سامية محمد مصطفى



شبكة المعلومات الحامعية

بسم الله الرحمن الرحيم



-Caro-

سامية محمد مصطفي



شبكة العلومات الحامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





سامية محمد مصطفى

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسو

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة يعيدا عن الغيار



سامية محمد مصطفي



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سامية محمد مصطفى

شبكة المعلومات الحامعية



بالرسالة صفحات لم ترد بالأصل



ROLE OF CROSS SECTIONAL IMAGING OF THE BRAIN IN PAEDIATRIC EPILEPSY

Thesis

Submitted to the Faculty of Medicine,
University of Alexandria
In partial fulfillment of the
requirements of the degree of

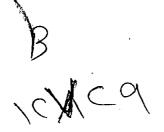
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Ву

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Who by their love and support,
make my success real

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I never forget the patients to whom we owe a lot.

KEY TO THE FIGURES' ABBREVIATIONS

AG : Angular gyrus

CC(B) : Body of corpus callosum CC(G) : Genu of corpus callosum

CC(S) : Splenium of corpus callosum

CcS : Calcarine sulcus
CoS : Collateral sulcus
CaS : Callosal sulcus
CgG : Cingulate sulcus

CgG(I) : Isthmus of cingulate gyrus

CgS : Cingulate sulcus

CgS(MB) : Marginal branch of cingulate sulcus
CgS(PaB) : Paracentral branch of cingulate sulcus

Cn : Cuneus

CS : Central sulcus FhG : Fusiform gyrus

HS : Hippocampal sulcus IFG : Inferior frontal gyrus

IFG(OpP) : Opercular part of inferior frontal gyrus
 IFG(OrP) : Orbital part of inferior frontal gyrus
 IFG(TrP) : Triangular part of inferior frontal gyrus

IPL : Inferior parietal lobule IPS : Intraparietal sulcus

ITG : Inferior temporal gyrus ITS : Inferior temporal sulcus

LgG : Lingual gyrus

LS(AAR) : Anterior ascending ramus of lateral sulcus LS(AHR) : Anterior horizontal ramus of lateral sulcus

LS(PR) : Posterior ramus of lateral sulcus

MFG : Middle frontal gyrusMTG : Middle temporal gyrusMTS : Middle temporal sulcus

PCL Paracentral lobule

PCn Precuneus

PHG Parahippocampal gyrus

PoCG Postcentral gyrus

POS Parieto-occipital sulcus

PrCG Precentral gyrus **PrCS** Precentral sulcus **SbPS**

Subparietal sulcus SFG Superior frontal gyrus

SMG Supramarginal gyrus

SPL Superior parietal lobule

STG Superior temporal gyrus STS

Superior temporal sulcus

CONTENTS

<u>Chapter</u>		Page
I	INTRODUCTION	. 1
II	AIM OF THE WORK	52
III	SUBJECTS	53
IV	METHODS	54
\boldsymbol{V}	RESULTS	55
VI	DISCUSSION	85
VII	SUMMARY	97 :
VIII	CONCLUSIONS	100
IX	REFERENCES	101
	PROTOCOL	
	ADARIC SUMMADY	

Chapter I

INTRODUCTION

INTRODUCTION

THE BRAIN ANATOMY

Developmentally the brain consists of three major parts; forebrain (prosencephalon), midbrain (mesencephalon) and hindbrain (rhombencephalon). The forebrain consists of the cerebrum and the diencephalon, while the hindbrain consists of the pons, the medulla oblongata and the cerebellum.⁽¹⁾

The Cerebrum:

It consists of two cerebral hemispheres connected by a mass of white matter called the corpus callosum. Each hemisphere extends from the frontal to the occipital bones, above the anterior and middle cranial fossa, and posteriorly, above the tentorium cerebelli. The hemispheres are separated by a deep cleft, the longitudinal fissure, into which projects the falx cerebri. The surface layer of each hemisphere is called the cortex and is composed of grey matter. The grey matter consists of nerve cells and the proximal portions of their processes embedded in neuroglia. The cerebral cortex is thrown into folds, or gyri, separated by fissures, or sulci. A number of the large sulci conveniently subdivide the surface of each hemisphere into lobes which are named for the bones of the cranium under which they lie. (2)

The interior of the cerebrum is formed of white matter tracts and deep grey matter (basal nuclei). The white matter tracts are classified into three types:

- Association (intrahemispheric) fibres: They connect cortical areas in the ipsilateral hemisphere. They are divided into short and long association fibers.
- 2. Commissural (interhemispheric) fibres: They connect cortical areas with contralateral hemisphere. Corpus callosum is the largest commissure connecting hemispheres. It is formed of four parts, from anterior to posterior, rostrum, genu, body and splenium.
- 3. Projection fibers: They connect cortical or limbic areas with corpus striatum or diencephalon.

The basal nuclei include:

- 1. Amygdaloid body: It is located in the anterior temporal lobe.
- 2. Claustrum: It is a thin sheet of grey matter lateral to the external capsule and medial to the extreme capsule.
- 3. Corpus striatum: includes the caudate nucleus and the lentiform nucleus. The latter is formed of a medial portion, globus pallidus, and lateral portion, putamen. (3)