



شبكة المعلومات الجامعية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية
@ ASUNET



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

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



يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of
15-25- c and relative humidity 20-40%

بعض الوثائق الأصلية تالفة

بالرسالة صفحات لم ترد بالاصل

[B-1555]

Management of Brain Stem and Deep-Seated Brain Tumours

Thesis Submitted for the Partial Fulfillment of the Doctoral Degree in Radiation Oncology and Nuclear Medicine

By

Hany Mohamed Abd El-Aziz

M.B., B.Ch., Ms.C.

Supervised by

Prof. Dr.

Laila Fares Matta

Professor of Radiation Oncology
and Nuclear Medicine
Faculty of Medicine
Ain Shams University

Prof. Dr.

Mamdouh Mohamed Salama

Professor of Neurosurgery
Faculty of Medicine
Ain Shams University

Prof. Dr.

Sohair Helmy Mahmoud

Professor of Radiation Oncology
and Nuclear Medicine
Faculty of Medicine
Ain Shams University

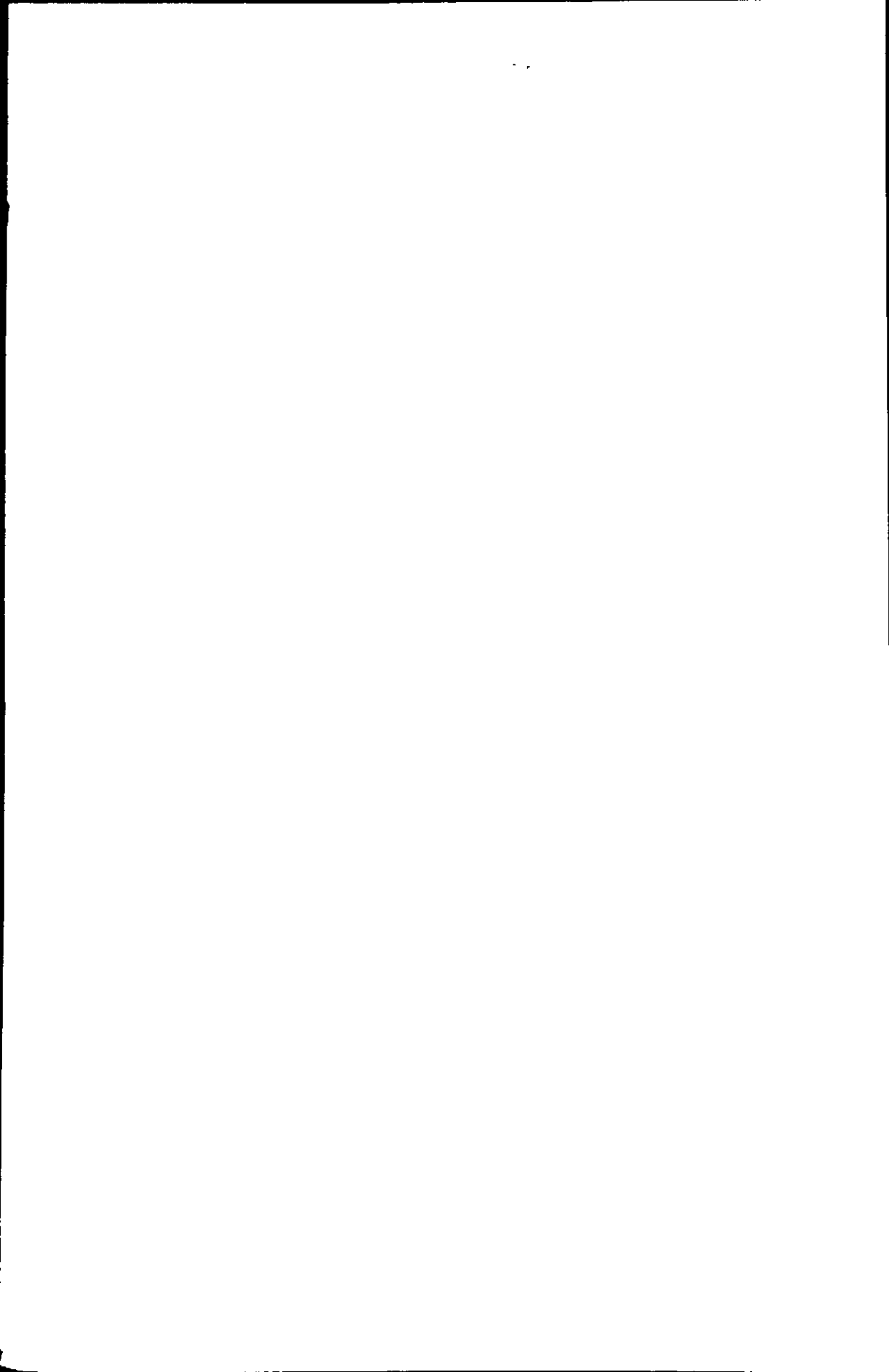
Dr.

Manal Moawad Abd El-Wahab

Lecturer of Radiation Oncology
and Nuclear Medicine
Faculty of Medicine
Ain Shams University

Faculty of Medicine
Ain Shams University
2001

Laila Fares



بسم الله الرحمن الرحيم

قالوا سبحانك لا علم لنا إلا ما علمتنا،

إنك أنت العليم الحكيم

صدق الله العظيم

سورة البقرة - الآية: ٣٢

Acknowledgment

I would like to express my respect and gratitude to Prof. Dr. Laila Fares Matta, Professor of Radiation Oncology and Nuclear Medicine, Faculty of Medicine, Ain Shams University, for her continuous support and meticulous supervision, without her great help and advices, this work could not be completed, whatever had been said will be little to express my gratitude for her.

Also I present my thanks and appreciations to Prof. Dr. Mamdouh Mohamed Salama, Professor of Neurosurgery, Faculty of Medicine, Ain Shams University, for his fruitful advices, continuous encouragement and worthy remarks.

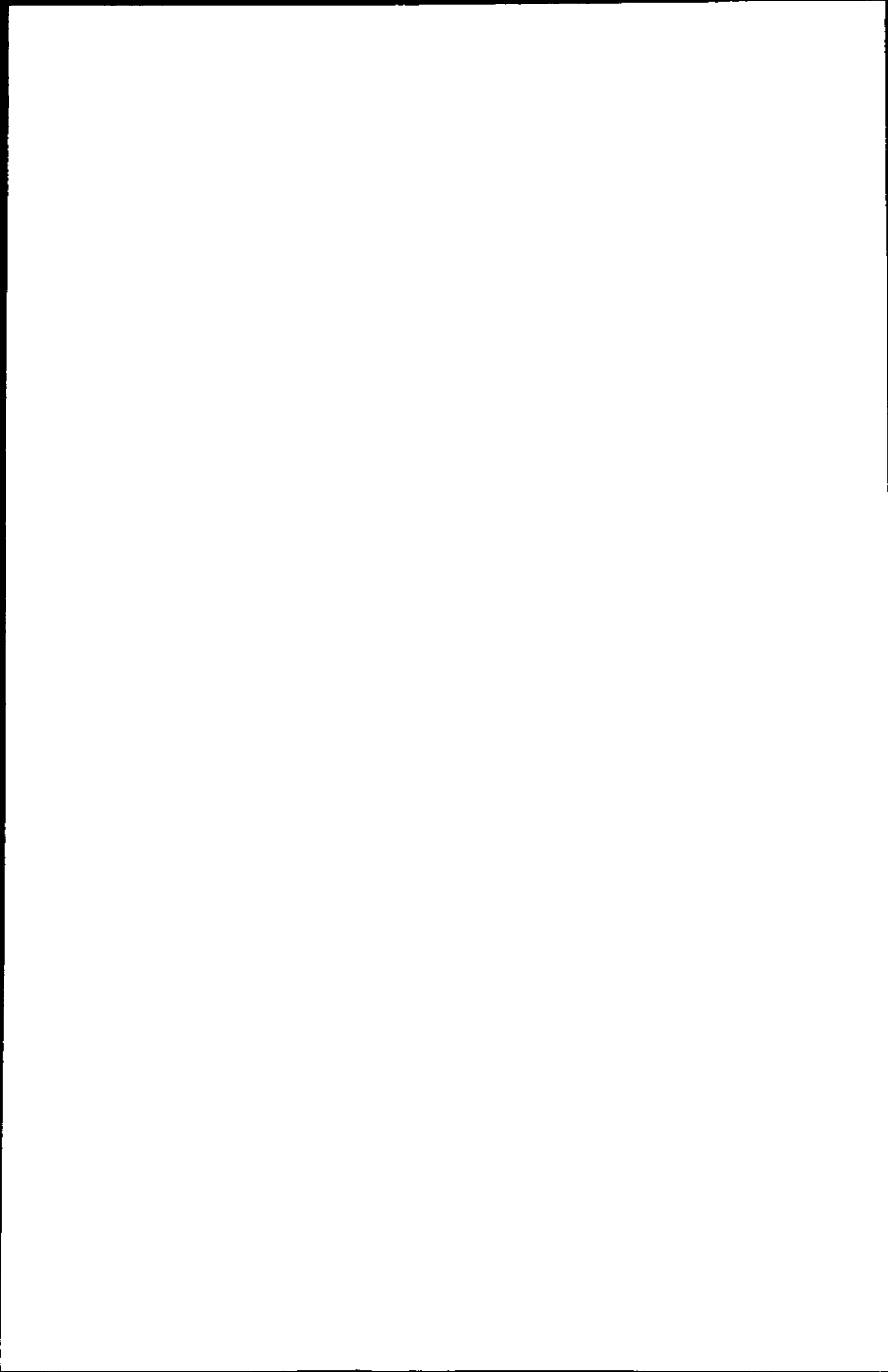
I am indebted to Prof. Dr. Sohair Helmy Mahmoud, Professor of Radiation Oncology and Nuclear Medicine, Faculty of Medicine, Ain Shams University, she saved no time nor effort in revising the most fine details of this work,

Last but not least, I would like to present my sincere thanks to Dr. Manal Moawad Abd El-Wahab, Lecturer of Radiation Oncology and Nuclear Medicine, Faculty of Medicine, Ain Shams University, for her help and encouragement during this work,

Hany Abd El-Aziz

List of Contents

	Page
Introduction	1
Aim of the work	4
Review of Literature	5
• <i>Anatomy</i>	5
• <i>Pathology</i>	23
• <i>Epidemiology</i>	54
• <i>Biology</i>	63
• <i>Clinical picture</i>	91
• <i>Diagnosis</i>	105
• <i>Surgery</i>	126
• <i>Radiation therapy</i>	142
• <i>Chemotherapy</i>	161
• <i>Prognosis</i>	181
Material and Methods	188
Results	197
Discussion	225
Conclusion and Recommendations	236
Summary	238
References	
Arabic Summary	



List of Abbreviations

AFP:	α -fetoprotein
AJCC:	American Joint Committee on Cancer
ALL:	Acute lymphoblastic leukemia
β-HCG:	β -human chorionic gonadotropins.
BBB:	Blood Brain Barrier
BCNU:	Bischlorethyl Nitrosurea
BrdU:	Bromodeoxy Uridine
C.N.S.:	Central Nervous System
C.T.:	Computerized Tomography
CCG:	Children's Cancer Group
cdK4:	Cyclin-dependant kinase 4
CR:	Complete response
CSF:	Cerebrospinal fluid
EBV:	Epstein-Barr virus
EGFR:	Epidermal growth factors receptor
FGF:	Fibroblast growth factor
GBM:	Glioblastoma multiforme
GFs:	Growth factors
Go:	Gap-o
Gy:	Gray
HMPAO:	Hexamethyl propylamine oxime
I.C.P.:	Intracranial pressure
IL:	Interleukin
KPS:	Karnofsky performance status
LoH:	Loss of heterozygosity
M.R.I.:	Magnetic Resonant Imaging
MDR:	Multidrug resistance
MHC:	Major histocompatibility
MTP:	Median time to prognosis
Mv:	Million volt

NF:	Neurofibromatosis
PA:	Protease
PAI:	Plasminogen activation inhibitor
PDGF:	Platelet-derived growth factor
PET:	Positron Emission Tomography
PGF:	Peptide growth factor
PNET:	Primitive neuro-ectodermal tumours
POG:	Pediatric Oncology Group
PR:	Partial response
Q.L.:	Quality of life
Rb:	Retinoblastoma
SEER:	Surveillance, epidemiology, and end results registry
Sesta-mibi:	6- methoxy-2-isobutyl-isonitrate
SPECT:	Single Photon Emission Tomography
Tc-99m:	Technetium-99m
TGF:	Transforming growth factor
TIL:	Tumour-infiltrating lymphocytes
Tl-201:	Thallium-201
TNF:	Tumour necrosis factor
TSG:	Tumour suppressor gene
VEGF:	Vascular endothelial growth factor
WHO:	World Health Organization