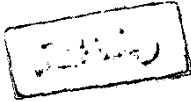


**ROLE OF RADIOLOGICAL AND DIFFERENT
IMAGING MODALITIES IN DIAGNOSIS
OF INTERVERTEBRAL
DISC LESIONS**



Essay

Submitted for Partial Fulfilment of the
Master Degree in Radiodiagnosis

BY

Azza Abd El Khalek Mahmoud

M.B., B.Ch.

616-0257
A. A

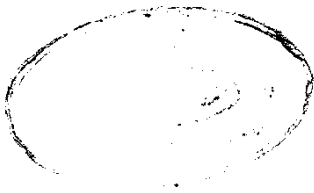
SUPERVISED BY

Prof. Dr. Ahmed Abd El Tawab Mohamed

Ass. Prof. of Radiodiagnosis

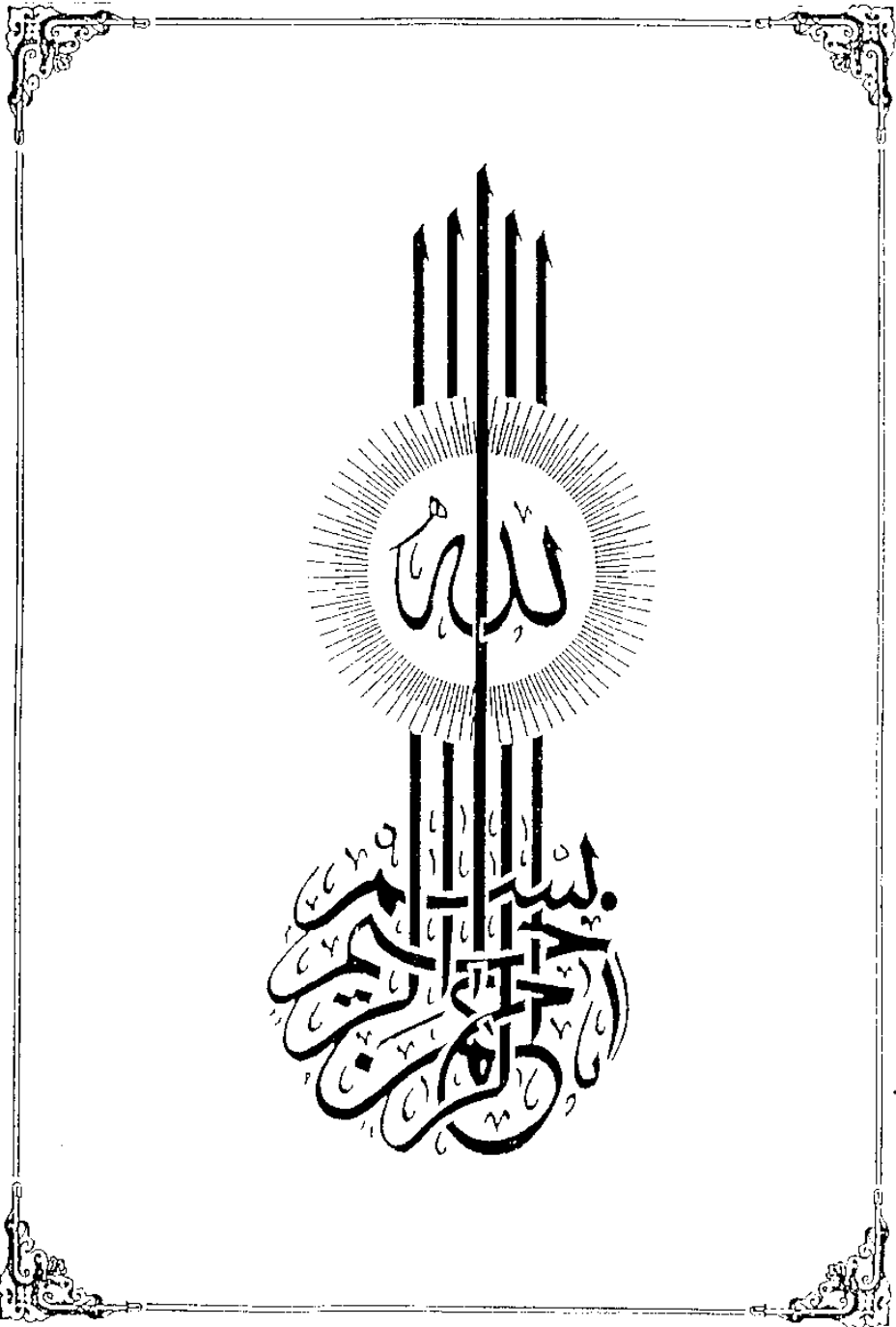
Ain Shams University

3-1998



**FACULTY OF MEDICINE
AIN SHAMS UNIVERSITY**

1994



**IN THE NAME OF GOD
MOST MERCIFUL
MOST GRACIOUS**

no words can express the warmth of my feelings
to my husband
to my daughter doha
to my mother
to my aunt

ACKNOWLEDGEMENT

I wish to express my sincere gratitude to *Prof. Dr. Ahmed Abd El Twab* Prof. of Radiodiagnosis Faculty of Medicine Ain Shams University. For his time, interest and commitment. I am also impressed with his insightful supervision and valuable comments which helped me most to complete this work in its present form.

Special thanks to all staff members and residents in the Department of Radio diagnosis, Ain Shams University.

Finally, no words can express the wormth of my feeling to my family for their understanding and patience.

CONTENTS

I- Introduction and Aim of the Work	1
II- Radiological and Imaging Anatomy of Intervertebral Disc	3
III- Different Lesions of Intervertebral Disc	29
IV- Methods of Radiological and Imaging Investigation	52
1- Plain x-ray.	
2- Myelography.	
3- C.T.	
4- M.R.I.	
V- Radiological and Imaging Manifestations of Intervertebral Disc Lesions	96
VI- Illustrated Cases	119
VII- Summary and Conclusions	132
VIII- References	134
IX- Arabic Summary	

List of Figures

Radiological & imaging Anatomy of Intervertebral disc.

1- Gross anatomy of the intervertebral disc and spinal canal.

Fig. (1)	2
Fig. (2)	4
Fig. (3)	4
Fig. (4)	6
Fig. (5)	8
Fig. (6)	8

2- CT anatomy of the intervertebral disc and spinal canal.

Fig. (7)	12
Fig. (8)	12
Fig. (9)	12
Fig. (10)	12
Fig. (11)	13
Fig. (12)	13
Fig. (13)	15
Fig. (14)	15
Fig. (15)	15
Fig. (16)	17
Fig. (17)	17
Fig. (18)	17
Fig. (19)	19
Fig. (20)	19
Fig. (21)	19
Fig. (22)	19
Fig. (23)	21
Fig. (24)	21

Fig. (24)	21
Fig. (25)	21
Fig. (26)	21
Fig. (27)	23
Fig. (28)	23
Fig. (29)	23

3- MR anatomy of the intervertebral disc and spinal canal.

Fig. (30)	26
Fig. (31)	26
Fig. (32)	27
Fig. (33)	27

Different Lesions of intervertebral disc.

Fig. (34)	35
Fig. (35)	40
Fig. (36)	42
Fig. (37)	44
Fig. (38)	47

Radiological and imaging manifestations of intervertebral disc lesions.

1- Congenital Disc Lesions.

a- Congenital vertebral fusion.

Fig. 39	69
---------------	----

b- Klippel feil syndrome.

Fig. 40	69
Fig. 41	69

