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

Thesis

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بسم الله الرحمن الرحيم

قال رب اشرح لي صدري ويسر لي أمري واحلل
عقدة من لساني يفقهوا قولي

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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 immunosupressive 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 adminstration of contrast. The lesions extension and delineation, their relationship to adjacent structures and their signal intensity patterns were evaluated. Althougth 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 complementery to eachother in order to get more diagnostic data.

INTRODUCTION AND AIM OF THE WORK

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