STUDY OF ANGIOGRAPHIC ANALYSIS OF CONGESTIVE CARDIOMYOPAPHY

THESIS

Submitted in Partial Fulfilment for the
Degree of Master in Cardiology

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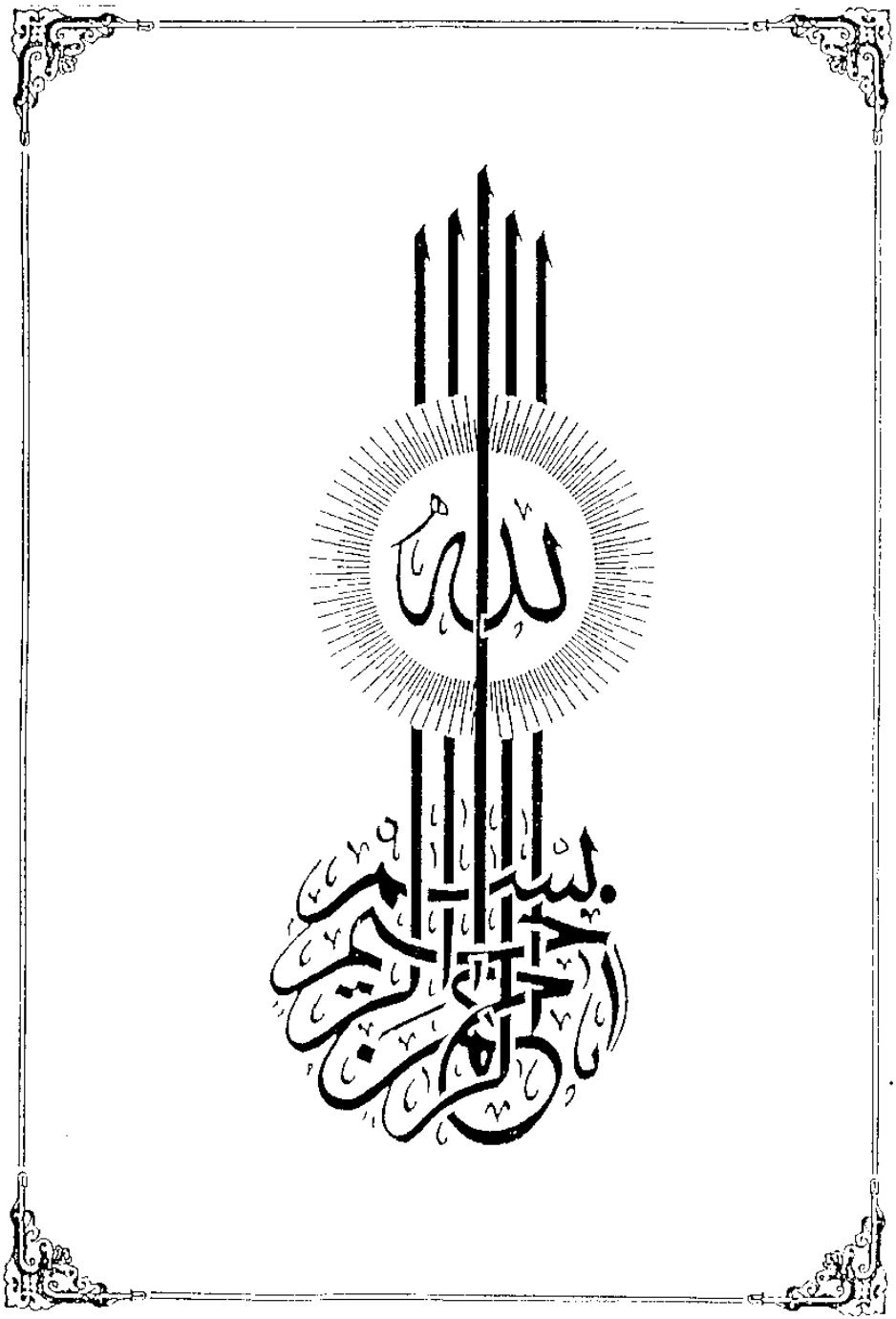
ACKNOWLEDGEMENT

I would like to express my deepest gratitude and thanks to Prof. Dr. KHAIRY ABDEL-DAYEM and Dr. AMAL AYOUB Asst.Prof. of Cardiology for their suggestion and planning of this work and for their supervision.

I would like also thank all the staff and colleogues of the cardiology department Ain Shams University for their help and co-operation.



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INTRODUCTION

I N T R O D U C T I O N

The existence of primary myocardial disease has been recognized for more than 100 years (16).

Nevertheless the underlying pathophysiology of these disorder remains obscure (1,5,7,8).

Cardiomyopathies may be classified into four main types based on disordered physiology and pathology (1,3,4,5):- congestive, hypertrophic, constrictive and obliterative.

The term congestive (dilated) cardiomyopathy describes the initial ventriculographic features of ventricular dilatation, generalized hypokinesia, and globular ventricular shape (6), some studies (6,14,16) illustrated that during the later stages of this disease heart failure, cardiomegaly and E.C.G. abnormalities almost invariably occur.

The term ischemic cardiomyopathy was coined by Burch and co-workers (44,45) to characterize the severe myocardial dysfunction that may result from occlusive coronary artery disease.

Patients with evidence of heart failure resulting from coronary artery disease should have widespread abnormalities

of left ventricular motion severe enough to reduce segnificantly the left ventricular ejection fraction (46).

Patients in whom heart failure results from localized ventricular disease such as ventricular aneurysm are not included in the definition of ischemic myopathy (46,47).

Cardiomyopathic syndrome due to coronary artery disease (ischemic myopathy) may present as progressive heart failure with complete absence of angina and with no E.C.G changes diagnostic either of coronary insufficiency or myocardial infarction (56).

The distinction between primary and ischemic cardiomyopathy sometime cannot be made on clinical basis and E.C.G. changes. In this situation angiocardiography is the only solution to reach the diagnosis and distinguish primary from ischemic myopathy.

Left ventriculography and selective coronary arteriography are essential to establish the diagnosis of ischemic myopath, and primary C.O.C.M. (56).

The purpose of our study is to review the ventriculographic data in primary C.O.C.M. and to compare the findings with those of ischemic cardiomyopathy.

AIM OF WORK

THE AIM OF THE WORK

The present study was designed to compare the angiographic changes of the primary C.O.C.M. with those of cardiomyopathy due to coronary artery disease (ischemic cardiomyopathy).

In this study we compared 20 patients of primary C.O.C.M. with 12 patients of ischemic cardiomyopathy.

The purpose of this study was to arrive at the spectrum of left ventriculographic changes characteristic of primary C.O.C.M. and ischemic myopathy, and to attempt to find characteristic angiographic picture of each that will allow definitive diagnosis base on angiography alone.

LITERATURE REVIEW

Primary (Idiopathic)

Congestive Cardiomyopathy

Definition and Classification of cardiomyopathy:

Cardiomyopathy is disease of the heart muscle of unknown causes (1,2,5), on basis of ventricular function and pathologic findings. Goodwin (1,3) has classified the primary cardiomyopathies into four main types.

1. Congestive type:

Presenting with left ventricular and congestive heart failure. There is massive ventricular dilatation with poor contraction.

2. Hypertrophic Type:

The main feature is the massive ventricular hypertrophy which involvesprincipally the septum, and may extend to all parts of the left ventricle and sometimes also the right ventricle.

There are 2 main features:

a. Hypertrophic with obstruction:

There is massive asymmetrical hypertrophy of the outflow tract of the ventricle.

b. Hypertrophy without obstruction:

The disease mainly involves the left ventricle inflow without outflow abnormality.

c. apical.

3. Contrictive Type:

Resembling constrictive pericarditis with diastolic filling difficulty due to myocardial rigidity infiltration and often endocardial involvement.

4. Obliterative Type:

Disorders of the cavities of the ventricles it is associated with atrioventricular valve regurgitation, as in endomyocardial fibrosis and leofflers eosinophilic fibroelastic endocarditis.

The term congestive cardiomyopathy is derived from the common late clinical manifestation of congestive cardiac failure (6). However, dilatation is an earlier and predominant feature, and for this reason the term dilated cardiomyopathy is preferred (6).