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Influence of Aerobic Exercises Training on Type II Diabetic Hypertensive Patients

By
Tamer Mahmoud Sabry Mowafy
B.SC. in Physical Therapy 1994

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Cairo University

Faculty of Physical Therapy
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B 0<71

Supervisors

PROF. DR / Zeinab Mohamed Helmy EL-Sayed.

Assistant Professor in Physical Therapy - Cardiopulmonary Disorders and Geriatrics Department - Faculty of Physical Therapy. Cairo University. Dy Senet Helle

PROF. DR / Alaa Afify

Professor of Physiology - Faculty of Medicine - Cairo University

PROF. DR / Hala Mohamed Ez El-Dine Hamed

Assistant Professor in Physical Therapy - Cardiopulmonary Disorders and Geriatrics Department Faculty of Physical Therapy Cairo University

قال الله تعالى:



فتعالى الله الملك الحق ولا تعجل بالقرآن من قبل أن يقضى إليك وحيه وقل رب زدني علما الله العظيم صدق الله العظيم (الآية ١١٤ سيورة طه)

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Dedication

To my parents, my wife and my sister

Abstract

Tamer Mahmoud Sabry Mowafy.

Infuence of Aerobic Exercises training on type 2 Diabetic Hypertensive patient.

Tamer Mahmoud Sabry / Supervisors; Prof. Dr / Zeinab Mohamoud Helmy, Assistant Professor of Physical Therapy for Cardiopulmonary and geriatrics Disorders, Faculty of Physical Therapy, Cairo University, Prof. Dr/Alaa Afify, Professor of Physiology, Faculty of Medicine, Cairo University, Prof. Dr / Hala Mohamed Ez EL-Dine, Assistant Professor of Physical Therapy for Cardiopulmonary and geriatrics Disorders, Faculty of Physical Therapy, Cairo University. Master Thesis. 2003.

This research was Conducted to study the effect of aerobic training (treadmill training) on diabetic (type 2) hypertensive patient from Diabetic clinic in Sherpien Hospital. Twenty patients were trained by aerobic exercise with treadmill at 80 % of maximum heart rate. The other twenty patients were taken as a control group. Both groups were on their medications and were instructed to be on their normal activities. All patients were evaluated in the first and final evaluation. The results of this study revealed as significant reduction in body mass index for the training group (group A), while they revealed insignificant increase for the control group (group B). The results also revealed a significant reduction of fasting and post prandial blood glucose level for group (A), while for group (B), there was insignificant reduction in fasting and post prandial blood glucose.

The results also revealed a significant reduction in resting systolic and resting diastolic blood pressure in-group (A), while in-group (B), there was insignificant reduction in resting systolic and resting diastolic blood pressure.

The results also revealed a significant an increase in post-exercise systolic and post-exercise diastolic blood pressure in-group (A), while ingroup (B), there was insignificant increase in post-exercise systolic and post-exercise diastolic blood pressure.

Exercise tolerance test variables (maximum heart rate, training heart rate, duration of exercise test) in group (A) significantly increased and pre-exercise (resting) heart rate in group (A) significantly reduced.

While in-group (B) there was insignificant increase in maximum heart rate, training heart rate) but significant mild increase in duration of exercise test and was insignificant decrease in pre-exercise heart rate.

Key words: Aerobic training, females, Diabetes (type 2), Hypertension.

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