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151 P.

Assessment of Cerebral Atherosclerosis and Novel Strategies of Management of Brain Attack

THESIS

*Submitted for Fulfillment of
M.D. Degree in Neurology*

By

Hany Mahmoud Zaki-eldine
(M.B.B.Ch, M.Sc)

Under Supervision of

HE
Prof. Dr. Mohamed Anwar El-Etribi
Professor & Head of Neurology and
Neurocritical Care Unit
Faculty of Medicine
Ain-Shams University

Prof. Dr. Abdel Zaher Ali Hassoun
Chairman of Radiodiagnosis Department
Faculty of Medicine
Ain-Shams University *ON*

prof. A. Z.
Prof. Dr. Amira Ahmed Zaki Dwedar
Professor of Neurology
Faculty of Medicine
Ain-Shams University

Prof. Dr. Mohamed Ossama Abdughani
Professor of Neurology
Faculty of Medicine
Ain-Shams University

A. S.
Ass. Prof. Dr. Mohamed Aymen Mostafa Saleh
Assistant Professor of Cardiology
Faculty of Medicine
Ain-Shams University

Faculty of Medicine
Ain-Shams University
2002

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LIST OF ABBREVIATIONS

AA	Amino acid
ACA	Anterior cerebral artery
AChA	Anterior choroidal artery
ACoA	Anterior communicating artery
ADA	Apparent diffusion anisotropy
ADC	Apparent diffusion coefficient
ADCr	ADC ratio
ADP	Adenosine diphosphate
a FGF	Acidic fibroblast growth factor
AI	Asymmetric index
AICA	Anterior inferior cerebellar artery
AMPA	α -amino-3-hydroxy-5-methyl-1-4-isoxazole proprionate
a PC	Activated protein C
apo	Apoprotein
APSAC	Anisoylated-plasminogen-streptokinase-activator complex
aPTT	Activated Partial thromboplastin time
ASK	Australian Streptokinase Study
ATIII	Antithrombin III
ATLANTIS-trial	Alteplase Thrombolysis for Acute Noninterventional Therapy in Ischemic Stroke
ATP	Adenosine triphosphate
BA	Basilar artery
Bat-PA	Vampire bat salivary plasminogen activator
BBB	Blood brain barrier
b FGF	Basic fibroblast growth factor
BG	Basal ganglia
BI	Barthel index
BOLD	Blood oxygen level dependent

C	Carbon
CABG	Coronary artery bypass graft
cAMP	Cyclic adenosine monophosphate
Carotid "T"	Terminal ICA +/- MCA +/- ACA
CBF	Cerebral blood flow
CBV	Cerebral blood volume
CCA	Common carotid artery
CCR	Contralateral control region
CD	Carotid duplex
CEA	Carotid endarterectomy
CE-TCCD	Contrast-enhanced transcranial color-coded duplex
CIT	Cytidine-5-diphosphocholine
CM	Contrast material
CMR gl	Cerebral metabolic rate of glucose
CMR O ₂	Cerebral metabolic rate of oxygen
CNS	Canadian Neurological Scale
CO ₂	Carbon dioxide
CPB	Cardiopulmonary bypass
CPP	Cerebral perfusion pressure
CRAO	Central retinal artery occlusion
CSF	Cerebrospinal fluid
CT	Computerized Tomography
CTA	Computerized tomography angiography
DM	Diabetes mellitus
DIC	Disseminated intravascular coagulation
DSA	Digital subtraction angiography
DSPA α	Desmodus salivary plasminogen activator- α
DWI	Diffusion weighted image
ECA	External carotid artery
ECASS	European Cooperative Acute Stroke Study
ECG	Electrocardiogram
ECGF	Endothelial growth factor

ECM	Extracellular matrix
EDRF	Endothelial derived relaxing factor
EGF	Epidermal growth factor
ELT	Euglobulin lysis time
EMS trial	Emergency Management of Stroke trial
EPI	Echo-planar imaging
EPISTAR	Echo-planar imaging and signal targeting with altering radiofrequency
F	French
FDPs	Fibrin degradation products
18 F-FMISO	18 F-Fluoromidazole
FFP	Fresh frozen plasma
FLAIR	Fluid attenuated inversion recovery sequence
FMZ	¹¹ C-Flumazenil
FPA	Fibrinopeptide A
FPB	Fibrinopeptide B
Gd-DTPA	Gadolinium diethylenetriamine penta-acetic acid
Glu-plasminogen	Glutamic-plasminogen
gp IIb/IIIa	Glycoprotein IIb/IIIa
H	Hydrogen
HDL	High density lipoprotein
15-HETE	15-Hydroxyeicosatetraenoic acid
HI	Hemorrhagic infarction
HMCAS	Hyperdense middle cerebral artery sign
HMG-CoA	Hydroxy- β -methylglutaryl-Coenzyme-A
HMW kininogen	High molecular weight kininogen
13-HODE	13-Hydroxyoctadecadienoic acid
HRG	Histamine rich glycoprotein
HS	Highly significant
HT	Hemorrhagic transformation
IA	Intra-arterial
IABW	Inadequate acoustic bone window

ICA	Internal carotid artery
ICAM	Intercellular adhesion molecule
ICH	Intracerebral hemorrhage
IL-1	Interleukin-1
INR	International normalized ratio
IU	International unit
IV	Intravenous
Kcat	Catalytic constant
Kcat/Km	Catalytic efficiency
Kg	Kilogram
Km	Michaelis constant
LDL	Low density lipoprotein
LIF	Local intra-arterial fibrinolysis
LN	Lentiform nucleus
Lp(a)	Lipoprotein(a)
LSA	Lenticulostriate arteries
Lys-plasminogen	Lysine-plasminogen
MAST-E	Multicenter Acute Stroke trial-Europe
MAST-I	Multicenter Acute Stroke trial-Italy
MCA	Middle cerebral artery
MCP-1	Monocyte chemotactic molecule-1
MELAS	Myopathy encephalopathy lactic acidosis stroke-like picture
MICPT	Maximum ICA plaque thickness
Min	Minute
MMP	Metallo-proteinase
MPR	Multiplanar reformatting
Mr	Molecular weight
MRA	Magnetic resonance angiography
MRI	Magnetic resonance Imaging
mRS	Modified Rankin Scale
MRS	Magnetic resonance spectroscopy
MTS	Magnetization transfer

MTT	Mean transit time
N	Nitrogen
Na	Sodium
NAA	N-acetyl-aspartate
NIH	National Institute of Health
NIHSS	National Institute Health Stroke Scale
NINDS	National Institute of Neurological Disorder and Stroke
NMDA	N-methyl-D-aspartate
NMR	Nuclear magnetic resonance
NO	Nitric oxide
NS	Non-significant
OEF	Oxygen extraction fraction
P	Phosphorus
PA	Plasminogen activator
PAF	Platelet activating factor
PAI-1	Plasminogen activator inhibitor-1
PAI-2	Plasminogen activator inhibitor- 2
PAI-3	Plasminogen activator inhibitor-3
PBV	Perfused cerebral blood volume
PCA	Posterior cerebral artery
PCoA	Posterior communicating artery
PCr	Phosphocreatine
PDGF	Platelet derived growth factor
PDWI	Proton density weighted imaging
PcCAM	Pericellular adhesion molecule
PET	Positron emission tomography
PG	Plasminogen
PGD2	Prostaglandin D2
PGE2	Prostaglandin E2
PGF2	Prostaglandin F2
PGG2	Prostaglandin G2
PGH2	Prostaglandin H2