

THE ROLE OF ULTRASONOGRAPHY IN CASES OF ECLAMPSIA

Essay

**submitted for the partial fulfillment of Master
degree in Radiodiagnosis**

By

Moharram Fouad Abd El -Aziz

M.B.;B.ch

616.07543
A. F

supervised by

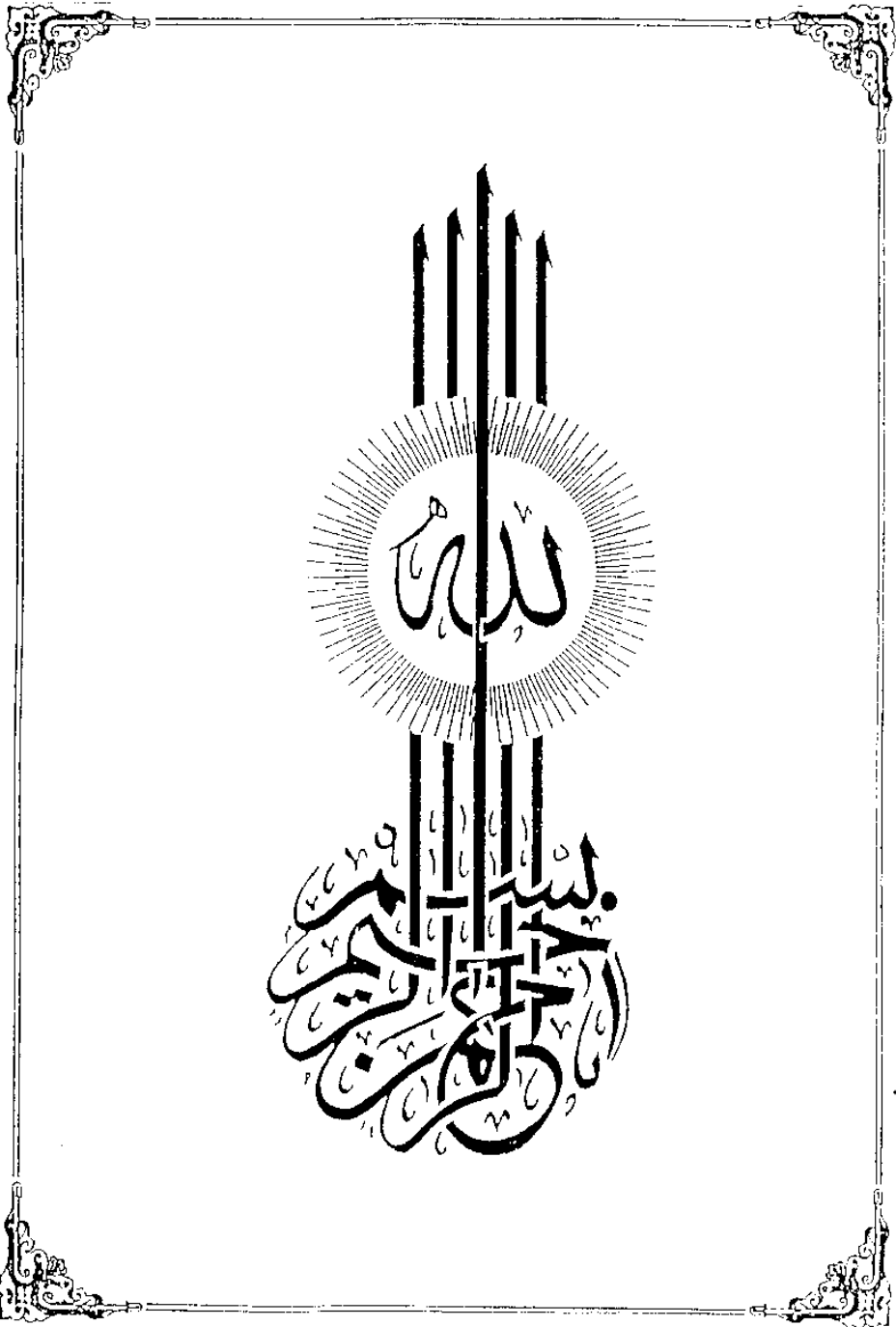
prof. Dr. Mamdouh Ghoneim

prof. of Radiodiagnosis
faculty of Medicine
Ain Shams University

Dr. Laila Hosny

Lecturer of Radiodiagnosis
Faculty of Medicine
Ain Shams University

**Faculty of Medicine
Ain Shams University
1997**



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿ قال رب اشرح لي صدري ﴾ (١)
ويسر لي أُمري (٢) واخلل عقدة
من لسانى (٣) يفقهوا قولى ﴿

صَلَّى
الْعَظِيمِ



*I Dedicate This
Work to My Family*



2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

ACKNOWLEDGEMENT



I am deeply honoured to have the opportunity to express my great indebtedness and gratitude to *Prof. Dr. Mamdouh Ghoneim*, prof of radiodiagnosis, Faculty of Medicine, Ain Shams University for his valuable supervision, professional guidance, constructive criticism and encouragement throughout the preparation and fulfillment of this work.

Also, I would like to express my appreciation to all my professors, senior staff and colleagues of radiology Department.

I greatly acknowledge all those who helped me and shared in achieving this work.

Before and above all, I wish to express my thanks to
"GOD"



1

11

2

41

22

33

47

57

69

119

111

11

CONTENTS



1	Introduction and aim of work.....	1
2	Anatomy of the placenta.....	2
3	Technique and normal sonographic findings.....	9
4	pathology and clinical aspects.....	14
5	placental changes.....	29
6	placental grading	32
7	Fetal Biophysical profile.....	47
8	Modified Biophysical profile.....	62
9	The kidney and the Eclampsia.....	65
10	Hepatic affection in Eclampsia.....	70
11	Uteroplacental flow velocity	73
12	Umbilical artery blood Flow.....	79
13	Illustrative cases.....	82
14	Summary & conclusion.....	91
15	List of References.....	93
16	summary (in Arabic).....	

١٠٠

١٠١

١٠٢

١٠٣

١٠٤

١٠٥

١٠٦

١٠٧

١٠٨

١٠٩

١١٠

١١١

١١٢

LIST OF FIGURES



1) Anatomy of placenta	3
2) Schematic drawing of placental section.....	7
3) Anatomy of the arcuate, radial and spiral arteries in pregnancy.	8
4) Hepatic involvement in eclampsia.....	22
5) CT scan of hepatic subcapsular Hematoma.....	23
6) Cranial CT of an eclamptic woman.....	26
7) Massive placental calcification.....	31
8) Massive placental calcification.....	31
9) Sites of Hematomas & thrombi.....	38
10) Echo- free placental infarcts	40
11) Echo- free placental infarcts	40
12) Mottled placenta.....	42
13) Heterogenous appearing clot.....	45
14) Spiral arteries in P.I.H.....	77
15) Uterine artery flow velocity waveforms in normal pregnancy.....	78
16) Uterine artery flow velocity wavefrom in P.I.H....	78
17) Doppler recording in normal & eclamptic pregnancy.....	81
18) Retroplacental hematoma.....	83
19) Retroplacental hematoma.....	84

١٢٠
١٢١
١٢٢

20) Subcapsular hematoma in the liver (U/S Finding)	86
21) U/s findings in hepatic infarction.....	88
22) CT findings in hepatic infarction.....	88
23) MR findings in hepatic infarction.....	89
24) Multiple Placental infarcts.....	90

