ENZYMATIC ABNORMALITIES OF PATIENTS WITH AQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)

ESSAY

Submitted for partial fulfilment of M. Sc. Degree

IN

CLINICAL PATHOLOGY

Presented by,

MIRIAM KAMAL RAGHEB
M.B.B.Ch,

supervised by,

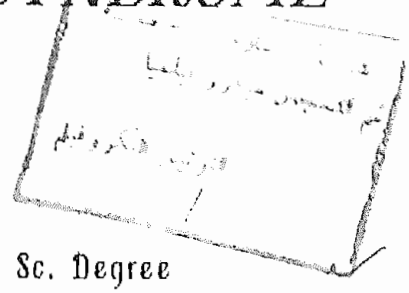
Dr. Hani Sobhi Rufail
Assistant Professor of Clinical Pathology
Faculty of Medicine
Ain-Shams University

Dr. Hanzada I. Abd El Fatah
Assistant Professor of Clinical Pathology
Faculty of Medicine
Ain-Shams University

Clinical Pathology Department
Faculty of Medicine
Ain-Shams University

1990

ENZYMATIC ABNORMALITIES OF PATIENTS WITH AQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)

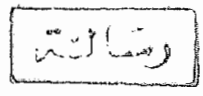


ESSAY

Submitted for partial fulfilment of M. Sc. Degree

IN

CLINICAL PATHOLOGY



Presented by,

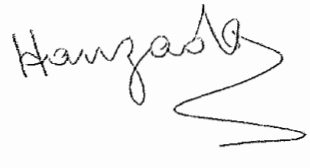
MIRIAM KAMAL RAGHEB

M.B.B.Ch,

supervised by,

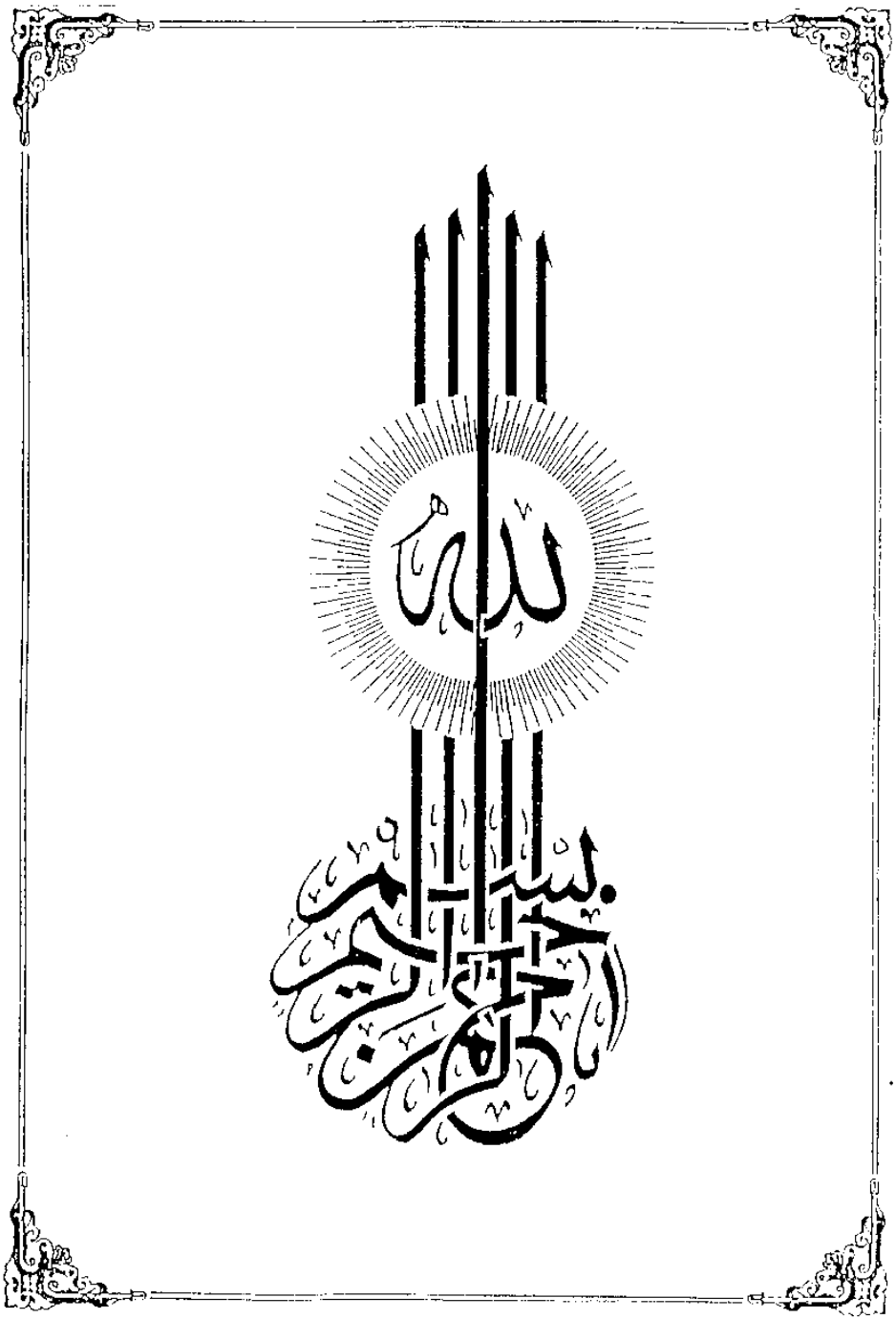
Dr. Hani Sobhi Rufail
Assistant Professor of Clinical Pathology
Faculty of Medicine
Ain-Shams University

Dr. Hanzada I. Abd El Fatah
Assistant Professor of Clinical Pathology
Faculty of Medicine
Ain-Shams University



Clinical Pathology Department
Faculty of Medicine
Ain-Shams University

1990



INDEX

ACKNOWLEGMENT

ACKNOWLEDGMENT

I wish to express my sincere gratitude to Dr. Hani Sobhi Rufail, Assistant Professor of Clinical Pathology, Ain Shams University, for his great encouragement, kind help, guidance and supervision throughout the course of this work.

I would also like to express my deepest gratitude to Dr. Hanzada Ibrahim Abd El Fatah, Assistant Professor of Clinical Pathology, Ain Shams University. I am glade to work under her supervision. Her kind care and precise instructions were of great value.

LIST OF

ABBREVIATIONS

LIST OF ABBREVIATIONS

Acquired immune deficiency syndrome	AIDS
Adenosine Kinase	AK
Adenosine Deaminase	ADA
AIDS Related complex	ARC
Alanine Aminotransferase	ALT
Alveolar - arterial Oxygen Tension	$P(A\text{-}a)O_2$
Aspartate Aminotransferase	AST
Azido Thymidine	AZT
B_2 - Microglobulin	B_2M
Broncho Alveolar Lavage	BAL
Centers for Disease Control	CDC
Cytomegalo Virus	CMV
Ecto-5' Nucleotidase	5'NT
Epstein Barr Virus	EBV
Glucose Phosphate Isomerase	GPI
Glucuronidated Zidovudine	G-ZDV
Glutamate Pyruvate Transaminase	GPT

Glutamate Oxalacetate Transaminase	GOT
Hepatitis B Virus	HBV
Human T-cell Lymphotropic virus	HTLV
Human Immunodeficiency Virus	HIV
Interferon	IFN
Kaposi's Sarcoma	KS
Lactate Dehydrogenase	LD
Lymphadenopathy Associated Virus	LAV
2'-5' Oligo Adenylate Synthetase	2'-5' A Sythetase
Peroxidase Enzyme	PX
Phosphohexose Isomerase	PHI
Pneumocystis Carinii Pneumonia	PCP
Purine Nucleoside Phosphorylase	PNP
T- Helper	TH
T- Suppressor	TS
Terminal Deoxynucleotidyl Transferase	TDT
Tetra-hydrobiopterin	BH4
Thymidine Kinase	TK
Zidovudine	ZDV

INTRODUCTION

AND

AIM OF THE WORK

INTRODUCTION AND AIM OF THE WORK

Acquired immune deficiency syndrome (AIDS) is a newly described disease entity primarily affecting sexually active homosexual men, intravenous drug abusers, Haitians and hemophiliacs. The disease is clearly spread by sexual contact and blood borne transmission. The mortality may well approach 100%, making this one of the most extraordinary transmissible diseases in history *(Fauci et al., 1984)*.

Diagnosis of suspected cases of AIDS is problematic, however, since it is based on a less well-defined set of non specific signs and symptoms. To recognize these patients especially asymptomatic, or subclinical AIDS and persons in the high-risk groups who need intensive follow up, a laboratory marker specific for the disease is needed *(Zolla - Pazner et al., 1984)*.

The concentrations of B_2 - microglobulin, neopterin, and adenosine deaminase activity in serum have been suggested as prognostic

biochemical markers for the development of AIDS *(Huang et al., 1988)*.

Impairment of hepatic function may be a factor in the development of AIDS. Assays of the enzymic markers for hepatic function such as alanine aminotransferase, aspartate aminotransferase and lactate dehydrogenase may be adjunctive biochemical markers for progression of AIDS *(Huang et al., 1988)*.

The aim of this work is to show the changes in enzyme activities occurring during the course of AIDS, thus helping in diagnosis and follow up of the disease.

ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

* *Origin of AIDS*
* *Epidemiology*
* *Who gets AIDS ?*
* *Risk Factors*
* *Immunologic Abnormalities*
* *Aetiology*
* *Clinical Features*
* *Diagnosis*
* *Therapy*