RADIONUCLIDE DOBUTAMINE STRESS TEST AS A DIAGNOSTIC WAY FOR SELECTION OF CHILDREN WITH SEVERE AORTIC REGURGITATION FOR AORTIC VALVE REPLACEMENT

Thesis

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M.D. Degree in Cardiology

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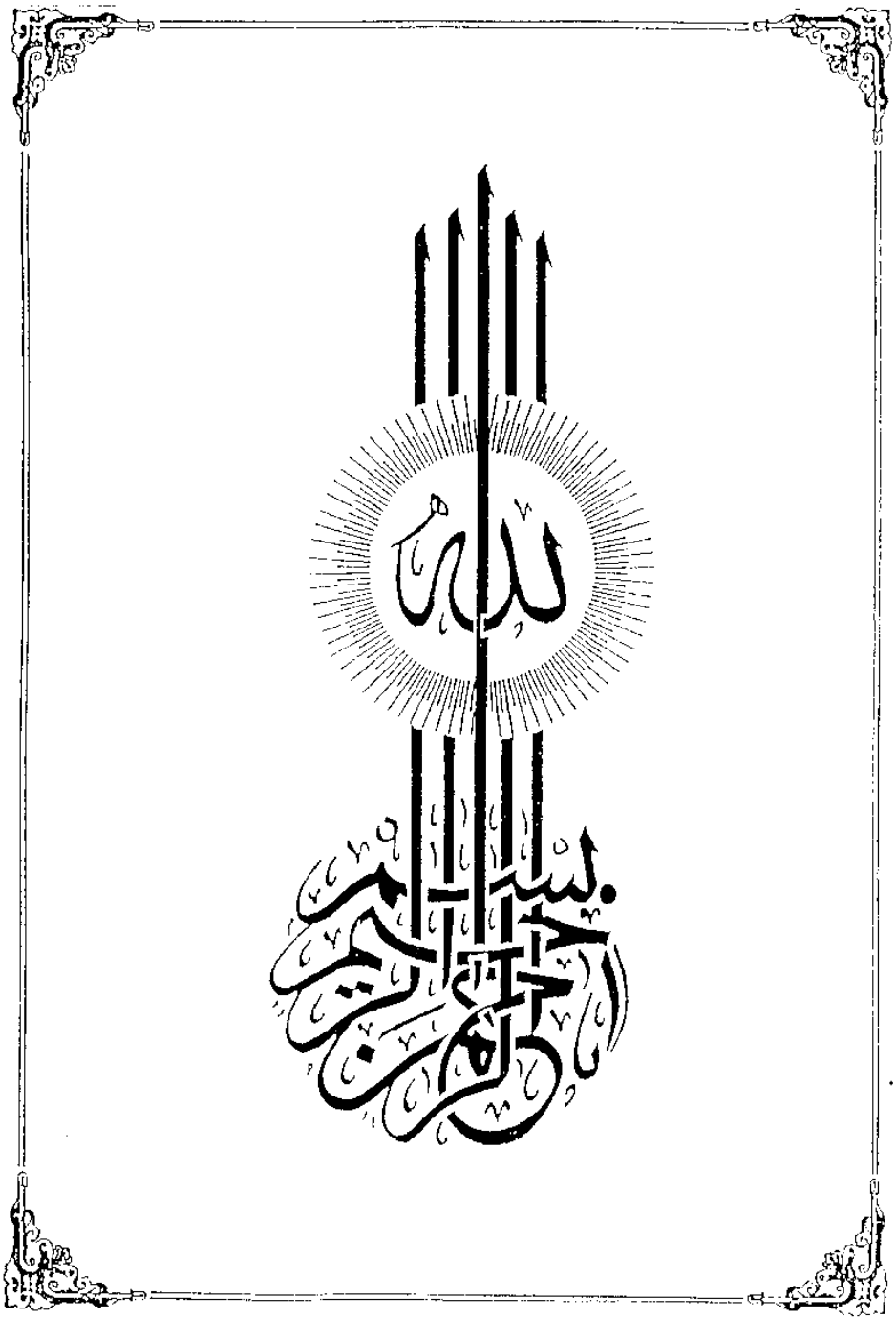
بسم الله الرحمن الرحيم .

﴿ سُبحَانكَ لاعِلمَ لَنـآ إلاّ مَاعَلّمتَـنَآ
إنَّكَ أَنتَ العَلِيمُ الحَكِيمُ . ﴾

(سوره البقره آيه ٣٢)



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Dedicated
To
The Memory Of
My Parents

And To
My Dear Husband

CONTENTS

List of Tables

List of Figures

List of Graphs

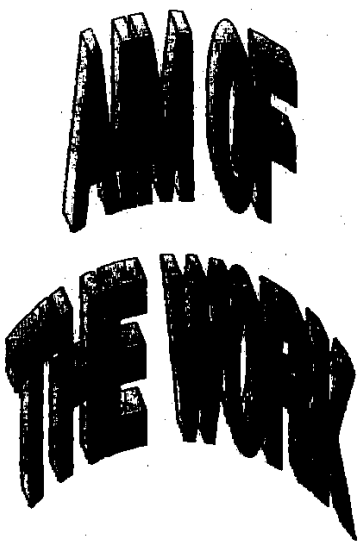
INTRODUCTION

Determination of the proper time of aortic valve replacement, in children with severe aortic regurgitation, has been for years a preplexing problem in clinical cardiology ***(Bisset et al., 1983).***

In addition to the usual problems associated with cardiac valve replacement, these patients face specific risks as restricted hemodynamics of small valves, outgrowth of prosthetic valves, the difficulty of anticoagulant control in the active child, and the potential problems resulting from child bearing age in girls.

Despite substantial volume load on the left ventricle, patients with aortic regurgitation may remain asymptomatic for prolonged period. However once symptoms of dyspnea, angina, presyncope or syncope develops the time course of events in patients not operated on is often quite rapid, and average survival time is only 3 to 5 years ***(Bonow et al., 1983).***

When severe symptoms are used as the only indication for aortic valve replacement, long term



AIM OF THE WORK

1- Evaluation of radionuclide dobutamine stress test as a way for selection of children with severe aortic regurgitation for aortic valve replacement.

2- Studying the results of surgery after 3 months by repeating the same test.

3- Studying the relation-ship between left ventricular reserve as assessed by radionuclide dobutamine stress test and systolic wall stress index as assessed by echo Doppler study.