



شبكة المعلومات الجامعية

شبكة المعلومات الجامعية
ASUNET





شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكرو فيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

قسم

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



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %



شبكة المعلومات الجامعية



بالرسالة صفحات

لم ترد بالأصل



شبكة المعلومات الجامعية



بعض الوثائق

الأصلية تالفة

SERUM LEVELS OF CYTOKINES IN EGYPTIAN PATIENTS WITH CHRONIC LIVER DISEASE

THESIS

Submitted in Partial Fulfillment For
The Requirement of M.Sc. Degree in
Tropical Medicine

By

Naglaa Ali Zayed

(M.B., B.Ch.)

Supervisors

Prof. Dr.
Soheir Zakaria
*Professor of Tropical Medicine,
Faculty of Medicine,
Cairo University*

Prof. Dr.
Wafaa El-Metenawi
*Professor of Hematology and
Cancer Biology,
Faculty of Medicine, Cairo Univ.*

Dr. Iman Ramzy
*Assistant Prof. of Tropical Medicine
Faculty of Medicine, Cairo University*

Faculty of Medicine,
Cairo University

1998

B
7/11

Abstract

From this study, it was concluded that serum levels of IL-1 β , IL-2, IL-6 and TNF- α were increased in patients with chronic liver disease compared to the healthy control indicating that these cytokines may be involved in the pathogenesis as well as the outcome of viral infection. The increased serum levels of the previous cytokines did not depend on the etiology of the underlying liver disease, ALT levels or on the severity of liver disease.

Interferon therapy did not affect the serum levels of IL-1 β , IL-2, IL-6 and TNF- α however, further studies on larger scale is recommended before reaching such conclusion.

- ★ Large scale studies are recommended to assess the role of IL-1 β , IL-2, IL-6 and TNF- α in the pathogenesis of chronic liver disease.
- ★ Further studies to clarify the role of other immunomodulatory cytokines (IL-4, IL-10, IL-12 and IFN- γ) in the pathogenesis of CLD including chronic HCV infection.
- ★ Further studies are required to assess Th₁ and Th₂ on quantitative and qualitative basis in chronic HCV infection.
- ★ Further studies to assess the role of cytokines in acute HBV and HCV.
- ★ More studies to assess soluble IL-2 receptor (sIL-2R) in serum which may be used as an indicator for disease activity in chronic HCV.
- ★ Study of cytokine levels in schistosomal liver fibrosis on a large scale is recommended.
- ★ More studies to assess the effect of IFN therapy on the pre and post treatment levels of IL-1 β , IL-2, IL-6 and TNF- α in an attempt to predict the patients response.
- ★ Further studies to assess the localization of cytokines in liver tissue in chronic HCV.

Key Word

Cytokines
Introduction
Classification
Interleukins
Tumour necrosis factor (TNF)

To My Family
without their help
this work could
not be completed

ACKNOWLEDGEMENT

I am greatly honoured to express my deep gratitude to Prof. Dr. Soheir Zakaria, Professor of Tropical Medicine, Faculty of Medicine, Cairo University. She gave me much of her time, experience, meticulous constructive advice and support that can not be expressed in words. Her mother hood attitude, patience encouragement were indispensable for the completion of this work.

I would like to express my thanks and gratitude to Prof. Dr. Wafaa El-Metenawi, Professor of Hematology and Cancer Biology, Faculty of Medicine, Cairo University, for her continuous guidance, help and support throughout this work.

Sincere thanks are own to Prof. Dr. Iman Ramzy, Assistant Professor of Tropical Medicine, Faculty of Medicine, Cairo University, for her great help, advice and guidance. No words of thanks could ever express my feelings towards her extreme support.

My deepest gratitude goes to Professor Abul-Dahab El-Sahly, Head of Tropical Medicine Department, Cairo University, for his continuous support and faithful guidance.

I would like to express my deepest thanks and gratitude to all my Professors and Teaching Staff of this Department with special thanks and utmost gratitude to Prof. Dr. Shoukry Hunter, whom I am very proud to have gained knowledge at his hands and whose kindness and support cannot be denied.

I would like to express my sincere thanks and gratitude to Dr. Maissa El-Raziky, Lecturer of Tropical Medicine, Faculty of Medicine, Cairo University, who helped me during all the steps of this work. Her illuminating ideas helped this work in many steps.

I would like to express my sincere thanks to Dr. Sameh Fakhry, Lecturer of Tropical Medicine, Theodore Bilharz, Research Institute whom I deeply appreciate his help and advice.

I would like to thank my colleagues in Department 2 and Liver Unit for their support that eased a lot of hard times and whom I deeply value their friendship.

Finally, I would like to thank all the patients who participated in this work.

CONTENTS

	<u>Page</u>
★ Introduction	1
★ Aim of The Work	4
★ Review of Literature	5
Part I: Cytokines	5
(A) Introduction	5
(B) Classification	7
(C) Interleukins	19
(D) Tumour necrosis factor (TNF)	36
Part II:	
(A) Hepatitis B virus and the immune system	45
(B) Hepatitis C virus and the immune system	51
(C) Histopathological features of HCV	61
(D) Schistosomiasis and the immune system	65
Part III: Cytokines and the liver	66
I. Effect on metabolism	66
II. Liver as a source and scavenger of cytokine	73
III. Pathophysiology of cytokine production	75
IV. Cytokines and liver diseases	76
Cytokines in acute viral hepatitis	80
Cytokines in chronic viral hepatitis	82
V. IL-1 β in chronic viral hepatitis	89
VI. IL-2 in chronic viral hepatitis	93
VII. IL-6 in chronic viral hepatitis	98
VIII. TNF- α in chronic viral hepatitis	103
IX. Cytokines and schistosomiasis	111

Page

★ Subjects and Methods	118
★ Results	127
★ Discussion	163
★ Summary	175
★ Conclusions	177
★ Recommendations	178
★ References	179
★ Arabic Summary	

