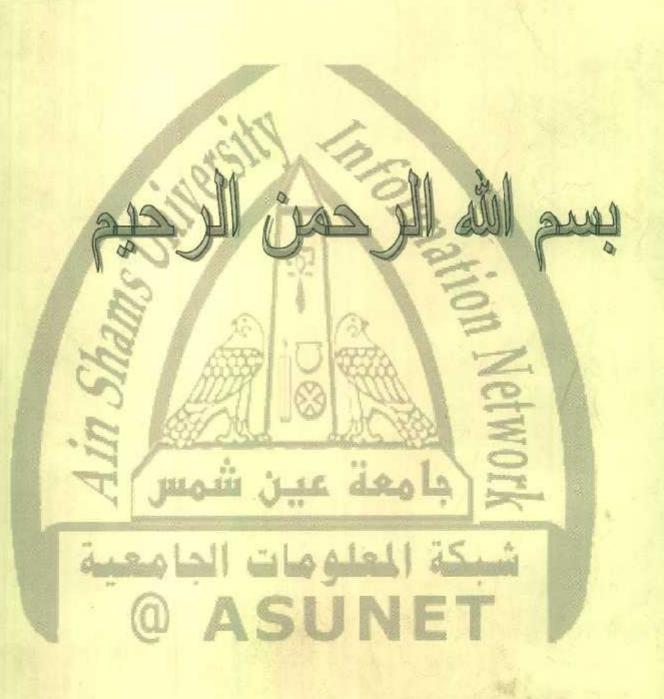


شبكة المعلومات الجامعية





شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم

Quantitative Rehabilitation Assessment In Patients With Peripheral Arterial Disease

Thesis

Submitted in the partial fulfillment for M.D. Degree in (Physical Medicine and Rehabilitation)

 $\mathbf{B}\mathbf{v}$

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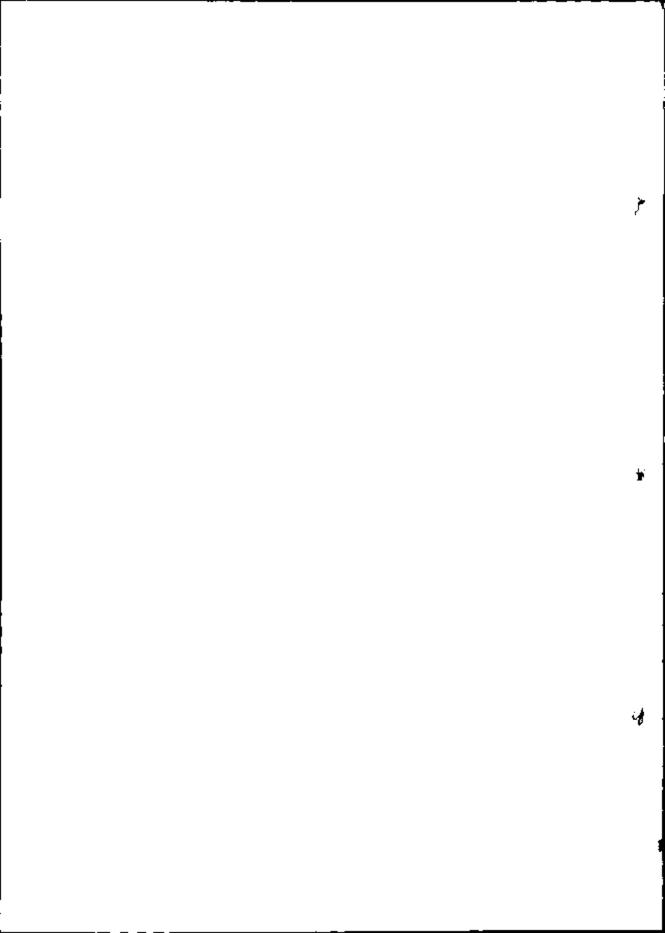
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﴿ سَبُحَانَكَ لَاعِلْمِ لِنَا إِلَامَا عَلَمْتَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَصِيمُ

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Words cannot adequately express the feelings of gratitude I have for those who helped me to accomplish this work.

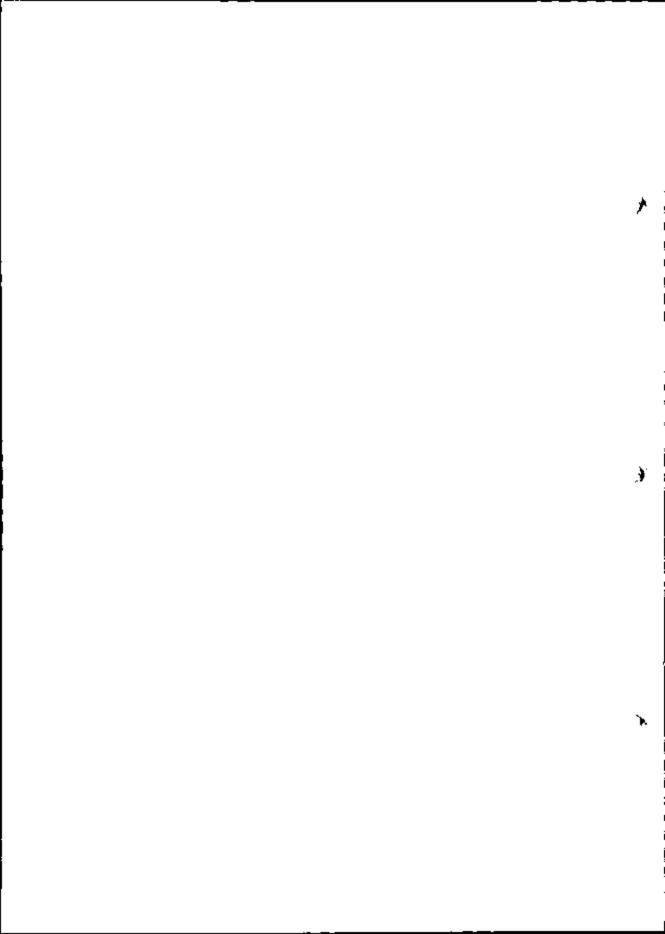
I would like to express my deepest gratitude and appreciation to **Prof. Dr. Nadia Abd El Salam El Kadery**, Professor of Physical Medicine and Rehabilitation, Ain Shams University, for her mother's guidance, precious help and expert supervision.

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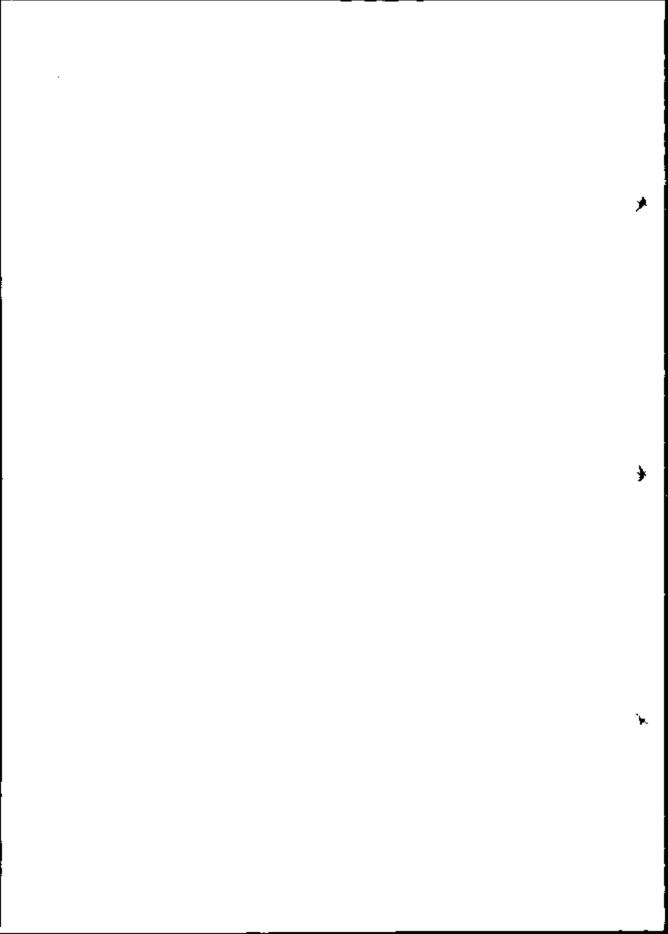
To Everyone Taught Me a Letter

To My Parents

To My Husband

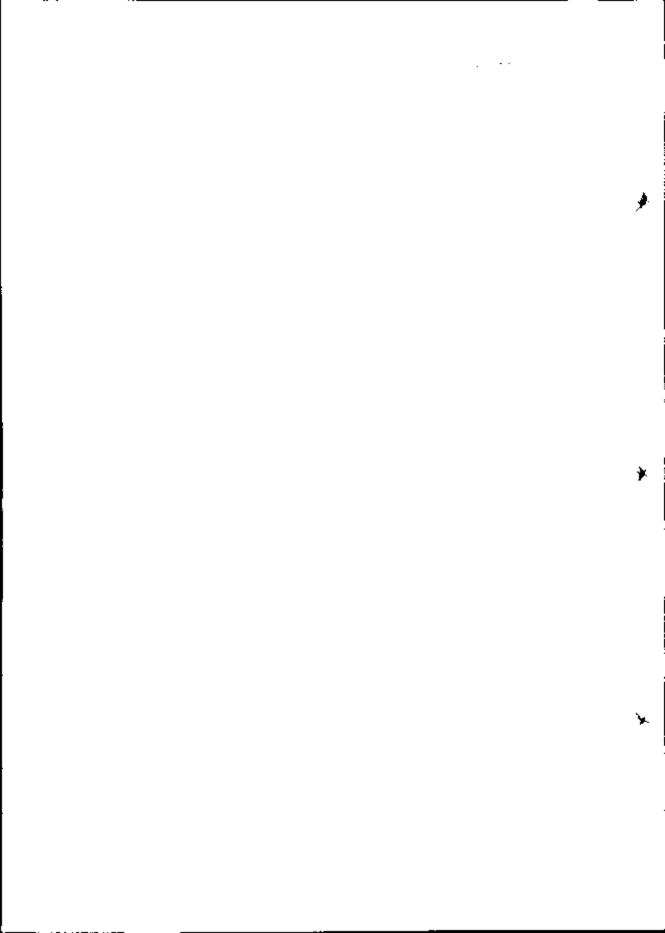
To My Son and

Daughters



Contents

	Contents	Page
I	Introduction	ļ
II	Aim of the work	3
Ш	Review of literature	4
	- Anatomy of arterial supply of lower extremities	4
	- Physiological adaptations of skeletal muscle to training	29
	- Pathophysiology of PAOD	48
	- Peripheral arterial occlusive disease	57
	- Rehabilitation of PAOD patients	97
	 Quantitative rehabilitation assessment in patients—with PAOD 	104
IV	Subjects and Methods	116
V	Results	127
VĮ	Discussion	160
VII	Summary and Conclusion	172
VIII	References	176
IX	Arabic summary	



LIST OF ABBREVIATIONS

ABI : ankle / brachial index ADP : Adenosine diphosphate

ANOVA : analysis of variance

ASP ; ankle systolic pressure

ATP : adenosine triphosphate AvPs : averaged potentials

BMI : body mass index

Ca ² : Calcium ion

CHD : coronary heart disease

CK : creatine phosphokinase

CLI : critical limb ischemia

Co 2 : carbon dioxide CP : critical power

CPD : claudication pain distance

CRP : C-reactive protein

CSA : cross sectional area CV : conduction velocity

DF : damping factor

DF-1 : inverse damping factor

DM : diabetes mellitus

EDRF : endothelial-derived relaxing factor

EFAs : essential fatty acids EMG : electromyography

ESAF : endothelial-cell-stimulating-angiogenetic

factor

ET - 1 : endothelin - 1 FFA : free fatty acid

FGF : fibroblast growth factor

FI : fatigue index

Fig. : figure

FT : fast twitch

GNG: gluconeogenesis GPX: GSH peroxidase

H + : hydrogen ion

HDL: high density lipoproteins

HDL-C : high density lipoprotein cholesterol

Hz : hertz

IMDF : Initial median frequencyIMF : initial median frequency

IMGU : insulin-mediated glucose uptake

IPC (foot) : intermittent pneumatic foot compression

JNK : c-Jun HN2-Terminal Kinase

K ' : potassium ion

LDL : low density lipoproteins

LDL-C : low density lipoprotein cholesterol

LEAOD : lower extremity arterial occlusive disease

LEOD : lower extremity occlusive disease
LEAD : lower extremity arterial disease
MCVs : motor conduction velocities

MDF : median frequency

MFCV : muscle fiber conduction velocity

mg : milligram

MOS : Medical Outcome Study
MPD : maximum pain distance
MPF : mean power frequency
MMG : mechanomyography
mmHg : millimeter mercury

mRNA : messenger ribonucleotide acid

MRV : mean rectified voltage

MSNA : muscle sympathetic nerve activity

MUAPs : motor unit action potentials

MVC : maximum voluntary contraction

Na, K pump : Sodium, Potassium pump

NO : nitric oxide O_2 : oxygen

PAD : peripheral arterial disease

PAOD : peripheral arterial occlusive disease

PAR ; Physical Activity Recall PCO₂ ; carbon dioxide tension

PGE : prostaglandin E PGI 2 : prostaglandin I 2

PIpp : peak-to-peak pulsatility index