

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال تعالى :

(وَقُلْ رَبِّ زِدْنِي عِلْمًا)

صدق الله العظيم

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## ***Dedication***

*To the soul of my father and*

*My mother who support me by all means.*

*To all whom I love and respect.*

## ***Acknowledge***

*Firstly thanks to Allah for giving me strength and patience to do this work.*

*It is of that I offer my deepest thanks to my supervisor Dr. HussainAhmed Hassanfor her great effort and patience.*

*Thanks also extended to all patients who donated the samples. I would like to express my special gratitude to the staff of Alamal National Hospital diagnostic center for their help in the selection of patients and collection of samples.*

## ***ABSTRACT***

30 patients (18 men and 12 women) of different ages with stroke were selected to Evaluate the role of MRI protocol in acute stroke

All patients were selected from Alamal National Hospital – diagnostic center.

The study showed that the stroke patient's participated in this study, patient's with old ages more affected than younger patient's

The preliminary investigations showed most of patients were presented with other diseases such as hypertension and diabetes mellitus .

The preliminary investigations obtained from this study revealed that the patients participated in this study, men's with being more affected than women's in regards with stroke disease.

In our study data indicate that both obesity and weight gain in males and females are important risk factors for ischemic.

The preliminary investigations obtained from this study revealed that the stroke patient's participated in this study, smoker patient's are more affected than non smoker patient's

From this study we conclude that the MRI allows accurate diagnosis of the infarct lesion, detection of cerebral arterial occlusion or significant stenosis with evaluation of actual collateral flow and may also display certain reversible ischemic changes.

MRI is reliable for detection of acute ischemia, and can detect acute and chronic hemorrhage; therefore it should be the preferred test for accurate diagnosis of patients with suspected acute stroke.



## ملخص الأطروحة

أجريت هذه الدراسة علي 30 مريضا (18 من الذكور و 12 من الإناث ) في أعمار مختلفة وذلك لتقييم دور بروتوكول التصوير بالرنين المغناطيسي لمرض السكتة الدماغية الحادة بمستشفى الأمل الوطني.

أوضحت الدراسة أن الأشخاص الأكثر عرضه للسكتة الدماغية الحادة الذين كانوا في أعمار متقدمه أكثر تأثرا من المرضى الأصغر سنا.

أوضحت الدراسة أن الذكور كانوا أكثر عرضه السكتة الدماغية الحادة حيث كان ترددهم 14 في المقابل وجد أن الإناث كان ترددهم 5

من خلال الدراسة , تشير البيانات إلى أن كل من السمنة وزيادة الوزن في الذكور والإناث هي عوامل خطورة للسكتة الدماغية الحادة.

أوضحت الفحوصات الأولية للمرض أن غالبية المرضى يعانون من أمراض أخرى مصاحبه للسكتة الدماغية الحادة مثل ارتفاع ضغط الدم ,مرض السكري .

من هذه الدراسة وجد أن تركيز السكتة الدماغية الحادة كان في المنطقة حول البطينات الدماغية حيث مثلت 63.3% .

من هذه الدراسة وجد أن الأشخاص المدخنين كانوا أكثر عرضه للسكتة الدماغية الحادة من الأشخاص غير المدخنين.

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## ***LIST OF ABBRIVIATIONS***

ACA	Anterior Cerebellar Artery
AICA	Anterior Inferior Cerebellar Artery
AIS	Acute ischemic stroke
AV	Arteriovenous Malformation
BMI	Body Mass Index
C I	Confidence Interval
CSF	Cerebrospinal Fluid
CT	Computed Tomography
CVA	Cerebrovascular Accident
D M	Diabetes Mellitus
DWI	Diffusion Weighted Imaging
FLAIR	Fluid Attenuation Inversion Recovery
H T	Hypertension
ICH	Intracranial Hemorrhage
Kg	kilogram
LT	Left
MCA	Middle Cerebellar Artery
MRI	Magnetic Resonance Imaging
MS	Multiple Sclerosis
PCA	Posterior Cerebellar Artery
PICA	Posterior Inferior Cerebellar Artery
PWI	Perfusion-weighted imaging
RR	Relative Risks
RT	Right
SPSS	Statistical Package for Social Sciences
TIA	Transient Ischemic Attack
W I	Weighted Image
WT	Weight