

THE ROLE OF MR IMAGING IN THE DIAGNOSIS OF SUPRATENTORIAL SPACE OCCUPYING LESIONS

T
Thesis

Submitted for Partial Fulfillment of the M.D. Degree in
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By

Maie Mohamed Ismail

M.B., B.Ch; M.Sc

Supervised By

Prof. Dr. Youssef Hamed Zaki

Professor of Radiodiagnosis

Faculty of Medicine, Ain Shams University

Major General Dr. Sarwat Seliem

Consultant and Head of Radiology Department,

Medical Corps,

Maadi Armed Forces Hospital

Faculty of Medicine

Ain Shams University

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالَ رَبِّ اشْرِكْ لِي صَدَقَةً وَيَسِّرْ لِي أَمْرِي وَاطْلُ
عَقْدَةً مِنْ لِسَانِي يَنْقُرُوا قَوْلِي

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CONTENTS

Subjects	Page
Introduction and Aim of The Work	1
Review of Literature:	3-79
• <i>Anatomy</i>	3
• <i>Pathology of the supratentorial space occupying lesions</i>	15
• <i>MR Manifestations of supratentorial lesions</i>	45
Materials and Methods	80
Results and Illustrative cases	88
Discussion	254
Summary and Conclusions	279
References	282
Arabic Summary.	

LIST OF TABLES

Tab. No.	Title	Page
I. Table in Material & Methods:		
1	Shows patients ages	80
2	Shows age, sex, diagnosis of each case of vascular lesions	81
3	Shows age, sex, diagnosis of each case of inflammatory lesions	82
4	Shows age, sex, diagnosis of each case of tumors	83
II. Table in Results:		
5	Shows radiological findings in plain skull x-ray.	88
6	Shows the number of cases in different vascular lesions	89
7	Shows CT & MRI findings in cases of intra cerebral hemorrhage	89
8	Shows the correlation between CT and MR findings in cases of OCVMs	91
9	Shows the correlation between CT and MR findings in multiple brain abscesses	92
10	Shows the correlation between CT and MR findings in cases of tuberculoma	93
11	The No. of cases of supratentorial tumors	94
12	Shows correlation between CT and MR findings in cases of glioma	95
13	Shows MR findings in cases of ependymoma	99
14	Shows the MR findings in choroid plexus papilloma	99

CONT. LIST OF TABLES

Tab. No.	Title	Page
15	Shows the correlation between CT and MR findings in the cases of dermoid	101
16	Shows correlation between CT and MR findings in cases of craniopharyngioma	103
17	Shows correlation between CT& MR Findings in the pineal body tumors	104
18	Shows characteristics of pituit macroadenoma.	106
19	Factors in Meningioma heterogeneity	107
20	Comparison of MR imaging and CT in cases of meningiomas	108
21	Shows No. of cases of metastases and the primary cancer	109

LIST OF FIGURES

Fig. No.	Title	Page
I. Figures in Review:		
(A)	Midsagittal TIWI	5
(B)	Axial TIWI Supraventricular level	7
(C)	Axial TIWI high ventricular level	7
(D)	Axial TIWI low ventricular level	9
(E)	Axial TIWI low ventricular level	9
(F)	Axial TIWI infraventricular level	11
(G)	Axial TIWI infraventricular level	11
(H)	Coronal TIWI	13
(I)	Coronal TIWI	14
(J)	Coronal TIWI	14
II. Figures in Illustrated Cases:		
1	Subacute intracerebral hematoma	112
2	Subacute intracerebral hematoma	115
3	Bilateral chronic subdural hematoma (CT)	118
4	Bilateral chronic subdural hematoma (MRI)	119
5	Aneurysm of the ICA (CT scan)	121
6	Aneurysm of the ICA (MRI)	122
7	Rt. occipital AVMs	125
8	Rt. temporal AVMs	129
9	Rt. occipital AVM	132
10	Occult vascular malformation	135
11	Occult vascular malformation (MRI).....	136
12	Occult vascular malformation	139

CONT. LIST OF FIGURES

Fig. No.	Title	Page
13	Multiple brain abscesses	142
14	Tuberculoma	145
15	Multiple Tuberculomas Vs, metastasis	148
16	Rt. parietal glioma	152
17	Rt. fronto parietal glioma	155
18	Cystic glioma	158
19	Glioma	161
20	Thalamic glioma	164
21	Corpus collosum glioma (CT)	167
22	Corpus collosum glioma (MRI)	169
23	A space occupying lesion (CT)	171
24	A space occupying lesion (MRI)	172
25	Ependymoma (proved by pathology)	175
26	Recurrent chroid plexus papilloma (CT)	178
27	Recurrent chroid plexus papilloma (MRI)	179
28	Colloid cyst of the third ventricle	181
29	Colloid cyst	184
30	Arachnoid cyst	187
31	Dermoid cyst	190
32	Dermoid (CT)	192
33	Dermoid (MRI)	193
34	Craniopharyngioma	196
35	Craniopharyngioma	199
36	Germinoma with seeding metastasis (CT)	202
37	Germinoma with seeding metastasis (MRI)	203
38	Pineal body tumor	206

CONT. LIST OF FIGURES

Fig. No.	Title	Page
39	Pineal body tumor	209
40	Pituitary macroadenoma	211
41	Pituitary macro-adenoma (CT)	215
42	Pituitary macro-adenoma (MRI)	216
43	Pituitary macro-adenoma (CT).....	219
44	Pituitary macro-adenoma (MRI)	220
45	Recurrent meningioma (CT)	223
46	Recurrent meningioma (MRI)	224
47	Meningioma	227
48	Recurrent meningioma (CT)	230
49	Recurrent meningioma (MRI)	231
50	Meningioma (CT)	234
51	Meningioma (MRI)	235
52	Metastasis with leptomeningeal spread	239
53	Metastasis	241
54	Solitary metastasis (CT)	244
55	Solitary metastasis (MRI)	245
56	Metastasis (CT)	248
57	Metastasis (MRI)	249
58	Lymphoma	252

LIST OF ABBREVIATION

&	: and
+ve	: Positive.
AVMs	: Arteriovenous malformations.
CNS	: Central nervous system.
CSF	: Cerebrospinal fluid.
CT	: Computed tomography.
GBM	: Glioblastoma multiforme.
Gd-DPTA	: Gadolinium.
Gd-MRI	: Enhanced magnetic resonance imaging.
HIV	: Human immunosuppressive virus.
ICA	: Internal carotid artery.
L.M.	: Leptomeningeal metastasis.
Lat.	: Lateral.
Lt.	: Left.
MRA	: Magnetic resonance angiography.
MRI	: Magnetic resonance imaging.
No.	: Number.
OCVMs	: Occult vascular malformations.
RBC	: Red blood corpuscle.
Rt.	: Right.
T.B	: Tuberculosis.
T1-WI	: T1 - weighted image.
T2-WI	: T2 - weighted image.

ABSTRACT:

In a study comprising 108 patients with variable supratentorial space occupying lesions were examined with CT and MRI (1.5T) with and/or without administration of contrast. The lesions extension and delineation, their relationship to adjacent structures and their signal intensity patterns were evaluated. Although CT scans show the abnormalities in most cases, MR provided considerable additional informations and more anatomic details. MR was superior in a case of isodense subdural hematoma, AVMs, in a case of OCVM, and in a case of craniopharyngioma. MR can reveal fat, hematoma and can be used to differentiate, the pathologic features of many lesions. Calcifications and hyperostosis were better detected by CT. It's advised to use CT and MRI as complementary to eachother in order to get more diagnostic data.

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INTRODUCTION AND AIM OF THE WORK

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amount of the surrounding oedema. A differential diagnosis of different supratentorial neoplasms can thus be concluded based on the recognition, exact localization and the tumor extent as well as the mass effect on the surrounding tissue.

ANATOMY
