IMAGING OF BENIGN BREAST MASSES

Essay

Submitted for partial fulfillment of
Master Degree in Radiodiagnosis

By

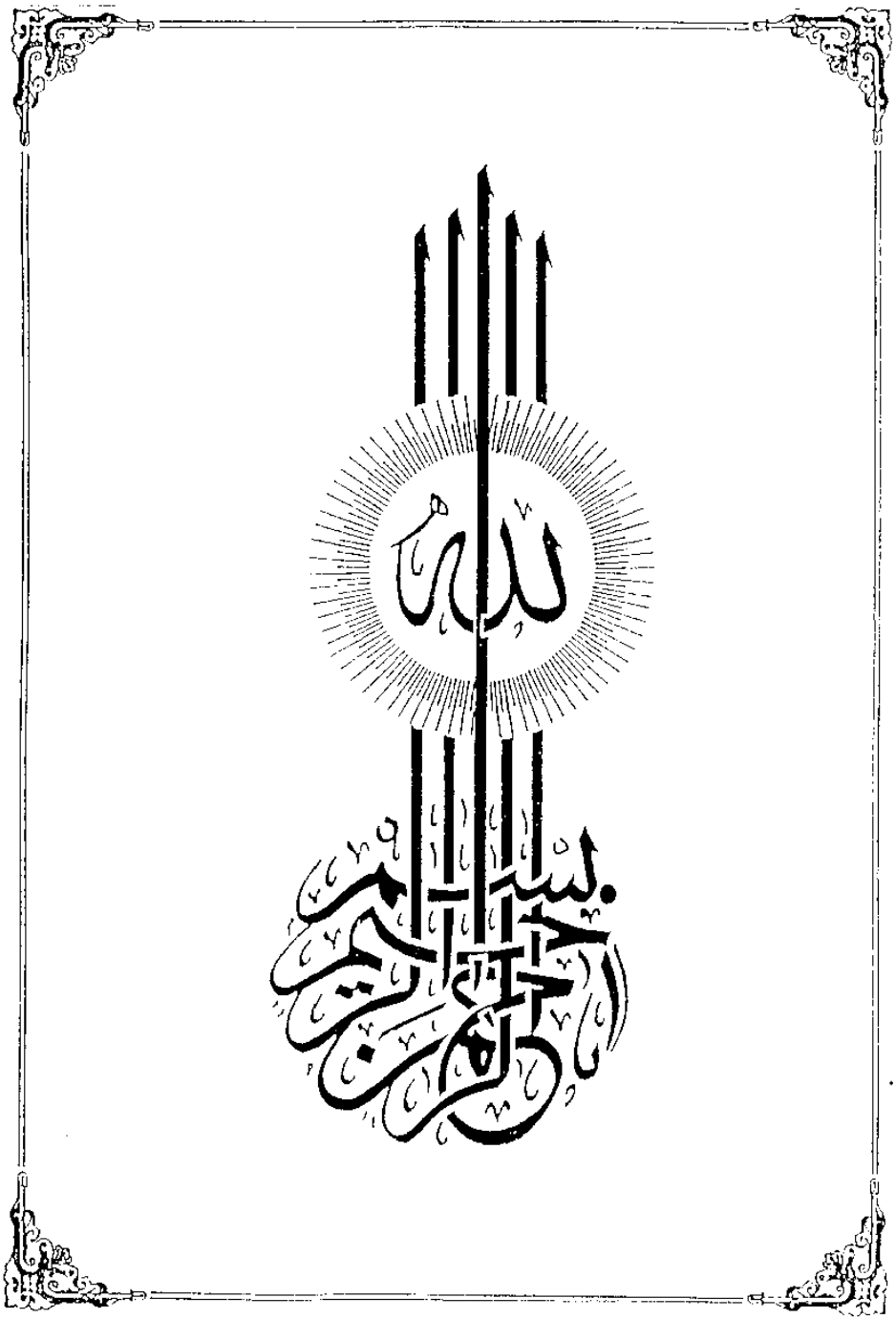
Sherine George Tadros Moftah
(M.B., B.Ch.)

Supervised By

Prof.Dr. Heba Mohamed Khalil El-Deeb
Professor of Radiodiagnosis
Faculty of Medicine, Ain Shams University

Dr. Ola Gamal Nouh
Lecturer of Radiodiagnosis
Faculty of Medicine, Ain Shams University

Faculty of Medicine
Ain Shams University
1996



In Thankfullness to

* MY FAMILY

To whom all my work is dedicated

* MY HUSBAND

For his sincere support during the accomplishment of this work

* With all hope to my lovely son

AMIR

LIST OF ABBREVIATIONS

CSI	:	Fat suppressed chemical shift imaging
C.T	:	Computed axial tomography
FLASH	:	Fat low angle shot A gradient echo fat imaging pulse sequence
Gd-DTPA	:	Gadolinium diethylene triamine penta-acetic acid
KVp	:	Kilovoltage
L.N.	:	Lymph node
mGy	:	Milligray (radiation unit)
mHz	:	Mega hertz
mmol/kg	:	Millimole/kilogram
MRI	:	Magnetic resonance imaging
NaCl	:	Sodium Chloride
rad	:	Radiation absorbed dose
SE	:	Spin Echo
S/N ratio	:	Signal to noise ratio
T1	:	Longitudinal relaxation time
T2	:	Transverse relaxation time
2D	:	Two dimensional
3D	:	Three dimensional
US	:	ultrasound

LIST OF FIGURES

INTRODUCTION AND AIM OF THE WORK

INTRODUCTION AND AIM OF THE WORK

The nomenclature of benign breast disorders has become very confusing. The greatest source of confusion has been the consideration of symptoms and histological features separately and without correlation with the features occurring in the normal breast during the reproductive period **(Gravelle, 1992).**

Clinical signs of benign breast masses may be identical to signs of malignant breast masses, often differentiation is absolutely impossible **(Homer, 1988).**

Various breast imaging modalities are available nowadays among which we can enumerate mammography, galactography, ultrasound, duplex scanning, colour flow mapping and most recently the MRI mammography.

The aim of this work is to detect the first choice and value of the different imaging modalities in the various types of benign masses and to conclude the most valuable, easiest, feasible procedure for each benign mass.