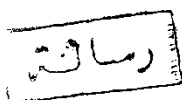


**ASSESSMENT OF LEFT VENTRICULAR
DIASTOLIC FUNCTION IN POST
MYOCARDIAL INFARCTION PATIENTS:
COMPARISON OF DOPPLER
ECHOCARDIOGRAPHY AND GATED
BLOOD POOL RADIONUCLIDE
ANGIOGRAPHY**



Thesis

Submitted for Partial Fulfillment of the
M.D. Degree
in
Cardiology

67532

616.11
A. N.

By

Ahmed Naguib Saad El Din El Tawdy
M.Sc. Cardiology

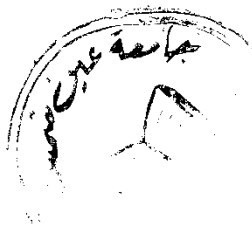
SUPERVISORS

Prof.Dr. Mohamed Khairy Abd El Dayem
Professor of Cardiology

Prof.Dr. Laila Fares Matta
Professor of Radiology

Head of Radiotherapy, Nuclear Medicine

Prof.Dr. Wagdy Abd El Hamid Galal
Professor of Cardiology



Dr. Mona Abu El Soud

Assistant Prof. of Cardiology
Faculty of Medicine
Ain Shams University

1997





**ASSESSMENT OF LEFT VENTRICULAR
DIASTOLIC FUNCTION IN POST
MYOCARDIAL INFARCTION PATIENTS:
COMPARISON OF DOPPLER
ECHOCARDIOGRAPHY AND GATED
BLOOD POOL RADIONUCLIDE
ANGIOGRAPHY**

Thesis

Submitted for Partial Fulfillment of the
M.D. Degree
in
Cardiology

By

Ahmed Naguib Saad El Din El Tawdy
M.Sc. Cardiology

SUPERVISORS

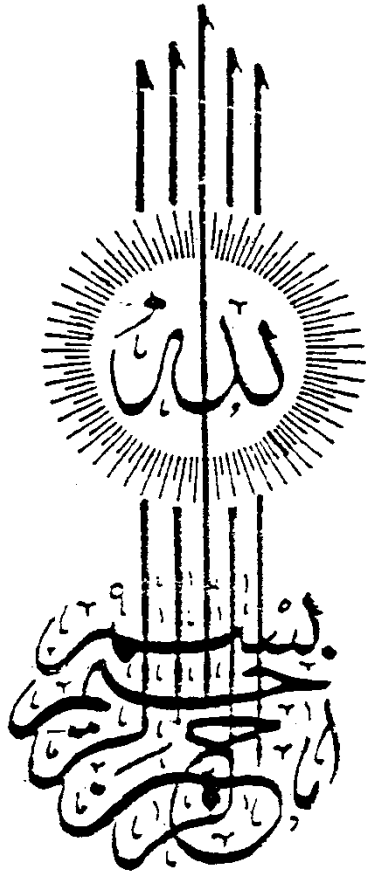
Prof.Dr. Mohamed Khairy Abd El Dayem
Professor of Cardiology

Prof.Dr. Laila Fares Matta
Professor of Radiology
Head of Radiotherapy, Nuclear Medicine

Prof.Dr. Wagdy Abd El Hamid Galal
Professor of Cardiology

Dr. Mona Abu El Soud
Assistant Prof. of Cardiology
Faculty of Medicine
Ain Shams University

1997



قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا
عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ .
كَذَقَ اللَّهُ النَّصِيمَ
الْبَيْتِ - ٣٢ -

Central Library - Ain Shams University

DEDICATION

I would like to dedicate this work to the Spirit of my Mother, who blessed me, and to my Father who gave me the support to continue working patiently until finishing this thesis.

ACKNOWLEDGEMENTS

First of all thanks to GOD

I am very grateful to all who contributed to the success and finishing of this work and in particular **Professor Dr. Mohamed Khairy Abd El Dayem** who kindly helped me in all stages of the study and supplied me with the notes and instructions necessary for its success.

Also I am grateful to **Professor Dr. Laila Fares** who helped me wisely and agreed that the study be done for the patients under her kind supervision in the Radiotherapy and Nuclear Medicine Department.

Furthermore, I would like to extend my thanks to **Prof. Dr. Wagdy Galal** who advised me throughout all the phases of the study, gave me bright help to finish the work.

I would also like to express my appreciation to **Dr. Mona Abu El Souad** for all her honest aids, and thorough review to my work.

Finally I like to thank **Dr. Magdy Shaaban** who performed a great effort in the nuclear medicine department, and participated in the accomplishment of the study.

CONTENTS

	Page
INTRODUCTION & AIM OF THE WORK	1
REVIEW OF LITERATURE	
Definition , Pathology, Pathophysiology of Myocardial Infarction.	3
Definition and Significance of Diastolic Performance.	13
Determinants of Left Ventricular Diastolic Performance.	19
Echocardiographic Doppler Evaluation of Left Ventricular Diastolic Function.	26
Doppler Echocardiography for assessing LV Diastolic function in Myocardial Infarction.	38
Basic Technique in Evaluation of Ventricular Function by Radionuclide Methods.	45
Mechanism of Filling Abnormalities in Acute Myocardial Infarction	63
SUBJECTS AND METHODS	79
RESULTS	87
DISCUSSION	153
LIMITATIONS OF THE STUDY	167
CONCLUSION AND IMPLICATIONS	169
SUMMARY	173
REFERENCES	177
ARABIC SUMMARY	



INTRODUCTION AND AIM OF THE WORK

