RADIOLOGICAL AND IMAGING STUDY OF PERICARDIAL EFFUSION

A THESIS

Submitted For Partial Fulfilment Of The

Master Degree In Radiodiagnosis

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RAMEZ ABDO MOHAMED

[M.B.,B.Ch.]

Supervisor

DR. JANNETTE BOUSHRA HANNA

Assist.Prof.of Radiodiagnosis

FACULTY OF MEDICINE

AIN SHAMS UNIVERSITY

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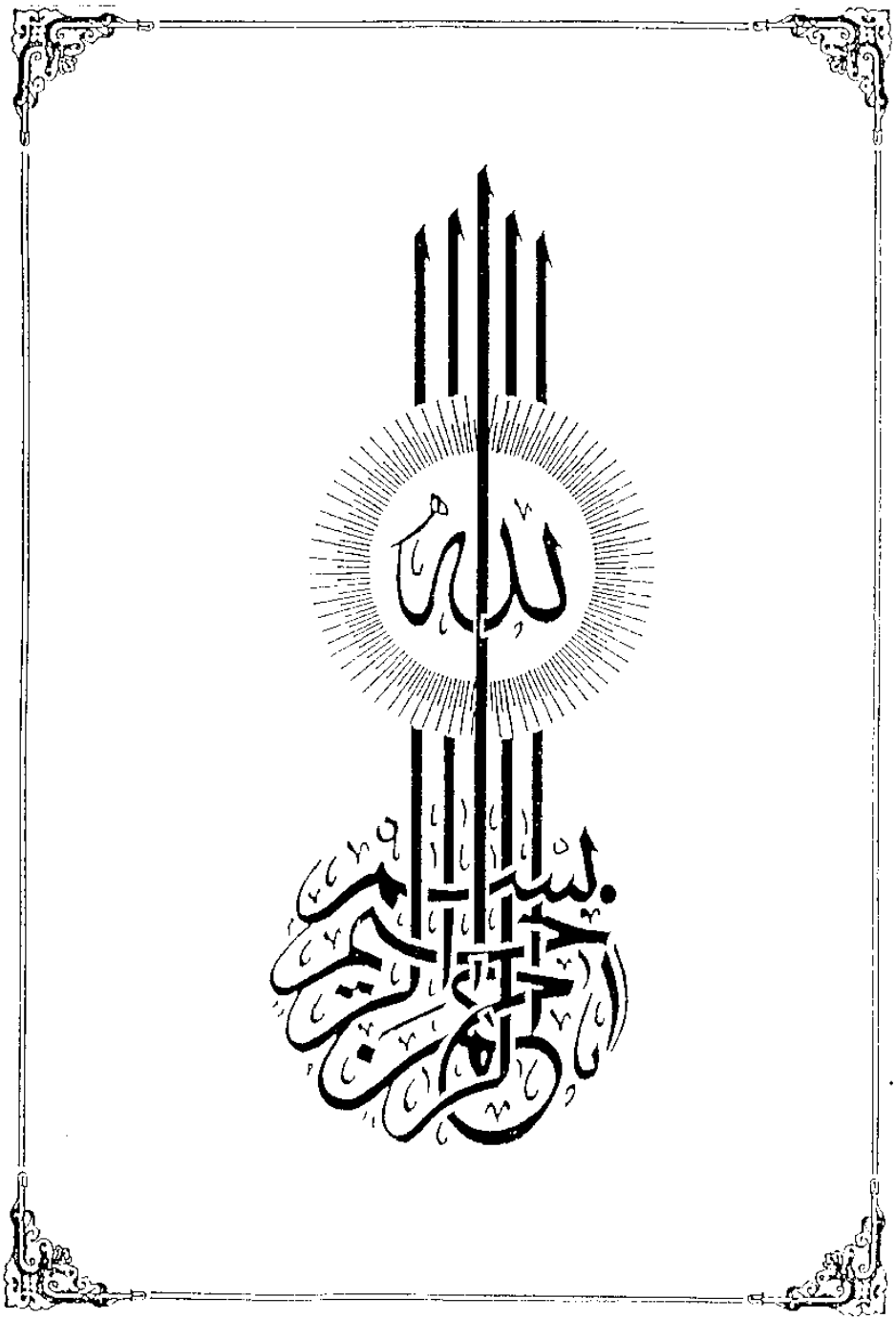
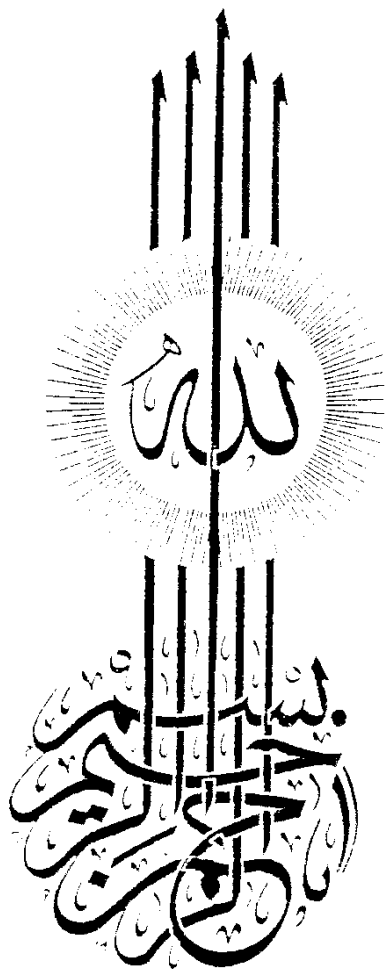
1986





ACKNOWLEDGEMENT

It is with much gratitude and sincerity that I acknowledge the great help and guidance of my Prof.Dr. JANNETTE BOUSHRA HANNA,Assistant Professor of Radiodiagnosis, Ain Shams University, who used to give so much of her golden time and her unlimited knowledge and experience throughout the preparation of this work.

My sincere appreciation and thanks for all my professors and teaching staff at Radiology Department, Ain Shams University, Specially Dr. Hoda Eldeeb, Dr. Salwa Taha, Dr, Hala Hafez, and Dr.Wahid Tantawy, for their favourable assistance and kindness .

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C O N T E N T S

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INTRODUCTION

Pericardial effusion is the increase of the amount of pericardial fluid [normal 40-50 ml]. Plain films are frequently the first indication for the presence of pericardial effusion , especially in silent cases. The maximum amount of fluid detected radiologically is somewhere between 300-500 ml. Echocardiography has the ability to detect the minimal amount of fluid.

The speed of accumulation determines the physiologic importance of the effusion. If it is accumulated slowly , it may produce no symptoms. However sudden accumulation of relatively small effusions may produce signs of cardiac tamponade. Shock and death may result if tamponade is not relieved .

The aim of this work is to verify the various radiological and imaging manifestations of pericardial effusion and the findings that favor its diagnosis and emphasize the role of radiology and imaging studies achieving a correct diagnosis of pericardial effusion.

PATHOLOGY

P A T H O L O G Y

TYPES AND CAUSES OF PERICARDIAL EFFUSION :

1. EXUDATIVE EFFUSION [Seropericardium]

The fluid is clear, straw coloured, rich in protein and of specific gravity of 1020 and contain inflammatory cells , it follow inflammation of the pericardium in cases of :

a) Tuberculous pericarditis :

The commonest cause for pericardial effusion. It is secondary to tuberculous infection elswhere: Blood borne or as result of extension from pulmonary tuberculosis or ruptured tuberculous mediastinal lymph node. Occasionally the effusion may be hemorrhagic. The lesion ends by fibrosis and often followed by calcification in late stages leading usually to constrictive pericarditis.

b) Rheumatic pericarditis :

Fibrinous pericarditis is the most common form but the exudate may be serofibrenous. However effusion is seldom large and , consequently, tamponade is rare. Healing is usually complete, but focal areas of adhesions or a diffuse adhessive pericarditis may persist, neither of which produce any cardiac disability