

**VALUE OF MEASURING SERUM VISCOSITY AND LIPID PROFILE IN
STUDY OF PORTAL CIRCULATION IN CASES OF FATTY LIVER**

Thesis

Submitted for the partial fulfillment of
M.D. Degree of **Internal Medicine**

By

Hatem Abdel Latteef Mohammed

M.B., B.Ch., M.Sc., Int. Medicine. Ain Shams University.

Supervised By

Prof. Dr. Mohammed Awad Alla Sallam

F.R.C.P. (Lond.), F.R.C.P. (Glasg.), F.A.C.P. (USA)

Prof. and Head of Gastroenterology Dept.

Faculty of Medicine, Ain Shams University

Prof. Dr. Motassem Salah Amer, M.D.

Prof. of Internal Medicine

Faculty of Medicine, Ain Shams University

Prof. Dr. Mohsen Mostafa Maher, M.D.

Prof. of Internal Medicine

Faculty of Medicine, Ain Shams University

Prof. Dr. Tareef Hamza Sallam, M.D.

Prof. of Clinical Pathology

Faculty of Medicine, Ain Shams University

Co-supervisor

Dr. Laila Saleh Aboud, M.D.

Lecturer of Internal Medicine

Faculty of Medicine, Ain Shams University

Faculty of Medicine
Ain Shams University

1997





*To My Father, Mother, and Older Brothers, The
Early Teachers In My Life.*

*To My Wife, and My Son Omar, The Candles Of
My Future.*

Acknowledgment

"Thanks To God Before And After"

I would like to express my sincere thanks and highest appreciation to **Prof. Dr. Mohammed Awad Alla Sallam** Prof. of Gastroenterology, and Internal Medicine, Faculty of Medicine Ain Shams University, for his generous help in supervising and revising this work.

I would also like to express my extreme thanks and gratitude to **Prof. Dr. Motassem Salah Amer**, Prof. of Internal Medicine Faculty of Medicine, Ain Shams University, for his great support and careful supervision.

Also, I would like to express my extreme thanks and gratitude to **Prof. Dr. Mohsen Mostafa Maher**, Prof. of Internal Medicine Faculty of Medicine, Ain Shams University, for his great help, valuable time and experience he has given to me.

I also extend my thanks and appreciation to **Prof. Dr. Tareef Hamza Sallam**, Prof. of Clinical Pathology Faculty of Medicine, Ain Shams University, for his great help, support and careful supervision during the practical part of the work.

Last and not least, I wish to acknowledge the greatest help offered to me by **Dr. Laila Saleh Aboud**, Lecturer of Internal Medicine Faculty of Medicine, Ain Shams University, for her generous support in supervising and revising this work.

Katam Abd El-Latif

1997

Central Library - Ain Shams University

List Of Tables

Table No.		Page
1	Causes of portal hypertension	17
2	Classification of fatty liver according to microscopic pattern of lipids	40
3	Lab. investigation and Doppler examiantion of group I (the insulin dependent diabetic patient)	84
4	Lab. investigation and Doppler examiantion of group II (the non insulin dependent diabetic patient)	86
5	Lab. investigation and Doppler examiantion of group III (the obese patients)	88
6	Lab. investigation and Doppler examiantion of group IV (the alcoholic patient)	90
7	Lab. investigation and Doppler examiantion of the control group	92
8	Statistical evaluation of ALT in different groups of the study	94
9	Statistical evaluation of AST in different groups of the study	95
10	Statistical evaluation of bilirubin in different groups of the study	96
11	Statistical evaluation of albumin in different groups of the study	97

Cont. List Of Tables

Table No.		Page
12	Statistical evaluation of cholest. in different groups of the study	98
13	Statistical evaluation of LDL in different groups of the study	99
14	Statistical evaluation of HDL in different groups of the study	100
15	Statistical evaluation of total lipid in different groups of the study	101
16	Statistical evaluation of pl. viscosity in different groups of the study	102
17	Statistical evaluation of portal vein flow in different groups of the study ..	103
18	Statistical comparison between group I and the control group as regard all studied variables	104
19	Statistical comparison between the control group and group II as regard all studied variables	105
20	Statistical comparison between control group and group III as regard all studied variables	106
21	Statistical comparison between control group and group IV as regard all studied variable	107

Cont. List Of Tables

Table No.		Page
22	Statistical comparison between group I and group II as regard all studied variables	108
23	Statistical comparison between group I and group III as regard all studied variables	109
24	Statistical comparison between group I group IV as regard all studied variables	110
25	Statistical comparison between group II and group III as regard all studied variables	111
26	Statistical comparison between group II and group IV as regard all studied variables	112
27	Statistical comparison between group III and group IV as regard all studied variables	113

List Of Abbreviation

A.F.L.P	Acute fatty liver of pregnancy
A.I.D.S.	Acquired immunodeficiency syndrome
A.T.P	Adenosine triphosphate
Alb.	Albumin
ALT	Alanine aminotransferase
Apo B	Apoprotein B
AST	Aspartate aminotransferase
Bil.	Bilirubin
cA.M.P	Cyclic adenosine monophosphate
Chol.	Cholesterol
ELISA	Enzyme linked immunosorbent assay
H.D.L.	High density lipoprotien
I.V.C.	Inferior vena cava
IDDM	Insulin dependent diabetes mellitus
L.D.L	Low density lipoprotien
NIDDM	Non insulin dependent diabetes mellitus
P.V-A	Portal vein area
P.V-D	Portal vein diameter
P.V-F	Portal vein flow
P.V-V	Portal vein velocity
P.V.	Portal vein
PHT	Portal hypertension
Pl.visc.	Plasma viscosity
S.V.	Splenic vein
T.G.	Triglycerides
T.Lip	Total lipids
V.H.D.L	Very high density lipoprotien
V.L.D.L	Very low density lipoprotien

