



شبكة المعلومات الجامعية

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شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون أية تغيرات



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %



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بعض الوثائق الأصلية تالفة



شبكة المعلومات الجامعية



بالرسالة صفحات

لم ترد بالأصل

**EFFECTS OF TREADMILL WALKING ON
PLASMA CATECHOLAMINES AND
ELECTROLYTES IN HYPERTENSIVE
SUBJECTS**

Thesis

**Submitted in partial fulfillment for the Doctoral
Degree in physical therapy**

By

Salwa Roushdy El- Gendy

B.Sc. (1987), M. Sc. (1993)

In

Physical Therapy

Faculty of Physical Therapy

Cairo University

Supervisors

Prof. Dr. Nagwa M. Badr

Chairman of P.T. for Internal

Medicine and Geriatrics Dept.

Faculty of physical therapy

Cairo University

Prof. Dr. Karima M. Ibrahim

Professor of Physiology

Physiology Department

Faculty of Medicine

Cairo University

Dr. Maged A. Haroun

Assistant Professor of Physiology

Physiology Department

Faculty of Medicine

Cairo University

Cairo University

2000

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1-2-44

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

الرحمن (١) علم القراءان (٢) خلق الإنسان (٣)
علمه البيان (٤)

(سورة الرحمن من آية ١ إلى آية ٤)

Effects of treadmill walking on plasma catecholamines and electrolytes in hypertensive subjects/ Salwa Roushdy El - Gendy; Supervisors: Nagwa M. Badr Karima M. Ibrahim, Maged A. Haroun (Cairo): Cairo univ. (Egypt). Fac. Of physical Therapy- P.T. for internal medicine and geriatrics dept. - thesis; Ph. D., 2000.

The aim of this work was to study the effects of walking on plasma catecholamines and electrolytes in hypertensive subjects. In this study, 10 hypertensive patients, and 10 normotensive subjects were presented. Results were suggestive about the role of walking in the improvement of hypertension, and that the decrease of plasma noradrenaline level plays a role in lowering arterial blood pressure. Walking also increases plasma potassium level that plays a role in the improvement of hypertension.

Key words: Hypertension - Catecholamines - Exercise - Sodium - Potassium.

Contents

	<i>Page</i>
<i>Chapter I</i>	<i>1</i>
Introduction and aim of the work	
<i>Chapter II</i>	<i>7</i>
Review of literature	
<i>Hypertension</i>	<i>7</i>
<i>Catecholamines</i>	<i>32</i>
<i>Hypertension and exercise</i>	<i>45</i>
<i>Electrolytes and arterial blood pressure</i>	<i>63</i>
<i>Chapter III</i>	
Subjects and Methods	<i>78</i>
<i>Chapter IV</i>	
Results	<i>93</i>
<i>Chapter V</i>	
Discussion	<i>154</i>
<i>Chapter VI</i>	
Summary and conclusion	<i>167</i>
<i>Chapter VII</i>	
References	<i>171</i>
<i>Arabic summary</i>	<i>1</i>

(22)	Comparative influence of exercise training program on mean serum potassium level between first and twelveth session pre and post exercise in hypertensive subjects.	145
(23)	Mean plasma epinephrine level before and after exercise for the first, sixth and twelveth sessions for normotensive and hypertensive groups.	147
(24)	Comparative influence of exercise training program on mean plasma epinephrine level between first and twelveth session pre and post exercise in hypertensive subjects.	149
(25)	Mean plasma norepinephrine level before and after exercise for the first, sixth and twelveth sessions for normotensive and hypertensive groups.	151
(26)	Comparative influence of exercise training program on mean plasma norepinephrine level between first and twelveth session pre and post exercise in hypertensive subjects.	153

Continued

(15)	Comparison between mean of (PP) pre and post exercise in 1 st , 6 th and 12 th sessions.	132
(16)	Comparison between mean of (HR) pre and post exercise in 1 st , 6 th and 12 th sessions.	136
(17)	Comparison between mean of (Na ⁺) pre and post exercise in 1 st , 6 th and 12 th sessions.	140
(18)	Comparison between mean of (K ⁺) pre and post exercise in 1 st , 6 th and 12 th sessions.	144
(19)	Comparison between mean of (E) pre and post exercise in 1 st , 6 th and 12 th sessions.	148
(20)	Comparison between mean of (NE) pre and post exercise in 1 st , 6 th and 12 th sessions.	152

List of Abbreviations

A.Ch.	<i>Acetylcholine</i>
ABP	<i>Arterial blood pressure</i>
ACEI	<i>Angiotensin- converting enzyme inhibitors</i>
ASCVD	<i>Atherosclerotic cardiovascular disease</i>
ATP	<i>Adenosine triphosphate</i>
ATP-ase	<i>Adenosine triphosphatase</i>
A-V _O ₂	<i>Arteriovenous oxygen difference</i>
BHT	<i>Borderline hypertension</i>
Bpm	<i>Beat per minute</i>
CA	<i>Catecholamines</i>
Ca ²⁺	<i>Calcium</i>
CO	<i>Cardiac output</i>
COMT	<i>Catechol-O-methyltransferase</i>
CSA	<i>Cyclosporin A</i>
Cyclic AMP	<i>Cyclic adenosine monophosphate</i>
DβH	<i>Dopamine β- hydroxylase</i>
DBP	<i>Diastolic blood pressure</i>
E	<i>Epinephrine</i>
EDRF	<i>Endothelial derived relaxing factor</i>
EDTA	<i>Ethylene diamine tetra -acetic acid</i>
EH	<i>Essential hypertension</i>
ET ₁	<i>Endothelin 1</i>

ET _A	<i>Endothelin A receptor</i>
ET _B	<i>Endothelin B receptor</i>
EX	<i>Exercise</i>
g.	<i>Gram</i>
GNB ₃	<i>Beta 3 subunit of heterotrimeric G proteins</i>
Gs	<i>G- protein</i>
HDL	<i>High density level</i>
HR	<i>Heart rate</i>
HT	<i>Hypertension</i>
INTER SALT	<i>International study of salt</i>
K ⁺	<i>Potassium</i>
Kcal	<i>Kilo calory</i>
Kg	<i>Kilogram</i>
L-dopa	<i>L-dihydroxy phenylalanine</i>
LVH	<i>Left ventricular hypertrophy</i>
MAO	<i>Mono- amine Oxidase</i>
MAP	<i>Mean arterial pressure</i>
mEq	<i>Milli equivalent</i>
min	<i>Minute</i>
ml	<i>Millilitre</i>
mm.Hg.	<i>Millimeter mercury</i>
MRNA	<i>Messenger ribonucleic acid</i>
Na ⁺	<i>Sodium</i>
NAD	<i>Nicotinamide adenine dinucleotide</i>

NADH	<i>Nicotinamide adenine dinucleotide phosphate</i>
NE	<i>Norepinephrine</i>
NHANES	<i>National health and nutrition examination survey</i>
NO	<i>Nitric oxide</i>
NPMT	<i>Nonpharmacological methods of treatment</i>
O ₂	<i>Oxygen</i>
ONPG	<i>O- nitrophenyl galatopyranoside</i>
OVX	<i>Ovarictomized</i>
Pg	<i>Pico gram</i>
PH	<i>Hydrogen ion concentration</i>
PNMT	<i>Phenylethanolamine -N- methyltransferase</i>
PP	<i>Pulse pressure</i>
PR	<i>Peripheral resistance</i>
PRA	<i>Plasma renin activity</i>
PVO ₂	<i>Oxygen consumption at peak exercise</i>
RBCs	<i>Red blood corpuscles</i>
SBP	<i>Systolic blood pressure</i>
SHR	<i>Spontaneously hypertensive rats</i>
SV	<i>Stroke volume</i>
TOMHS	<i>Treatment of mild hypertension study</i>
VO ₂ Max	<i>Maximal oxygen consumption</i>
Vs	<i>Versus</i>
WHO	<i>World health organization</i>
WKY rats	<i>Wistar-Kyoto rats</i>

Introduction
and
Aim of the work