Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and Its Surgery

Master Degree
2006

Author	**:**	**Ahmed Abdel Hamied Mohamed Narouz.**
Title	**:**	**Effect of High Voltage Galvanic Current Versus Intermittent Compression Therapy on Reduction of Hand Edema in Diabetic Stroke Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hala Mohamed Ez El Dein Hamed.**
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	3.	**Nevien Hemamy Mohamed.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The purpose of this study was to evaluate and compare the effect of intermittent compression therapy and high voltage galvanic stimulation on hand edema reduction in diabetic stroke patients. Thirty patients of both sexes participated in this study. They were divided into two groups equal in number. Group (I) received intermittent compression therapy. Group (II) received high voltage galvanic stimulation. Both groups received conservative treatment. The program was conducted for three times per week for three months. The patients were assessed for hand volume. These measures were recorded three times during the period of the study: before treatment, at the termination of treatment and after two weeks of the termination of treatment. The results showed significant decrease of hand volume in both groups at the end of the study period. It was concluded that both intermittent compression therapy and high voltage galvanic current are effective methods for reduction of hand edema with predominance of intermittent compression therapy as it was more effective. So it is suggested to use intermittent compression therapy in treatment of hand edema in diabetic stroke patients.

Key words	**1.**	**High Voltage Galvanic Current.**
	2.	**Intermittent Compression Therapy.**
	3.	**Hand Edema.**
	4.	**Diabetes mellitus.**
	5.	**Stroke.**
Arabic Title Page	**:**	**تأثير العلاج بالتيار الكهربائى عالي الجهد مقابل العلاج بالضغط المتقطع على تورم اليد لدى مرضى السكري والشلل النصفى.**
Library register number	**:**	**1381-1382.**

Author	**:**	**Fadia Sorial Gayed.**
Title	**:**	**Effect of Aerobic Training on Physical Work Capacity among Ederly.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Zeinab Mohamed Helmy El Said.**
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	3.	**Khaled Fouad Abd El Latif Abou- Hatab.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The purpose of this study was to investigate the effect of aerobic training on Physical work capacity among elderly. Forty female elderly subjects participated in this study their age ranged from 65 to 75 years old. The subjects of the study participated in moderate aerobic training calculated as 65% to 75% of their pre determined maximum heart rate. This program was applied three times per week for two months.Cardiopulmonary exercise test was conducted for all subjects before and after the training program to determine the physical work capacity related indices, and their hemodynamic response to exercise. The results of this study revealed improvement in the physical work capacity indices as significant increase in the VO_2max, increase anaerobic threshold and significant increase of the forced vital capacity. This in addition to the significant increase of the maximum heart rate, decrease of the resting heart rate, resting and maximum systolic blood pressure.

Key words	**1.**	**Aging.**
	2.	**Aerobic training.**
	3.	**Physical work capacity.**
Arabic Title Page	**:**	**تأثيرالتدريبات الهوائية على الكفاءة البدنية لدى المسنين.**
Library register number	**:**	**1375-1376.**

Author	**:**	**Fateen Mohamed El-Nozahay.**
Title	**:**	**Response of Bone Density to Exercises and Negative Balanced Diet in Obese Women.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Azza Abdel Aziz Abdel Hady.**
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	3.	**Neiven Hamamy Mohammed.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

This study was designed to investigate the effect of negative balanced diet with or without exercises on bone mineral density (BMD) and anthropometric variables (weight, body mass index, waist to hip ratio), in premenopausal women. Forty females' patients have been participated and randomly divided into two equal numbers. Group I (Diet) this group consisted of 20 patients who instructed to negative balance diet under medical supervision. Group II (Diet+ Exercises); consisted of 20 patients who instructed too negative balanced diets in addition to exercises program (aerobic and resistive training). Anthropometric variables (weight, height, body mass index, waist to hip ratio) and BMD of the femur, measurement was taken at the beginning of study (Pre) and after 12 weeks (Post). Aerobic exercises were performed for 40 minutes on treadmill walking, at an intensity of 65% of heart rate reserve. The resistance training was performed using free weight for all major muscles groups of lower limb (Gluteus maximums, and medieus, quadriceps, hamstring, tibials anterior and calf muscles). The training was performed for each muscle for 12 repetitions, with total duration of 60 minutes, three sessions per week for 12 weeks. results of this study revealed that there were no statistical significance differences (P>0.05) in anthropometric variables (Age, weight, height, body mass index, waist to hip ratio) and BMD between two groups at the beginning of the study. The results of this study showed that; all women in the two interventions group I and group II reported significant reduction (P<0.05) of anthropometric measures (weight, body mass index, and waist to hip ratio) with greater percentage of reduction for group II versus group I. The BMD was significantly reduced in group I with rate of reduction over three month equal to (2.15%) while in group II, BMD was improved with percentage of increased of about (3.2%).From results of current study; in overweight premenopausal women , addition of aerobic and resistive training exercises to negative balanced diet lead to loss of body weight , BMI and waist to hip ratio with maintenance effect on BMD when compared with diet alone.

Key words	**1.**	**Bone mineral density.**
	2.	**body mass index.**
	3.	**Diet.**
	4.	**Exercises.**
	5.	**obesity Premenopausal.**
Arabic Title Page	**:**	**استجابة كثافة العظام للتمرينات ونقص الغذاء المتوازن فى السيدات البد ينات.**
Library register number	**:**	**1431-1432.**

Author	**:**	**Hany Farid Eid Morsy.**
Title	**:**	**Effect of Low Frequency Magnetic Field on Blood Flow in Diabetic Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Aziz Guirguis Aziz.**
	2.	**Al-Sayed Abd-Alhameed Shanb.**
	3.	**Nashwa Ahmed Mohamed El-Sarraf.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The purpose of this study is to examine the effect of low frequency pulsed magnetic field (LFPMF) therapy on microcirculation in patients with type 2 diabetes mellitus. Twenty patients from Out Patient Clinic of Diabetes in Kasr Al-Aini Hospital were assigned randomly into 2 groups equal in number. The magnet on group (n=10) received LFPMF in addition to oral hypoglycemic drugs, whereas the magnet off group (n=10) received hypoglycemic drugs. The blood perfusion, heart rate, respiratory rate and blood pressure were measured before and after 3 month of treatment. Ankle brachial pressure index (ABPI) was measured before the study to exclude macrovascular complications. Results: The results showed a statistical significant improvement in all parameters in magnet on group compared with magnet off group. Conclusion: It was concluded that LFPMF is effective as a therapeutic method to improve microcirculation in patients with type 2 diabetes mellitus.

Key words	**1.**	**Magnetic Field.**
	2.	**Blood Flow.**
	3.	**Diabetic Patients..**
Arabic Title Page	**:**	**تأثير المجال المغناطيسي قليل التردد علي التدفق الدموي لدي مرضي داء السكر.**
Library register number	**:**	**1425-1426.**

Author	**:**	**Heba Ahmed Ali Abdeen.**
Title	**:**	**Clinical parameters' response to TENS in refractory angina pectoris.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hala Mohammed Ezz El Din Hamed.**
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Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The aim of this work was to investigate the effect of TENS application on the clinical parameters in refractory angina patients including: severity of symptoms and 24hour ambulatory ECG reports. Forty male patients, their ages ranged between 42 to 66 years suffering from chronic refractory angina participated in the study. They were divided into two equal groups, the TENS group which received routine medications plus TENS for one hour 3 times a day, and the control group received regular medical treatment only. The period of study was two weeks proceeded by a follow up period of two weeks. The results of this study showed a significant reduction in the intensity of chest pain, frequency of anginal attacks, and rate of short-acting nitrates consumption in the TENS group. Concerning the episodes of ST depression there was also a reduction in the TENS group, over the Control group. While the HRV was not significantly altered in both groups.

Key words	**1.**	**Refractory angina pectoris.**
	2.	**TENS.**
Arabic Title Page	**:**	**إستجابة المقاييس الإكلينيكية للتنبيه الكهربى للعصب عبر الجلد فى الذبحة الصدرية المقاومة.**
Library register number	**:**	**1293-1294.**

Author	**:**	**Intesar Hussain Zaky Ahmed.**
Title	**:**	**Immediate response of incentive spirometery versus non invasive intermittent positive pressure breathing on arterial blood gases post mitral valve replacement.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Zeinab Mohamed Helmy.**
	2.	**Lotfy Mohamed Aissa.**
	3.	**Neiven Hemamy Mohamed.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The aim of this study was to investigate the effect of incentive spirometery and noninvasive intermittent positive pressure breathing on arterial blood gases post mitral valve replacement. Also to compare between the effect of I.S and non invasive IPPB on arterial blood gases post mitral valve replacement in the intensive care unit. Forty patients who had been operated on for mitral valve replacement participated in this study and divided into two equal groups. First group received incentive spirometery and the second group received non - invasive intermittent positive pressure breathing. Partial pressure of oxygen (Pao_2). Partial pressure of carbon dioxide ($Paco_2$), and H^+ion concentration (pH). were recorded at different time intervals. Significant improvement of PaO_2 had been shown two hours after treatment in IS group and non significant improvement of PaO_2 had been shown two hours after treatment in IPPB group. Comparison between two groups showed that non of the two modalities is superior to the other.

Key words	**1.**	**Incentive spirometry.**
	2.	**non invasive intermittent positive pressure breathing.**
	3.	**arterial blood gases.**
	4.	**mitral valve replacement.**
Arabic Title Page	**:**	**التأثير الفوري لجهاز الحافز التنفسي مقابل جهاز ضغط التنفس الإيجابي المتقطع الغير تداخلي على غازات الدم الشرياني بعد استبدال الصمام الميترالي.**
Library register number	**:**	**1399-1400.**

Author	**:**	**Karim Ahmed Fathy.**
Title	**:**	**Cardiovascular response to body weight reduction for pre diabetic obese female.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Azza A. Abdel Hady.**
	2.	**Mohamed I. Abdel Maguid.**
	3.	**Neemat M. Aly.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The aim of this study was to determine the efficacy of weight reduction program in avoidance of cardiovascular diseases and improving cardiovascular state in pre diabetic obese female subjects. Thirty pre diabetic obese volunteer females selected from Internal Medicine Department of Kasr El Ainy and October 6th University Hospitals. Their age ranged between 35-45 years, attended a program of weight reduction (aerobic exercises and diet), within 12 weeks. The results can be used as a reference for the present study to show the efficacy of weight reduction program in avoidance of cardiovascular diseases and improvement of cardiovascular state in pre diabetic obese females. Whenever there's high value of body mass index change reduction, it gives the expected improvement of cardiovascular system.

Key words	**1.**	**Cardiovascular.**
	2.	**body weight.**
	3.	**pre diabetic.**
	4.	**obese female.**
Arabic Title Page	**:**	**استجابة الجهاز الدورى لإنقاص الوزن لدى السيدات البدينات المرضات لمرضى البوال للسكرى.**
Library register number	**:**	**1415-1416.**

Author	**:**	**Khaled Mohamed Assem.**
Title	**:**	**Blood Gases Response to Different Body Positions in Patients with Chronic Obstructive Pulmonary Disease in Intensive Care Unit.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Awny F. Rahmy.**
	2.	**Mohamed Sherif Mohamed Elbohy.**
	3.	**Alsayed Abd Elhamed Shanab.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The purpose of this study was to evaluate blood gases response to different body positions in patients with chronic obstructive pulmonary disease in intensive care unit. Fifty four chronic obstructive pulmonary disease patients, stage III, with mean age 65 ± 5.35 years participated in this study. Three blood samples was drawn from each patient at base line supine position, at side lying position and at prone position, with interval of 2 hours between each sample. Physical therapy program was performed to the patient at each position. The results showed that there was highly significant improvement of blood gases (PaO2, SaO2), at prone position and statistically significant improvement of prone position with statistically significant differences between prone lying position and side lying and supine lying positions. From the obtained results in this study, it can be concluded that prone lying position may represent a beneficial therapeutic modality to improve blood gases in chronic obstructive pulmonary disease patients in intensive care unit.

Key words	**1.**	**Blood Gases.**
	2.	**Chronic Obstructive Pulmonary Disease.**
	3.	**Intensive Care Unit.**
Arabic Title Page	**:**	**تأثير الأوضاع المختلفة للجسم على غازات الدم لمرضى السدة الرئوية المزمنة فى العناية المركزة.**
Library register number	**:**	**1453-1454.**

Author	**:**	**Mahmoud Mohamed Nasser.**
Title	**:**	**Efficacy Of Low Level Laser Therapy Versus Ultrasonic In Carpal Tunnel Syndrome For Diabetics.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Azza Abdel Aziz Abdel Hady.**
	2.	**Ahmed Fathy Mohamed Genedy.**
	3.	**Akram Abdel Aziz Sayed.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

Background Diabetes Mellitus is a significant problem that frequently restricts patients activity specially hand function due to Carpal Tunnel Syndrome. The purpose of this study was to investigate the efficacy of low level laser therapy Vs ultrasonic therapy in the treatment of CTS for diabetics. Subjects. 30 diabetic patients with CTS (11 males, 19 females), age (44.467±3.3) years were randomly assigned into two groups: group (A) received LASER therapy & group (B) received ultrasonic therapy 3 times/week for six weeks. Results. Pain score was more significantly decreased in group A than in group B, mean was decreased from (7.13±1.3) to (2.87±1.3) and from (7.53±1.5) to (7.07 ±1.49) respectively. Hand grip measurements has more significant increase in group A than group B, mean was increased from (9.4±2.13) to (16.2 ±2.27) and from (9.73±2.12) to (10.87±2.9) respectively. EMG studies indicate that group A was improved more than group B after treatment. Conclusion. LA SER therapy is more effective in the treatment of CTS for diabetics than ultrasonic as pain decreased and the hand function improved with laser .than ultrasonic.

Key words	**1.**	**Carpal Tunnel Syndrome.**
	2.	**Diabetes mellitus.**
	3.	**Ultrasonic Therapy.**
	4.	**Laser Therapy.**
	5.	**Lasers.**
Arabic Title Page	**:**	**مدى كفاءة الليزر منخفض الشدة في مقابل الموجات فوق الصوتية لعلاج اختناق العصب الأوسط عند الرسغ لمرضى السكر.**
Library register number	**:**	**1457-1458.**

Author	**:**	**Mariam EI-Sayed Mohamed.**
Title	**:**	**Ventilatory Function Response to Supported versus Unsupported Arm Exercise among Elderly.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Hala M. Ezz EI-deen Hamed.**
	2.	**Awny Fouad Rahmy.**
	3.	**Neveen Hemami Mohamed.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The aim of this study was to compare the effect of supported versus unsupported arm exercise training on the ventilatory functions in elderly. Thirty elderly subjects (17 male and 13 female) were participated in the study, their age ranged from 60 to 75 years. They were divided into two study groups equal in number. The group I comprised of 15 subjects who received a training program of supported arm exercise and group n received a training program of unsupported arm exercise. The results showed that the forced vital capacity, the vital capacity, the forced expiratory volume in 1 st second, the maximum voluntary ventilation and the forced expiratory volume/ forced vital capacity ratio were significantly improved in both groups but the percentage of improvement of last three variables was significantly higher in group I.

Key words	**1.**	**Elderly.**
	2.	**accessory muscles**
	3.	**arm exercise.**
	4.	**ventilatory function.**
Arabic Title Page	**:**	**إستجابة وظائف التهوية لتمرينات الذراعين المسندة والغير مسندة لكبار السن.**
Library register number	**:**	**1275-1276.**

Author	**:**	**Mohamed Kotb Khalil Seyam**
Title	**:**	**Blood Gases Response to Respiratory Muscle Training in Patients with Spinal Cord Injury**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Al-Sayed Abd El- Hammeed Shanb.**
	2.	**Shehab Mahmoud Abd El-Kader.**
	3.	**Mohamed Sobh El-Gammal.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The aim of this study was to investigate the effect of respiratory muscle training in blood gases in patients with spinal cord injury. Twenty patients with acute complete neurological deficit (C_{3-8}), (15 male and 5 female) participated in the study, their age ranged from 21 to 45 years. They were studied after their medical and neurological conditions have stabilized and they were free from any active pulmonary disease. They received daily treatment of inspiratory muscle weight training for six weeks. The arterial blood gases and pulmonary function test are measured before and after exercise program. There were a significant improvments in the arterial blood gases and pulmonary function test following a six weeks of respiratory muscle training program. So respiratory muscle weight training can be used in training of respiratory muscles in patients with spinal cord injury.

Key words	**1.**	**Spinal cord injury.**
	2.	**breathing exercise.**
	3.	**arterial blood gases.**
	4.	**pulmonary function..**
Arabic Title Page	**:**	**استجابة غازات الدم لبرنامج تدريبي لعضلات التنفس لمرضى إصابات النخاع الشوكى.**
Library register number	**:**	**1429-1430.**

Author	**:**	**Mostafa Sayed Abd EI-Fattah.**
Title	**:**	**Glycemic Control Response to A Combined Aerobic and Resistance Exercise versus Aerobic Exercise in Diabetic Patients.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Awny Fouad Rahmy.**
	2.	**Shehab Mahmoud Abd EI-Kader.**
	3.	**Laila Ahmed Rashed.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	
The aim of this study was to compare the effect of a combined aerobic & resistance exercise versus aerobic exercise on glycemic control in diabetic patients. Twenty type 2 diabetic patients (10 male and 10 female) participated in the study, their age ranged from 40 to 55 years. They were divided into two equal groups. Group (A) performed a combined aerobic & resistance exercise, while group (B) performed aerobic exercise. The program continued for 8 weeks (three sessions per week).HbAIe and BM! were measured at the beginning and after the exercise program for both groups. Significant reduction in HbA Ie was observed in both groups after exercise program. There was a significant reduction of BMI in group (B), but the results of group (A) indicated non significant changes in BM. So it is recommended to use both resistance and aerobic exercises in order to improve glycemic control in type 2 diabetic patients regardless the reduction in body weight.		
Key words	**1.**	**aerobic exercise.**
	2.	**resistance exercise.**
	3.	**glycemic control.**
	4.	**diabetes mellitus.**
Arabic Title Page	**:**	**استجابة التحكم فى سكر الدم لبرنامج مركب من التمرينات الهوائية و تمرينات المقاومة مقابل التمرينات الهوائية لمرضى داء السكر.**
Library register number	**:**	**1317-1318.**

Author	**:**	**Rehab Farrag Mohammed Ali.**
Title	**:**	**The Effect of Non -Invasive Continuous Positive Airway Pressure on Blood Gases in Patients with Congestive Heart Failure.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Zeinab Mohamed Helmy.**
	2.	**Hala Mohamed Ezz EI- Deen.**
	3.	**Mostafa Abd - EI Salam.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	
This study was designed to investigate the effect of continuous positive airway pressure (CPAP), on blood gases (Pa02, Pac02, Sa02, HC03, and pH), as well as hemodynamic variables (HR, RR, SBP, and DBP) in-patients with acute pulmonary edema secondary to congestive heart failure (CHF). Twenty patients (11 females and 9 males) were recruited from emergency department at National Heart Institute, and enrolled in this study. Their age ranged from (50 to 65 years) with mean values of(57±6.3 years). All patients had acute exacerbation of CHF with acute cardiogenic pulmonary edema (ACPE) secondary to either ischemic heart disease (IHD), 11 patients (55%), or ischemic cardiomyopathy (ICM), 9 patients (450/0). The blood gases (Pa02, PaC02, 8a02, HC03, and pH), and hemodynamic variables (HR, RR, 8BP, and DBP) had been measured before entry to study (Pre), immediately after (Post I), and after 30 minutes (Post II) of CPAP therapy, through using Acid -Base Analyzer device, and ECG monitor respectively. The results of this study revealed significant reduction of hemodynamic variables (HR, RR, SBP, and DBP), immediately after application ofCPAP. These improvements continued after removal of CPAP therapy with 30 minutes. The results showed significant increase in Pa02, and 8a02, immediately after CPAP therapy, while HC03, and pH increased but not reaches statistical significant level. The results revealed continuous significant reduction (p<. 05) in PaC02 after 30 minutes of the end of CPAP. The results: the CP AP therapy is feasible, safe and well tolerated at emergency setting for patients with ACPE secondary to congestive heart failure.As it relief their clinical and symptomatic signs as well as laboratory finding of blood gases of acute pulmonary edema.		
Key words	**1.**	**Continuous positive airway pressure.**
	2.	**heart failure.**
	3.	**acute cardio pulmonary edema.**
Arabic Title Page	**:**	**تأثير جهازضغط التنفس الايجابي المستمر الغير تداخلي على غازات الدم في مرضى فشل عضلة القلب المحتقن.**
Library register number	**:**	**1287-1288.**

Author	**:**	**Suzan Mahmoud Habshi.**
Title	**:**	**Arterial blood gases response to incentive spirometry versus continuous positive airway pressure after coronary artery bypass graft.**
Dept.	**:**	**Physical Therapy Department for Cardiopulmonary Disorder and Geriatrics and its Surgery.**
Supervisors	**1.**	**Azza Fikry Ismail.**
	2.	**Lotfy Mohmed Eissa.**
	3.	**Shehab Mahmoud Abd EI-Khader.**
Degree	**:**	**Master.**
Year	**:**	**2006.**
Abstract	**:**	

The aim of this study was to determine the efficacy of incentive spirometry and continuous positive airway pressure on improving the arterial blood gases after coronary artery bypass grafting surgery. Thirty patients had coronary artery bypass grafting surgery participated in this study divided into two groups. The first group received incentive spirometry, the second group received continuous positive airway pressure, there were statistical significant increase in $PaO_2$and decrease in $PaCO_2$ after half an hour of using continuous positive airway pressure and after two hours of using incentive pirometry. But there were no statistical significant change in arterial blood gases result after half an hour of using incentive spirometry and after two hours of using continuous positive airway pressure. So continuous positive airway pressure can be introduced as a method of treatment for patients hich need immediate increase in arterial blood gases following surgery, and incentive spirometry is easonable intervention for reducing the risk of pulmonary complications after cardiac surgery.

Key words	**1.**	**Arterial blood gases.**
	2.	**incentive spirometry.**
	3.	**positive airway pressure.**
	4.	**coronary artery bypass graft.**
Arabic Title Page	**:**	**استجابة غازات الدم الشرياني لاستخدام جهاز الحافز التنفسي مقارنة بجهاز ضغط التنفس الايجابي المستمر بعد جراحات ترقيع الشريان التاجي.**
Library register number	**:**	**1363-1264.**