

Role of Diffusion Tensor Imaging and Positron Emission Tomography in Assessment of Epilepsy

Essay

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Radio diagnosis*

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DEDICATION

TO MY FAMILY

WHO HAVE BEEN THERE EVERY
STEP ON THE
WAY

I OWE THEM ALL THAT I HAVE
BECOME AND
ALL THAT I EVER WILL BE.....

Contents

1. Introduction and aim of the work.....	1-4
2. Anatomy of the temporal lobe.....	5-21
A) Gross anatomy.....	5-21
B) MRI anatomy.....	22-25
3. Patho physiology and clinical picture of epilepsy.....	26-52
4. Technique of magnetic resonance imaging of epilepsy...	53-83
5. Technique of positron imaging tomography of epilepsy	84-95
6. Manifestations of epilepsy by magnetic resonance diffusion tensor imaging.....	96-112
7. Manifestations of epilepsy by positron imaging tomography.....	113-148
8. Summary & Conclusion.....	148-150
9. References	151-171
10. Arabic Summary.....	

List of Abbreviation

ADC	APPARENT DIFFUSION COEFFINT
BOLD	BLOOD OXYGEN LEVEL DEPENDANT
CC	CORPUS CALLOSUM
CHO	CHOLINE
CNS	CENTRAL NERVOUS SYSTEM
CSI	CHEMICAL SHIFT IMAGING
CST	CORTICOSPINAL TRACT
3D	THREE DIRECTIONAL
DT	DECUSSATION OF SUPERIOR CEREBELLAR PEDUNCLE
DSCP	DIFFUSION TENSOR
DTI	DIFFUSION TENSOR IMAGING
DTT	DIFFUSION TENSOR TRACTOGRAPHY
DW	DIFFUSION WEIGHTED
DWI	DIFFUSION WEIGHTED IMAGING
EPI	ECHOPLANNER IMAGING
FA	FRCTIONAL ANISOTROPY
FACT	FIBER ASSIGNMENT BY CONTINUOUS TRACKING
FLAIR	FLUID ATTENUATION INVERSION RECOVERY

fMRI	Functional MRI
GBM	GLIOBLASOMAMULTIFORME
HARDI	HIGH ANGULAR RESOLUTION DIFFUSION IMAGING
ICT	INTRACRANIAL TENSION
ILF	INFERIOR LONGITUDINAL FASCICULUS
IOFF	INFERIOR OCCIPITO FRONTAL FASCICULUS
iMRI	INTRAOPERATIVE MRI
MD	MEAN DIFFUSIVITY
ml	MYOINOSITOL
MI	MEDIAL LEMINISCUS
MR	MAGNETIC RESONANCE
MRI	MAGNETIC RESONANCE IMAGING
MTC	MAGNETIZATION TRANSFER CONTRAST
PET	POSITRON EMISSION TOMOGRAPHY
FDG	FLUORODEOXYGLUCOSE
PMT s	PHOTOMULTIPLIER TUBE
BGO	BISMUTH GERMINATE
GSO	GADOLINIUM OXYORTHOSILICATE
LSO	LUTETIUM OXYORHTOSILICATE
SUV	STANDARDIZED UPTAKE VALUE
[18F] FDG	FLUORINE 18 FLUORODEOXYGLUCOSE
TLE	TEMPORAL LOBE EPILSPY

GABAA	Gamma-aminobutyric acid A
5-HT _{1A}	5-HYDROXYTRYPTAMINE
[18F]-MPPF	[18F] fluorobenzamido] ethylpiperazine
HPLC	high-performance liquid chromatography
CBZR	Central benzodiazepine receptors
ALARA	as low as reasonably achievable
TEDE	total effective dose equivalent
PM	photomultiplier (tube)
SPECT	single photon emission computed tomography
SUV	standard uptake value
PACS	Picture Archival and Communication System
GSO	gadolinium oxyorthosilicate

List of Figures

NUMBER	FIGURE NAME	PAGE
1	Boundaries of the temporal lobe	6
2	Anatomical landmarks of the cortex of the left temporal lobe	7
3	The hippocampus, dentate gyrus and fimbria	10
4	A transverse section through the body of the hippocampus and dentate gyrus	12
5	coronal section through the temporal lobe	15
6	Colour scheme	15
7	Anatomical relations of the temporal lobe	16
8	Anatomical relations of the temporal lobe	17
9	Anatomical relations of the temporal lobe	18
10	Arteries supplying the temporal lobe.	19
11	The larger superficial cerebral veins	20
12	coronal T1 MR Images through cerebral hemispheres	22
13	lobulated superior surface of hippocampal head	23
14	body of hippocampus & parahippocampal gyrus	23
15	Image at corpus callosum splenium	24
16	Image more posterior shows interhemispheric fissure	24

NUMBER	FIGURE NAME	PAGE
17	sagittal T1 MR Images from lateral to medial shows lateral aspect of sylvian fissure	25
18	sagittal T1 MR images shows central sulcus bordered by precentral & postcentral gyri.	25
19	Left hippocampal sclerosis (3.0 T MRI)	34
20	Multiple transverse DW images of same brain slice with diffusion gradients applied in different directions demonstrate anisotropic diffusion.	56
21	Production of tractography	59
22	Abstract representation	61
23	Tractography of corticospinal tract	65
24	schematic diagram of some cortico-cortical connections by association Fibers.	69
25	3D reconstruction results of association fibers in the limbic system	70
26	Cingulum, sagittal view	71
27	Trajectories of the cingulum, and fornix/stria terminalis	73
28	Illustration, Coronal directional map, Tractogram	75
29	corona radiata	76
30	Internal capsule, axial view	77

NUMBER	FIGURE NAME	PAGE
31	Geniculocalcarine tract (optic radiation), axial view	78
32	Corpus callosum axial view	79
33	Sagittal directional map of the corpus callosum	80
34	Anihalation reaction	87
35	Positron emission	89
36	a hybrid PET-CT scanner shows the PET ring detector system	91
37	photograph side view of hybrid PET-CT scanner shows the PET (P) and CT (C) components	93
38	Hippocampal lesion in temporal lobe epilepsy	99
39	High sensitivity of diffusion images in cryptogenic epilepsy	100
40	Potential patterns of WM fiber tract alteration by cerebral neoplasms	104
41	Cortical dysplasia in a 22-year-old woman with motor seizure disorder of the left hand	105
42	Tractography from periventricular nodular heterotopia	106
43	DTI pattern 1	108
44	DTI pattern 2	109

NUMBER	FIGURE NAME	PAGE
45	DTI pattern 3	110
46	DTI pattern 4	111
47	Ictal perfusion changes and interrectal fluorodeoxyglucose- PET metabolism in mesial temporal lobe epilepsy	118
48	FDG-PET of medial temporal lobe epilepsy	119
49	F-18 FDG PET findings in a 1-year-old boy with tuberous sclerosis	126
50	The patient was a 21-year-old woman with a 3-month history of a simple partial status epilepticus of the left parietal lobe	130
51	[18F]FDG (A: coronal, B: transversal) and [18F] ethylflumazenil (C: coronal, D: transversal) PET scans of a patient with right TLE	135

INTRODUCTION AND AIM OF WORK