PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery

Doctoral Degree 2011

Author	•	Ahmed Moustafa El – Kayaty Mohamed
Title	••	Effect of Different Intensity of Aerobic Exercise on Glycemic
		Control in Diabetic Obese Females.
Dept.	:	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	NAGWA M. BADR.
	:	DINA M. ABAZA
Degree	••	Doctoral.
Year	••	2011.
Abstract	:	

Back ground: Diabetes is a dangerous problem affecting multi systems in humans. The total number of diabetic patients in the world is expected to grow from 246 million in 2006 to 380 million by 2025. It is a large number that needs more attention, so controlling diabetes is very important especially for obese subjects. In the current study the effect of exercise on glycosylated hemoglobin (HbA1c) in diabetic obese females investigated. This will provide additional support for the metabolic advantages of aerobic exercise on health. Objective: To compare the effects of different intensities of aerobic exercise on HbA1c and anthropometric measures in type 2 diabetic obese females within 12 weeks. Design, Setting, and Participants : a study applied on the outpatients' clinic of diabetes at Al-Zahra University Hospital involving 100 sedentary women aged (35-45) years old and their body mass index ranged from (30 - 34.9) kg/m² (obese class I). Intervention: the hundred patients practiced a programme of aerobic exercise within 12 weeks and divided equally into 4 groups as: Control Group: under hypoglycemic drugs and diabetic low caloric diet. Group A exposed to mild intensity of aerobic exercise. Group B exposed to moderate intensity of aerobic exercise. Group C exposed to Vigorous intensity of aerobic exercise. The exercise programme including walking on a computerized treadmill 3 sessions/week including 20 minutes of an active phase of walking exercise on the treadmill preceded and ended by five minutes of warming-up and cooling down respectively. Measures: HbA1c, BMI, Fat Mass and WHR. **Results:** mean \pm SD following 12 weeks of treatment was statistically significant (P ≤ 0.05) in all measures at all exercise groups except: between control group and mild Ex group (p=0.137), mild Ex group and moderate Ex group (p=0.120) at HbA1c value. Control group and mild Ex group (p=0.169) at fat mass value. Control group and mild Ex group (p=0.933) at WHR value. The percent of improvement was 7.1 % in HbA1c, 5.4% in BMI, 8.3% in fat mass and 0.62% in WHR at control group. But in mild Ex group the improvement was 15.8 % in HbA1c, 9.4% in BMI, 16.4% in fat mass and 2.2% in WHR. Also 21.9 % in HbA1c, 14.8% in BMI, 32% in fat mass and 4.1% in WHR at moderate Ex group. While the favourable changes and dramatic improvement was in vigorous Ex group as 36.6 % in HbA1c, 19.3% in BMI, 48.5% in fat mass and 5.6% in WHR. Conclusions: best HbA1c reduction and dramatic improvement of BMI. Fat Mass and WHR was achieved following 12 weeks of high intensity of aerobic exercise.

Key words	:	Obese Females.
	:	Aerobic exercise.
	:	HbA1c.
	••	Body mass index.
	:	Waist to hip ratio.
Arabic Title Page	:	تأثير التمرينات الهوائية المختلفة الشدة علي ضبط سكر الدم في السيدات البدينات
		اللاتي يعانين من مرض البوال السكري .
Library register number		2637-2638.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	Alshimaa Ramadan Azab.
Title	••	Assessment of back geometry in hemophilic children.
Dept.	••	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Faten Hassan Abd El-Aziem.
	:	Mohamed Roshdy El-Masry.
	:	
Degree	••	Doctoral.
Year	:	2011.
Abstract	••	

Hemophilia is a group of inherited, congenital life-long blood disease. Children with Hemophilia are vulnerable to a high percentage of musculoskeletal lesions. These lesions predominantly affect lower limbs, influencing postural control. The purpose of this study was to evaluate postural abnormalities in hemophilic children in comparison with normal children. Hundred boys participated in this study. The hemophilic group examined 60 children with hemophilia their mean age 11.183±0.89 years and the normal group included 40 normal children, their mean age 11.35±1.027 years. The two groups were evaluated using formatric instrumentation system. Data were compared between the two groups using Mann Whitney U test. Children with hemophilia in comparing with normal were found to be significantly differ in parameters regarding to frontal profile except trunk length and dimple distance. While the parameters of sagittal view were non significant except trunk inclination and inflection point. There were back abnormalities in frontal view in form of scoliosis in comparing to normal these results may be due to muscle weakness, joint changes, alteration of proprioception and pain.

	-	
Key words	:	Back Geometry.
	:	Assessment of back geometry.
	:	Hemophilia.
THEED	•	Children.
	:	Posture.
Arabic Title Page	:	تقييم جيومترية الظهر عند الأطفال المصابين بسيولة الدم.
Library register number	:	2605-2606.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	Ashraf Abd Elaal Mohamed.
Title	:	LIPID PROFILE AND VENTILATORY FUNCTION
		RESPONSE TO EXERCISES IN DIABETIC OBESE
		FEMALES.
Dept.	:	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Awny Fouad Rahmy.
	••	Afaf Abd Eladl Abd El Fattah El Sawy.
	••	Nesreen Ghareb Mohamed El-Nahas.
Degree	:	Doctoral.
Year	:	2011.
Abstract	:	

Aim of this study was to investigate lipid profile and ventilatory function response to exercises in diabetic obese women. Sixty; class II obese; type 2 diabetic women participated in the study, their ages ranged from 50-60 years. They were divided randomly into three groups; 20 patient each. Aerobic exercise group (A) received aerobic exercise 3 times per week for 12 weeks. Resistive exercise group (B) received resistive exercise 3 times per week for 12 weeks. Control group (C) didn't receive any exercise. Results of this study showed significant improvement in lipid profile manifested by significant decrease in triglycerides, total cholesterol, low density lipoprotein cholesterol and significant increase in high density lipoprotein cholesterol levels; in addition to significant improvement in ventilatory function values manifested by significant increase in forced vital capacity, forced expiratory volume in the first second, forced expiratory volume in the first second/forced vital capacity and significant increase in minute voluntary ventilation in the two study groups (A) and (B) as compared to the control group (C); with the most significant changes were in aerobic exercise group. Findings represent the effective role of exercise especially aerobic type in the treatment of diabetic obese patients.

Key words	•	ventilatory function.
	:	lipid profile.
	:	resistance exercise.
	••	aerobic exercise.
영상 같은 것이 같은 것은 것이 없는 것이 없다.	••	type 2 diabetes mellitus.
	••	Obesity.
Arabic Title Page	:	استجابة معدل الدهون ووظائف التهوية للتمرينات لدى مريضات البوال السكري
		البدينات.
Library register number	:	2575-2576.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	Bahgat Ragy Thabet Soliman
Title	••	Resistive Exercises Versus Yoga Training On Glycemic
		Control In Type 2 Diabetics.
Dept.	•	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Nagwa Mohamed Hamed Badr.
	:	Zahra Mohamed Hassan Serry.
	:	Laila Ahmed Rashed.
Degree	••	Doctoral.
Year	•	2011.
Abstract	•••	

The aim of this study was to compare the effect of resistive exercises program versus yoga training program on glycemic control in type 2 diabetic patients. Forty type 2 diabetic patients participated in the study, their age ranged from 40 to 50 years. They were divided randomly into two equal groups. Group (A) performed a resistive exercises program while group (B) performed yoga training. The program continued for 12 weeks (three sessions per week). glycosylated hemoglobin (HbA_{1c}) fasting & 2 hours post prandial blood glucose levels and waist to hips ratio (WHR) were measured at the beginning and after the exercise program for both groups. Significant reduction in glycemic control as manifested by (HbA_{1c}), fasting & 2 hours post prandial blood glucose levels in both groups after exercise program. So it is recommended to use both resistive and yoga training in order to improve glycemic control in type 2 diabetics but especially we can use resistive exercise program as it had more effect on HbA_{1c}.

Key words	:	yoga training.
	:	Type 2 Diabetics.
	:	resistive exercises.
	:	glycemic control.
	:	diabetes mellitus.
Arabic Title Page	:	تمرينات المقاو <mark>مة مقابل تدريبات اليوجا للتحكم في سك ـر الــدم لمرضى السكـر</mark>
		(النوع الثاني).
Library register number	:	2371-2372.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	FATEN MOHAMMED MOHAMED ELNOZAH.
Title	•	Response of pulmonary functions to different physical
		programs in cervical spondylotic patients.
Dept.	••	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Azza Abdel Aziz Abdel Hady.
	:	Mohamed El Hosseiny Magdy ALy.
	:	Nesreen Ghareb Mohammed El-Nahas
Degree	•	Doctoral.
Year	••	2011.
Abstract	•	

Objective: This controlled randomized study was designed to assess the response of pulmonary functions and arterial blood gases for patients have cervical spondylosis. study design: A random sample of ninety volunteers, suffering from cervical spondylosis, they were selected from Medical Insurance Hospitals (out clinic). Their Age ranged from 30-50 years old. They were assigned into three groups equal in number. group I : They were treated with magnetic field and other modalities of treatment of cervical spondylosis(as electronic traction, infrared, general exercises). group II: They received breathing exercise in addition to other modalities of treatment for cervical spondylosis (as electronic traction, infrared, general exercises).group III: This control group was consisted of thirty patients who received electronic traction, infrared, general exercises. Results: by applying the magnetic field for patients in the first group the mean value increased significantly with a different of parietal pressure of arterial oxygen and improvement in the mean value in the electromagnetic group more than that of the electronic traction group, with a statistical significant difference (p value <0.05). there was no significant difference of partial pressure of arterial oxygen between the breathing exercise group and the electronic traction group (p value >0.05). after applying the electromagnetic field for the first group it revealed a high significant improvement in the partial pressures of carbon dioxide (PaCO2) when being compared with the second group who were treated by breathing exercises (with a p value <0.05) partial pressures of carbon dioxide (PaCO2) after three months of treatment, when comparing the electromagnetic field group with the electronic traction group revealed no significant difference as well as by comparing the breathing exercise group with the electronic traction group showed no significant improvement in the partial pressures of carbon dioxide (PaCO2)there was no significant difference, by comparing the groups couple by couple, with a p- value >0.05. This clinically arises from the point that those patients were within the normal arterial oxygen saturation (SaO2) as well as forced vital capacity (FVC there were no significant difference between the three groups post-treatment for timed forced expiratory volume. Conclusion: results indicated that there was no significant improvement in arterial blood gases or lung volumes for moderate cervical spondylotic patinnts treated by breathing exercise, electromagnetic field, or cervical traction therapy in addition to traditional physical therapy modalities.

:	electronic cervical traction.
:	physical programs
:	Electromagnetic field.
:	breathing exercises.
:	cervical spondylosis.
:	استجابة الوظائف الرئوية لبرامج العلاج الطبيعي المختلفة لمرضي خشونة الفقرات
	العنقية.
•	2691-2692.
	: : : :

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	Ghada Mohamed Shawky Abd El Halim.
Title	:	Efficacy of Physical Therapy Program on Blood Flow after
		Angioplasty.
Dept.	••	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Naguib Mohamed Ali Salem.
	:	Ahamed Sabrry El Saaed.
	:	
Degree	••	Doctoral.
Year	••	2011.
Abstract	:	

The aim of this study to evaluate the effect of the physical therapy program (aerobic training program as cycle ergometer and treadmill in addition to intermittent pneumatic compression) in improvement of blood flow (ABI) and Quality of life (QoL) after percutaneous transluminal angioplasty (balloon dilatation with stent in patients with peripheral arterial disease. Forty male patients operated for transluminal angioplasty (balloon dilatation with stent in patients with peripheral arterial disease) participated in this study. They were selected from the peripheral arterial disease clinic at National Heart Institute and were classified into two groups : study and control. First group (study), twenty received aerobic training and intermittent pneumatic compression. Second group (control), twenty not received physical therapy program. The results of the current study, revealed that first group (study) only resulted in improving (significantly) blood flow and QoL.

Key words	:	Aerobic exercise training (treadmill – cycle ergometry)
12564-319/218	••	Intermittent pneumatic compression
		Percutaneous transluminal angioplasty
	:	Balloon dilatation with stenting
	:	Blood flow.
	••	Quality of life.
Arabic Title Page	:	تأثير برنامج العلاج الطبيعى على تدفق الدم بعد توسيع الشرايين الطرفية بالبالونة.
Library register number	:	2535-2536.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	:	Gihan Samir Mohamed Mousa.
Title	:	Pulmonary Function Response To Expiratory Training In
		Chronic Obstructive Pulmonary Disease Patients.
Dept.	:	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	:	Awny Fouad Rahmy.
	:	Mona Mansour Ahmed.
	:	Nesreen Ghareeb Mohamed Elnahas.
Degree	:	Doctoral.
Year	:	2011.
Abstract	:	

The purpose of this study was to assess the effect of expiratory training (flutter) on pulmonary functions and exercise tolerance in patients with moderate COPD. 45 men patients with moderate COPD with age ranged 45-55 years enrolled in that study for three months. They were assigned into two: Group (A): The control group consisted of fifteen patients who received medical treatment and traditional chest physical therapy program (postural drainage, percussion and vibration). Group (B): The study group consisted of thirty patients who received as group(A) and flutter. both groups underwent measurment procedures at the beginning and after three months for wieght and height; FVC, FEV1, FEF25-75% and FEV1/FVC; PaO2, PaCO2, and SaO2; the 6MWT (Distance, SpO2) recorded every month. There were significant increase of all ventilatory functions, the 6MWT (Distance, SpO2)and the blood gases including (PaO2, SaO2) with study group when compared with control group. It was concluded that the flutter in combination with postural drainge had the effect of lowering PaCO2, improving oxygenation, ventilatory functions and exercise tolerance in moderate COPD male patients who had chronic sputum production.

Flutter.
COPD.
ventilatory functions.
exercise tolerance.
Airway clearance.
استجابة الوظائف الرئوية لتدريبات الزفير في مرضى السدة الرئوية المزمنة.
2555-2556.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	:	Hany Farid Eid Morsy.
Title	:	Response Of Bone Density To Pulsed Electromagnetic Field
		In Geriatrics.
Dept.	:	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Zahra Mohamed Hassan Serry.
	:	Rokia Abd El-Shafy Soliman El- Banna.
Degree	••	Doctoral.
Year	••	2011.
Abstract	••	

The purpose of this study was to examine the effect of low frequency and low intensity pulsed electromagnetic field (LFLIPEMF) therapy on bone mineral density in geriatrics. Thirty elderly subjects were assigned randomly into two groups equally in number. Each subject of the two groups was evaluated before and after three months of treatment by using dual energy x-ray absorptiometry (DEXA). The evaluation procedure involved measurement of bone mineral density of the femur, lumbar spine and arm. Control group (magnet off) (n = 15) that received their oral supplementation of calcium. Study group (magnet on) (n = 15) that received their oral supplementation of calcium given to the control group in addition to low frequency and low intensity pulsed electromagnetic field therapy with a frequency of 33 Hz, intensity of 50G for 30 minutes duration, three sessions were conducted per week for successive three months (12 weeks). Results: The collected data was processed and statistically analyzed using paired and unpaired t-test. The results showed a statistically significant improvement in all parameters in study group but there is significant decrease were recorded for control group. Conclusion: it is possible to conclude that (LFLIPEMF) is an effective modality in increasing bone mineral density in geriatrics.

Key words	:	Magnetic Field.
	:	Bone mineral density.
	:	Geriatrics.
	:	Pulsed Electromagnetic Field.
Arabic Title Page	:	استجابة كثافة العظام للمجال المغناطيسي الكهربائي المتقطع لدي المسنين.
Library register number	:	2581-2582.
Arabic Title Page Library register number	•••••••••••••••••••••••••••••••••••••••	استجابة كثافة العظام للمجال المغناطيسي الكهربائي المتقطع لدي المسنين. 2581-2582.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	:	Karim Ahmed Fathy
Title	••	Cardiopulmonary response to body weight reduction for
		obese prehypertensive males.
Dept.	••	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Azza Abdel Aziz Abdel Hady.
	:	Naguib Mohamed Salem.
	:	Mohamed Zaki El Ramly.
	:	Osama Safwat Lewis.
Degree	:	Doctoral.
Year	:	2011.
Abstract	:	

Objective: To determine the efficacy of weight reduction program in improving the cardiopulmonary system in prehypertensive obese males. Methods of Evaluation: (Measurement of body mass index, blood pressure, lipid profile, forced vital capacity and application of resting electrocardiogram) been used. Subjects: Fifty prehypertensive obese males aged from 35 to 45 years received weight reduction program in form of aerobic exercises for a duration of 30-45 minutes and diet regimen program, every other day for 6 months as a total period of treatment. Results: The results suggest that the program of weight reduction is effective in decreasing the blood pressure, lipid profile, forced vital capacity, ST segment and T wave readings of ECG diameters in prehypertensive obese males. Conclusion: It was concluded that the study showed the efficacy of weight reduction program in avoidance of cardiopulmonary diseases and improvement of cardiopulmonary state in prehypertensive obese males. Whenever there's high value of body mass index change reduction, witch gives the expected improvement of cardiopulmonary system.

Key words	••	cardiopulmonary system.
	:	obese prehypertensive males.
	:	weight reduction.
	:	Prehypertension.
	:	obesity.
Arabic Title Page	:	استجابة الجهاز الدوري التنفسي لإنقاص الوزن للرجال البدناء المعرضين لارتفاع
		ضغط الدم.
Library register number	:	2369-2370.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	Mohamed Abd El Halim Mohamed Shendy.
Title	••	Ventilatory function and hemoglobin level response in
		relation to ergonomic cycling on post mastectomy.
Dept.	:	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Nagwa Mohamed Hamed Badr.
	:	Ahmed Mohamed Osama Tony.
Degree	:	Doctoral.
Year	:	2011.
Abstract	:	

The aim of this study was to investigate the effect of aerobic exercises using ergonomic cycling on ventilatory function and blood hemoglobin level in post mastectomy female patients. Thirty post mastectomy female patients had been receiving adjuvant chemotherapy and/ or radiotherapy participated in this study. Their age ranged from 40 to 50 years old with mean values of patients' age was (45.4+ 3.6 years) in the control group and (45.8+ 2.7 years) in the study group. They were divided into two equal groups; Group (I) fifteen patients received only medical treatment and conventional physical therapy, while Group (II) fifteen patients received medical treatment and performed a moderate intensity aerobic exercise program on stationary bicycle at 60-70% of HR Max and conventional physical therapy. The program continued for eight weeks, three sessions per week for 24 sessions. Ventilatory functions and blood hemoglobin level were measured at the beginning and after the study for both groups. There were significant improvements in ventilatory functions and hemoglobin level in the exercise group without significant changes in the control group. So, it is recommended to encourage the post mastectomy patients to participate in an exercise program to improve ventilatory functions as well as blood hemoglobin level. **Key words:**

	1.00	
Key words	:	ergonomic cycling.
	:	aerobic exercise.
이 아이에 있는 것 같은 것 같	:	ventilatory functions.
	:	hemoglobin level.
요즘 물건을 잘 하는 것을 잘 물건을 줄 수 있는 것을 할 수 있다.	:	post mastectomy.
Arabic Title Page	:	إستجابة وظائف التهوية ومستوي الهيموجلوبين باستخدام العجلة الارجومترية بعد
		إستئصال سرطان الثدي.
Library register number	:	2601-2602.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	Mohamed Ahmed El-Bedewy Mohamed Ali.
Title	:	Pulmonary functions response to inspiratory muscles training
		in chronic obstructive pulmonary disease.
Dept.	••	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Azza Abdel-Aziz Abdel-Hady
	••	Maysa Mohamed Sharaf El-Din.
	••	Nesreen Ghareeb Mohamed El-Nahas.
Degree	:	Doctoral.
Year	:	2011.
Abstract	:	

The aim of this study is to determine the efficacy of inspiratory muscles training on improving the pulmonary functions and arterial blood gases in moderate chronic obstructive pulmonary disease patients. Thirty male patients aged from 40-60 years, had chronic obstructive pulmonary disease participated in this study. They were divided into two groups: The first group was control group who didn't participate in any physical therapy program. The second group was the study group who received inspiratory muscles training by using threshold inspiratory muscles trainer for three months, three times per week from ten to fifteen minutes per session. There were statistical significant improvements in pulmonary functions and arterial blood gases in the study group after three months from using threshold inspiratory muscle trainer. So, threshold inspiratory muscle trainer of three times per week to improve pulmonary functions and blood gases.

Key words	:	Inspiratory Muscle Training.
PHYSTCAL	:	muscles training
	:	Pulmonary functions Response.
	••	Arterial Blood Gases.
	•	Threshold Inspiratory Muscle Trainer.
	:	chronic obstructive pulmonary disease
Arabic Title Page	••	مدى استجابة ا <mark>لوظائف الرئوية لتدريبات عضلات الشهيق في مرضى السدة الرئوية</mark>
		المزمنة.
Library register number	:	2429-2430.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	Mohamed Kotb Khalil Seyam.
Title	••	Static and Dynamic Plantar Pressure Distribution Patterns in
		Diabetic Neuropathic Foot.
Dept.	••	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Awny Fouad Rahmy.
	:	Ezzat Mostafa Mohamed.
	:	Aisha Abd-Elmonem Solieman.
Degree	•	Doctoral.
Year	:	2011.
Abstract	:	

The aim of this study was to investigate the changes of static and dynamic patterns of planter pressure distribution in patients with diabetes mellitus and peripheral neuropathy. Sixty subjects participated in this study, their age ranged from 35 to 45 years, divided into two groups. Group I consists of thirty patients with type 2 diabetes mellitus and peripheral neuropathy (12 males and 18 females), and group II consists of thirty control non-diabetic subjects (10 males and 20 females). They were studied for plantar pressure distribution under the big toe, lesser toes, the first metatarsal head, lesser metatarsal heads, the mid foot and heel during both static and dynamic situation. There were a significant increased in PPPT1, PPPMT1, and PPPLMT of diabetic group than control group, in both static and dynamic tests. While there were a significant decrease in PPPH of diabetic group than control group, in both static and dynamic tests. Plantar pressure distribution assessment is important for physical therapist to design more appropriate treatment plans in such patients as well as more strategies to prevent diabetes mellitus complication.

Key words	:	diabetic foot.
	••	plantar pressure distribution.
	:	peripheral neuropathy.
Arabic Title Page	:	أنماط توزيع ال <mark>ضغوط الثابتة والمتحركة أسفل القدم السكرى ذو الإعتلال العصبي.</mark>
Library register number	:	2583-2584.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	:	Mona Mohamed Mohamed.
Title	:	The impact of aerobic exercises training on physical
		performance in obese women.
Dept.	••	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Zahra Mohamed Hassan Serry.
	:	Nargis Albert Labib.
	:	Hany Ezzat Obaya.
Degree	:	Doctoral.
Year	:	2011.
Abstract	:	

The aim of this study was to investigate the effect of aerobic exercise on physical performance in obese women. Forty class II obese women participated in the study, their age ranged from 20-30 vears and their BMI ranged from 35.0–39.9 kg/m². They were divided randomly into two age groups namely group I (n = 12) where age ranged between 20 to less than 25 years and this group constituted 30% from the whole sample. Group II (n = 28) where age ranged between 25 to 30 years and this group constituted 70% from the whole sample. Both groups received moderate-intensity aerobic exercise three times per week for 60 min/session for twelve weeks. Body mass index, Four meter walking velocity, Chair rising, Six min walking test, Hand grip and CRP level were assessed at Pre and post program after 3 months. The results of this study regarding physical performance items showed that the 6 min test showed significant improvement from a mean of 356.4 ± 49.4 to $402.0 \pm$ **39.8** after intervention. The 4 meter velocity showed significant improvement from a mean 0.81 ± 0.16 to 1.2 ± 0.29 after intervention. RT hand grip strength increased from 23.3 ± 3.3 to 26.7 ± 3.5 after intervention. LT hand grip strength increased from 20.6 ± 3.2 to 23.5 ± 4.5 after intervention. There was a significant reduction in Chair rising time test from 12.1 ± 1.7 to 9.7 ± 1.2 after intervention. The **CRP** showed significant reduction from 9.08 ± 3.4 to 3.2 ± 2.1 after intervention . Also the effect of age on physical function before and after intervention showed that there was no significant difference between the two age groups. These findings suggest that aerobic exercise may be an effective tool to improve physical performance in obese women. All findings represent the protective role of exercise against chronic complications of obesity on physical performance in obese women.

Key words	:	aerobic exercise.
	••	obese women.
Sobusie	••	Obesity.
	••	physical performance.
	••	CRP.
Arabic Title Page	••	تأثير التمارين الهوائية على الاداء الوظيفي في النساء البدينات.
Library register number	••	2681-2682.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	Mona Mohamed Taha El sayed .
Title	:	Response Of Fatty Liver Patients To Moderate Versus High
		Intensity Aerobic Exercise.
Dept.	••	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Nagwa Mohamed Hamed Badr.
	:	Maha Sayed Hasab-Allah.
Degree	:	Doctoral.
Year	••	2011.
Abstract	••	

The aim of this study was to compare the response of fatty Liver patients to moderate versus high intensity aerobic exercise. Forty NAFLD patients participated in the study, their age ranged from 30 to 45 years. They were divided randomly into three groups.(A) moderate intensity aerobic exercise group (n=15); (B) high intensity aerobic exercise group (n=15) and (c) control group (n=10) didn't receive any training. The program continued for 10 weeks (three sessions per week). Anthropometric indices, biochemical data (AST, ALT, TG, HDL, LDL and total cholesterol), liver fat on ultrasound, BMI and waist circumference were recorded at the beginning and after the end of the study for all groups. The results of this study showed a significant improvement in AST, ALT, TG, HDL, LDL and total cholesterol, liver fat on ultrasound, BMI and waist circumference in both study groups as compared to the control group. So it is recommended to use both moderate and high intensity aerobic exercise in order to improve liver enzyme and liver fat in NAFLD as each of them has higher effect on liver enzyme or liver fat

Key words	:	liver enzyme and liver fat .
	:	aerobic exercise intensity.
	:	fatty liver.
	:	NAFLD.
Arabic Title Page	:	استجابة مرضى <mark>الكبد الدهني للتمرينات الهوائية المتوسطة مقابل العالية الشدة.</mark>
Library register number	:	2569-2570.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	Mostafa Sayed Abd El-Fattah Mohamed
Title	••	Insulin resistance response to aerobic exercise in type 2
		diabetic patients.
Dept.	••	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Zahra Mohamed Hassan Serry.
	:	Nehal Hamdy El-Said.
	:	Laila Ahmed Rashed.
Degree	••	Doctoral.
Year	:	2011.
Abstract	:	

The aim of this study was to investigate the effect of aerobic exercise on insulin resistance in type 2 diabetic patients. Thirty type-2-diabetic patients participated in the study, their age ranged from 40-50 years and their BMI ranged from 30-34.9 kg/m². They were divided randomly into two groups. The study group (15 patients) received moderate-intensity aerobic exercise (score 12-14 on Borg scale for RPE) three times per week for eight weeks. The control group (15 patients) didn't receive any training. The results of this study showed a significant decrease of insulin resistance (measured by HOMA-IR), a significant increase of serum adiponectin level (as an inflammatory cytokine), a significant decrease of serum MDA (as an oxidative stress marker), in the study group as compared to the control group without a significant reduction in BMI. These findings suggest that aerobic exercise may be an effective tool to decrease insulin resistance, and this effect may be mediated, in part, by increase in adiponectin and decrease in MDA. All findings represent the protective role of exercise against chronic complications in type 2 diabetic patients.

Key words	:	HOMA-IR.
	:	Aerobic exercise.
	:	Insulin resistance.
	:	Type 2 diabetes mellitus.
Arabic Title Page	:	استجابة مقاومة الإنسولين للتمرينات الهوائية لمرضى النوع الثانى من البوال
		السكرى.
Library register number	:	2427-2428
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PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	:	Rami labib Abbas.
Title	:	EFFECT OF ELECTRICAL STIMULATION AFTER
		UNLOADING ON ANGIOGENESIS IN DIABETIC RATS.
Dept.	••	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Awny Fouad Rahmy.
	:	Aziz Guirguis Aziz.
	:	Soheir Assaad Filobbos.
	:	Raja'a Fakhoury.
Degree	••	Doctoral.
Year	:	2011.
Abstract	:	

The purpose of this study was to investigate the influence of electrical stimulation after unloading on angiogenesis in diabetic rats. 50 male adult Sprague-Dawley rats were injected intraperitonially by 50 mg/kg Streptozotocin to induce diabetes. Then rats were randomly assigned into 5 equal groups; DC, 10 diabetic control rats, D1 and D2, 10 diabetic rats in each group with right lower limb immobilized for 1 and 2 weeks respectively; D1S and D2S, 10 diabetic rats in each group with right lower limb immobilized for 1 and 2 weeks respectively followed by 4 days of intramuscular electrical stimulation for the gastrocnemius muscle 1 hour per day at 10 Hz. At the end, all rats were sacrificed and right gastrocnemius muscles were harvested. Cross sections were stained with alkaline phosphatase to stain capillaries and capillary to fiber ratio was calculated using optical microscope with a digital camera connected to a computer with special software, and genetic expression of VEGF was measured using PCR. Results showed that 1 and 2 weeks of unloading reduced capillary density as well as the genetic expression of VEGF. Also, adding electrical stimulation after 1 and 2 weeks of unloading increased capillary density after 4 days by a mean of 2.5 folds. And genetic expression of VEGF was increased after 1 and 2 weeks of unloading by 1.7 and 2.2 folds, respectively, perhaps explaining the drastic increase in capillarity after stimulation. It can be concluded that introducing electrical stimulation at 10 Hz for 1 hour per day for 4 consecutive days can reverse the reduction in angiogenesis in skeletal muscle after 1 and 2 weeks of unloading, but its effect is better seen after 2 weeks on unloading.

Key words	:	diabetes, unloading.
	:	VEGF.
	:	capillary to fiber ratio.
	:	Angiogenesis.
	:	electrical stimulation.
Arabic Title Page	:	تأثير التنبيه الكهربائي بعد عدم التحميل على عملية تخليق الشعيرات الدموية عند
		الجرذان المصابة بمرض السكر.
Library register number	:	2597-2598.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	Samah Mahmoud Ismail Mahmoud
Title	•	Efficacy of Aerobic Exercise on Selected Biochemical
		Mediators of Endothelial Dysfunction in Diabetic Patients.
Dept.	•	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Azza Abdel Aziz Abdel Hady .
	:	Soheir Abdel Fattah Abo El Fadl.
	:	Laila Ahmed Rashed.
	•	Hany Ezzat Obaya.
Degree	•	Doctoral.
Year	:	2011.
Abstract	•	

The aim of this study was to investigate the efficacy of regular aerobic exercise training program on serum resistin level and serum CRP level (biochemical mediators of endothelial dysfunction) in type 2 diabetic patients. Thirty two patients participated in this study, their ages ranged from 40 to 50 years and their BMI ranged from 25-29.9 kg/m². They were divided randomly into two equal groups. Group-I (studied) performed moderate-intensity aerobic exercise on cycle ergometer (3 sessions / weak, 40 minutes / session for 10 weeks) in addition to the traditional medical treatment, while group-II (control) received only the traditional medical treatment. Serum resistin level, serum CRP level and BMI were measured at the beginning and end of the study for both groups. The results showed a highly significant reduction in serum resistin and serum CRP levels in the studied group as compared to control group without a significant reduction in BMI. These findings suggest that aerobic exercise may be an effective tool to decrease serum resistin and serum CRP levels. Hence, reduce the risk of cardiovascular complications in type 2 diabetic patients.

Key words	:	Diabetes Mellitus.
	:	CRP.
	:	Resistin.
	:	Aerobic Exercise
Arabic Title Page	:	كفاءة التمرينات الهوائية على بعض الوسائط الكيميائية الحيوية للإختلال الوظيفي
		للغشاء المبطن للأوعية الدموية في مرضى البوال السكرى.
Library register number	:	2491-2492

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PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	Shereen Hamed El-Sayed Afifi.
Title	••	Insulin Response to High Intensity Interval Training Versus
		Resistive Training in Post Menopausal Obesity.
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		and Geriatrics and its Surgery.
Supervisors	••	Azza A. Aziz A. Hady.
_	:	Randa A. Aziz Ghanom.
	:	Mervat A. Rahman Mohamed.
	•	Nesreen Ghareib Mohamed Elnahas.
Degree	••	Doctoral.
Year	:	2011.
Abstract	•	

The aim of this study was to compare the effect of high intensity interval training (HIIT) versus resistive exercises program on insulin response and non estratified fatty acid (NEFA) values in post menopause obese women. Forty postmenopausal obese women, class III and have impaired glucose tolerance (IGT) were participated in the study, their age ranged from 45 to 55 years. They were divided randomly into two equal groups. Group (A) performed HIIT while group (B) performed a resistive exercises program. The program continued for 8 weeks (three sessions per week). OGTT, plasma NEFA, BMI and waist circumference were measured at the beginning and after the end of exercise program for both groups. Significant reduction in both laboratory and anthropometric measures were found in both groups. And the HIIT had significant reduction than resistive training. So it is recommended to use both HIIT program and resistive training in order to improve physiological changes after menopause especially HIIT.

Key words	••	High intensity interval training.
	••	resistive exercises.
	••	insulin resistance.
THECE	••	post menopausal obesity.
	••	obesity.
Arabic Title Page	:	استجابة الإنسولين للتمارين عالية الشدة مقابل التمارين المقاومة في سمنة ما بعد
		انقطاع الطمث
Library register number	:	2577-2578.

PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED

Author	••	Somaia Ali Hamed Ahmed.
Title	••	Kinetic and kinematic gait analysis in hemophilic children.
Dept.	:	Physical Therapy Department for Cardiopulmonary Disorder
		and Geriatrics and its Surgery.
Supervisors	••	Faten Hassan Abd El-Aziem.
	:	Mohamed Roshdy El-Masry.
Degree	:	Doctoral.
Year	:	2011.
Abstract	:	

Hemophilia is a group of inherited, congenital life-long blood disease. Children with Hemophilia are vulnerable to a high percentage of musculoskeletal lesions. These lesions predominantly affect lower limbs, influencing postural control, standing and walking. The purpose of this study was to evaluate sagittal Kinetic and Kinematic changes of stance and swing phases of gait. Ninety four boys participated in this study. The hemophilic group examined 44 children with hemophilia their mean age 10.560 ± 1.110 years and the normal group included 50 normal children. Their mean age 10.620 ± 1.123 years. The two groups were evaluated using 3D motion analysis system, Qualysis motion capture system, the system has 3 infra-red cameras, Pro-Reflex 120, with Q trac, Q capture and Q view. The Q gait software was used to capture and analyze data. Ground reactions were also collected using a force plate unit. Data were compared between the two groups using unpaired student *t* test. Children with hemophilia were found to be significantly different in all measured parameters of joint angles, muscle moments and vertical ground reaction force during initial contact, loading response, mid stance, terminal stance and toe off phases in the ankle, knee and hip joint. These results suggested to be due to muscle weakness, joint changes, alteration of proprioception and pain.

Key words	••	Kinetic.
and a second second second second second	:	gait.
	:	children.
	:	Hemophilia.
	:	Kinematic.
Arabic Title Page	:	التحليل الكينماتيكي والكينتيكي للمشي في الأطفال المصابين بسيولة الدم.
Library register number	:	2417-2418.