin.**
Classification number	**:**	**000.000.**
Pagination	**:**	**105 p.**
Arabic Title Page	**:**	**التدريب المتقطع عالي الشده مقابل تدريبات المقاومه علي الهيموجلوبين السكري لدي مرضي السكري من النوع الثاني.**
Library register number	**:**	**7135- 7136.**

Author	**:**	**Saad Mohamed Abd-elshakour Elgendy.**
Title	**:**	**Acute Effect of Chest Physical Therapy on Arterial Blood Gases for Mechanical Ventilated Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Heba Ahmed Ali Abdeen**
	2.	**Youssef Mohamed Soliman**
	3.	**Nagy lowis Nassef**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Background: Patients receiving mechanical ventilation have an increased risk of complications resulting in excess morbidity and mortality. The aim: This study aimed to identify the acute effect of chest physical therapy on arterial blood gases of mechanically ventilated patients. Methods: Sixty mechanically ventilated patients from both sexes were enrolled in the study,33males and 27 females. Their age ranged from 40 to 60 years. The patients were assigned into one study group who received a chest physiotherapy protocol in form of (manual hyperinflation , vibration , percussion, suctioning, upper and lower limbs exercise and ending positioning) for one session. Arterial blood gases (ABG) including (pH, PaO2, SO2, PaCO2 and HCO3) were assessed by arterial blood sample analysis through the Laboratory GEM premier 3000 device. All the assessment was done for every patient 5 minutes before the physiotherapy session and 15 minutes after ending the protocol.. The results: The results revealed a marked improvement in arterial blood gas exchange as compared to base line reflected by a highly significant statistical increase in PaO2 by5% ($p<0.001$) and SaO2by 7.9% ($p<0.001$) and a significant decrease in PaCO2 by7.9% ($p<0.001$) while there were no significant changes regarding Ph by 0,002%($p=0.36$) and HCO3 by2.06% ($p=0.15$). ($p<0.05$). Conclusion: Chest physiotherapy protocol is an effective method for improving arterial blood gases of mechanical ventilated patients acutely.

Key words	**1.**	**Chest physical therapy.**
	2.	**Arterial blood gases (ABG).**
	3.	**Mechanical ventilation.**
Classification number	**:**	**000.000.**
Pagination	**:**	**94 p.**
Arabic Title Page	**:**	**التأثير الحاد للعلاج الطبيعي للصدر على غازات الدم الشريانية لدي مرضى التنفسي الاصطناعي.**
Library register number	**:**	**7107-7108.**

Author	**:**	**Salma Elsayed Mohammed Elsheikh.**
Title	**:**	**Response of selected inflammatory measures to high intensity interval training in patients with type 2 diabetes.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Heba Ahmed Ali Abdeen**
	2.	**Mary Wadeaa Fawzy**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Background: Type2 diabetes is a complex and multifaceted inflammatory disease. Patients with T2DM are at risk for cardiovascular morbidity and mortality compared with age-matched healthy control subjects. Aim of the Study: Was to determine the response of selected inflammatory measures to high intensity interval training in patients with type 2 diabetes. Methods: Forty diabetic patients of both sexes (12 males and 28 females). Their ages ranged from 45 to 55 years selected from outpatient clinic of kasr El-Aini, Cairo university. The Study group included 20 patients (7 males and 13 females) who practiced high intensity interval training at intensity of (85-90% of MHR), three times per week for 12 weeks in addition to their oral hypoglycemic medications. The control group included 20 patients (5males 15 females) who only received their oral hypoglycemic medications. Serum interleukin 6, glycated hemoglobin (Hba1c), fasting and two hours post prandial blood glucose were measured before starting the treatment and after the end of the sessions in both groups. Results: The results showed significant reduction in study group in Serum interleukin 6, glycated hemoglobin, fasting blood glucose and two hours post prandial blood glucose by ↓53.9%, ↓19.8%, ↓17.66% and↓11.82% respectively, compared to results of control group that showed no significant reduction in Serum interleukin 6, glycated hemoglobin, fasting blood glucose and two hours post prandial blood glucose by↓3.7%,↓0.83%,↓0.37%and↓0.25% respectively .Conclusion: The high intensity interval training is an effective tool in reducing interleukin6, glycated hemoglobin and blood glucose in type2 diabetic patients which consequently helps in the management of type 2 diabetes.

Key words	**1.**	**Type 2diabetes.**
	2.	**Interleukin**
	3.	**High intensity interval training.**
	4.	**Inflammatory measures.**
Classification number	**:**	**000.000.**
Pagination	**:**	**106 p.**
Arabic Title Page	**:**	**استجابة مقاييس التهاب مختارة للتمارين المتقطعة عالية الشدة في مرضى السكري من النوع الثانى.**
Library register number	**:**	**6993-6994.**

Author	**:**	**Shymaa Mohamed Youssef El-sadany.**
Title	**:**	**Effect of TENS versus High Intensity Laser on sensory and motor nerves in diabetic polyneuropathy.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hany Ezzat Obaya,**
	2.	**Emad Mohamed Ibrahim Taha**
	3.	**Asmaa Mohammed Nabiel Essa**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	
Background: Approximately 20% of diabetic neuropathy patients have neuropathic pain, TENS and HILT are used to relieve pain in diabetic polyneuropathy patients for improving their quality of life. objectives: This study was conducted to investigate the effect TENS versus High intensity laser therapy on sensory and motor nerves in diabetic polyneuropathy. Methods: Forty diabetic patients' men and women had symptoms of neuropathy in lower limbs their ages ranged from 50 to 60 years old selected outpatient clinic from physical therapy center at Suez Canal authority and were divided randomly into two main equal groups in number: group (I) 20 patients were assigned for TENS, group (II) 20 patients were assigned for HILT, sensory and motor nerve conduction studies and LEFS were assessed for both groups before and after the study, each group had 3 sessions per week for 5 weeks as the total duration of the study, Results: of this study found that, both TENS study and HILT study were significant but data showed that HILT was better than TENS in management of diabetic polyneuropathy. Conclusion: HILT was more beneficial than TENS in management of diabetic polyneuropathy.		
Key words	**1.**	**TENS.**
	2.	**diabetic polyneuropathy.**
	3.	**High Intensity Laser Therapy.**
	4.	**nerve conduction study.**
	5.	**motor nerves in diabetic polyneuropathy.**
Classification number	**:**	**000.000.**
Pagination	**:**	**116 p.**
Arabic Title Page	**:**	**تأثير الحث الكهربائى مقابل الليزر عالي الكثافة العصب الحسى والحركى لالتهاب الاعصاب الطرفيه لدي المصابين بمرض السكرى.**
Library register number	**:**	**7035-7036.**

Author	**:**	**Soma Adel Gaber Abd–Elghany.**
Title	**:**	**Mouth Mask Versus Pursed Lip Breathing On Ventilatory Functions And Dyspnea Index In Chronic Obstructive Pulmonary Disease.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Zahra Mohamed Hassan Serry**
	2.	**Nesreen Gharib EL-Nahas**
	3.	**Youssef Mohamed Amin Soliman**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Back ground: Chronic obstructive pulmonary disease (COPD) is a rising major problem. Dyspnea causes reduction of functional status and quality of life in it. Pursed lips Breathing (PLB) and mouth mask were used to reduce dyspnea and improve quality of life. Aim of study: To compare the effect of mouth mask versus pursed lip breathing on ventilatory functions and dyspnea index in COPD patients Methods: Forty COPD men patients (FEV 1/FVC <0.70) were selected from outpatient clinic at Chest Department Kasr El-Ainy Hospital, age ranged from 5٠- 65 years old. Ventilatory functions, Dyspnea index, oxygen saturation, CAT score questionnaire, were measured pre and post training program. Patients were assigned in two groups equal in number. Group (A): consisted of 20 patients were treated by expiratory breathing through Mouth Mask plus routine chest physiotherapy. group (B) consisted of 20 patients were treated by pursed lip breathing plus routine chest physiotherapy . For both groups, the Program was for five days per week for 8weeks Results: There was a significant increase in FVC, FEV1, FEV1/FVC, PEF and FEF25-75 in both groups with a percent of improvement 19.25%, 44.29%, 21.5%,38.28%and 71.58% respectively in the group A and 8.7%, 18.37%,8.9% ,21.2% and 28.75% respectively in group B (p > 0.001) with more improvement in group A. There was a significant decrease in CAT score with a percent of improvement 61.07% and 46.07% respectively in the group A and B (p <0.001) There was a significant decrease in DI pre and post 3 min step test post treatment in the group A and B with more improvement in group A (p < 0.0001). There was a significant increase in oxygen saturation pre and post 3 min step test with a mean difference between both groups A&B .75% pre 3min step test and 1.15% post 3min step test. Conclusion: Mouth mask and pursed lip breathing are effective in improving ventilatory functions, dyspnea, health status and physical activity in COPD patients. As there is improvement in CAT score ventilatory parameters, oxygen saturation and Dyspnea index in COPD.

Key words	**1.**	**Pursed lip breathing.**
	2.	**Ventilator functions.**
	3.	**Mouth mask.**
	4.	**Chronic Obstructive Pulmonary Disease** (COPD).
	5.	**Dyspnea Index.**
Classification number	**:**	**000.000.**
Pagination	**:**	**118 p.**
Arabic Title Page	**:**	**التنفس بقناع الفم مقابل الشفاه المضمومه على وظائف التهويه ومؤشر ضيق التنفس فى مرض الانسداد الرئوى المزمن.**
Library register number	**:**	**7105- 7106.**

Author	**:**	**Tawfeek Tawfeek Mahmoud Emara.**
Title	**:**	**Effect of Planter Electrical Stimulation on Balance in Diabetic Patients with Sensory Peripheral Neuropathy.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Zainab Mohamed Helmy**
	2.	**Hanan Hosny Abd El Alim Soliman**
	3.	**El-Sayed Essam El-Sayed Felaya**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Background: Polyneuropathy is the most common complication of type2 diabetes which occurs in the distal extremities and typically affects sensory, motor and autonomic system. People with diabetic peripheral neuropathy (DPN) often exhibit deteriorations in motor performance mainly due to lack of planter sensation. Purpose: To evaluate the effect of planter electrical stimulation (TENS) on balance in diabetic patients with sensory peripheral neuropathy. Patients and Methods: Using a Randomized controlled Trial (RCT), forty diabetic patients with sensory peripheral neuropathy assessed clinically and confirmed by NCS from both sexes (31 women and 9 men) with age ranged from (50-60y) were recruited from outpatient clinics of Kasr El-Ainy Hospital and conducted in outpatient clinics of faculty of physical therapy, Cairo university and randomly assigned into two groups (study and control) equal in number (n=20). All patients received same traditional balance exercise training, 3 times per week for 6 weeks; the study group (group A) received also TENS on planter surface of the foot for 15 minutes, 3 times per week over 6 weeks. The outcome measures were assessed by Biodex Stability System and visual analogue scale pre and post the study duration. Results: There was a significant overall stability index decrease with percentage about 44.4% and 17% for group A and group B respectively. Also, there was a significant visual analogue scale decrease with percentage about 62.3% and 13.5% for group A and group B respectively. There was a significant difference between group A and group B with better improvement in favor of group A. Conclusion: It was concluded that planter electrical stimulation (TENS) had a significant effect on balance in diabetic patients with sensory peripheral neuropathy.

Key words	**1.**	**Diabetic peripheral neuropathy**
	2.	**Sensory peripheral neuropathy**
	3.	**Balance**
	4.	**Planter electrical Stimulation**
Classification number	**:**	**000.000.**
Pagination	**:**	**96 p.**
Arabic Title Page	**:**	**تأثير الاستثارة الكهربية للأخمصين علي الاتزان لمرضي البوال السكري الذين يعانون من التهاب الاعصاب الحسيه الطرفية.**
Library register number	**:**	**7011-7012.**

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

Author	**:**	**Weaam Soliman Hasaneen Abd-El Rahman.**
Title	**:**	**Effect Of Whole Body Vibration On Exercise Capacity and Quality Of Life In Obstructive lung Disease.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Samir Abd -Al Ftah El Gazzar**
	2.	**Saif El-Deen Ahmed Ragab**
	3.	**Eman Ramzy El Adawy**
Degree	**:**	**Master.**
Year	**:**	**2020.**
Abstract	**:**	

Background: **Skeletal muscle dysfunction in Chronic obstructive pulmonary disease deteriorate the symptoms and quality of life of patients. Exercise is a basic unit of Pulmonary rehabilitation causing improve muscle strength, exercise capacity, health status . patients are not able to perform exercise due to high levels of perceived dyspnea, fatigue, and fear of breathlessness. Whole-body vibration exercise have similar response produced by other modes of physical activity .this study aim to clarify the effect of Whole Body Vibration on exercise capacity and quality of life in COPD patients. *Aim of the study*: To determine the effect of Whole Body Vibration to traditional exercise protocol on exercise capacity and quality of life with COPD patients. *Subject and procedures:*30 male patients diagnosed as COPD stage I & II according to(GOLD 2018) ages from 45 to 60 years old selected from chest department in AL-Kasr Al Ainy hospital(out patients). Duration of the study was from September 2018 to March 2020 were assigned into two equal groups in number performed 3 session/week for 6 weeks .Group (A) received Squat exercises program on Whole Body Vibration 5-10 minutes with six series of 30 s with 60 s of rest between each series, and frequency 24Hz in addition to traditional chest physiotherapy including Diaphragmtic breathing ,cycling ,strengthening for lower limbs while group (B) received the same training on the floor consisted of three sets with 3-min sessions of self –paced squats in addition to traditional chest physiotherapy before and after the 18th sessions the parameter of. Six minute walk distance test(6 MWDT), 5 Repetition sit to stand test(5RSTS) and COPD assessment test (CAT) were also measured. *Results:* Group (A) the results showed significant increases in 6MWDT, 5RSTS and CAT, 27.36%, 25.46%,36.67 % respectively &In Group (B) showed significant increase 21.98 %, 18.6 %, 30.63 % respectively ,Comparing between the two groups there were significant differences in 6MWD and 5 RSTS ,while non-significant difference in CAT *Conclusion:* Whole Body Vibration training was good complementary training exercise, which enhances exercise capacity and quality of life for COPD patients.**

Key words	**1.**	**COPD.**
	2.	**Exercise capacity.**
	3.	**Whole Body Vibration.**
	4.	**Quality Of Life.**
Classification number	**:**	**000.000.**
Pagination	**:**	**82 p.**
Arabic Title Page	**:**	**تأثير الاهتزاز الكلي للجسم على سعة التمرينات وجودة الحياة لحالات الإنسداد الرئوي المزمن.**
Library register number	**:**	**7279- 7280.**