

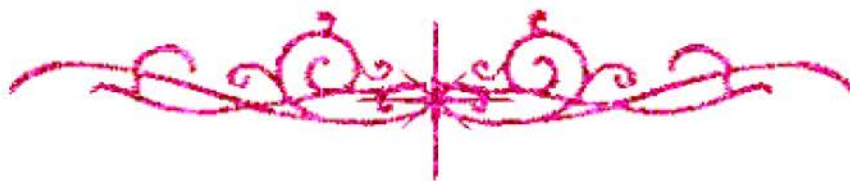
بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

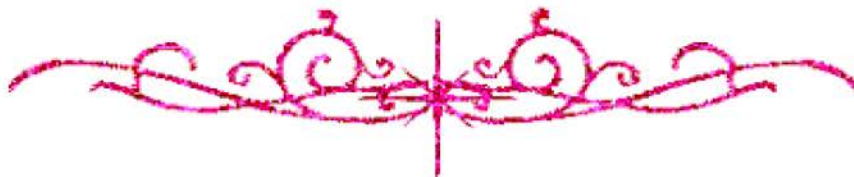
قسم

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



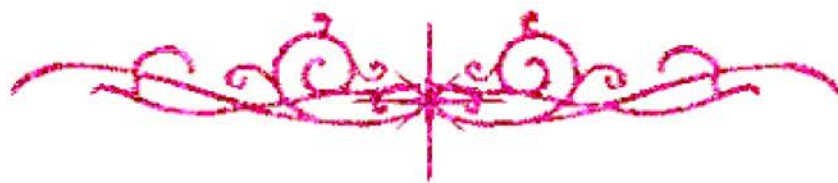
يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



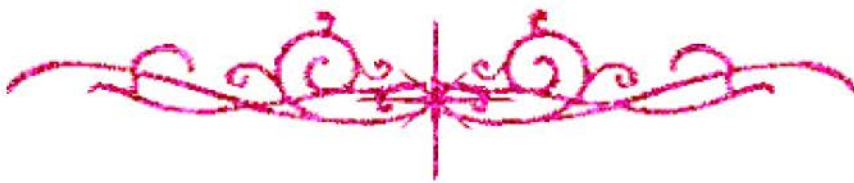


بالرسالة صفحات
لم ترد بالأصل





بعض الوثائق الأصلية تالفة



True incidence of hepatitis. C virus infection in Serpositive Blood Donors

thesis

Submitted in partial fulfillment

For M.S. degree in clinical and chemical pathology

By

Nagwa Hamed Mohamed

M.B.B.ch

Faculty of medicine
Ain Shams University



Under supervision of

Professor. Doctor.

Mona Mohamed Rafik

Professor of clinical pathology

*Faculty of medicine
Ain Shams University*

616.07561

IV. H

Assistant. Professor. Doctor

Hanaa Ahmed Amer

Assistant. Professor. Of clinical pathology

*Faculty of medicine
Ain Shams University*

H.Amer

Dr. Soha

Doctor. Nermeen Tayssir Ali

Lecturer of clinical pathology.

*Faculty of medicine
Ain Shams University*

Ali H.

Nermeen

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

"قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا

إِلَّا مَا عَلَّمْتَنَا أَنْكَ أَنْتَ

الْعَلِيمُ الْحَكِيمُ"

"صدق الله العظيم"

"سورة البقرة آية ٣٢"

To My Family

&

My Friends

ACKNOWLEDGEMENT

First, I thank "God" for granting me the power to proceed and to accomplish this work.

I would like to express my endless gratitude and appreciation to Prof. Dr. Mona Mohamed Rafik, professor of clinical pathology, Ain Shams University, for giving me the honour of working under her supervision and for providing me with a lot of encouragement and support throughout this work and always.

Likewise, I am deeply indebted to Dr. Hanaa Ahmed Amer, Assistant professor of clinical pathology, faculty of medicine, Ain Shams University for her tremendous assistance continuous guidance and enthusiastic support in every step of this work. Truly she gave me a lot of guidance, and support to accomplish this work in the appropriate way.

Thanks are due to Dr. Nerveen Tayssir Ali, Lecturer of clinical pathology, Ain Shams University for her great support, unforgettable assistance, encouragement and help.

In research, one does not only the assistance of one's superiors, but also the help of one's family. As such I must bow in respect to my parents for their tolerant support throughout this work.

CONTENTS

	<u>Page</u>
List of Abbreviations	i
List of Tables	ii
List of Figures	iii
Aim of The Work	iv
Review of Literature	1
Blood Transmitted Viral Disease	1
* Introduction	2-3
* Hepatitis B Virus	3
- Virology and Serology	4
- Epidemiology	4-5
- Mechanism of Transmission.....	5
- Clinical Presentation	6
- Transfusion Associated Hepatitis B	7
- Donor Screening and Testing to decrease post..... transfusion HBV	8-9
* Hepatitis D Virus	10
- Virology	10
- Epidemiology	10
- Clinical Features	11
- Transfusion Associated Hepatitis D	11
* Hepatitis C	12
- Virology	12-13
- Epidemiology	14-15
- Mechanism of Transmission of HCV	16-17
- Clinical presentation	18
- Donor Screening and Testing to decrease Post- transfusion HCV	19
* Hepatitis G Virus	20-21
* SEN Virus	22-23
* TT Virus	24-25

	<u>Page</u>
* Human Immunodeficiency Virus	25
- Virology and Serology	25-26
- Mechanism of Transmission of HIV	28
- Transfusion Associated AIDS	29
* Cytomegalo Virus (CMV)	30
* Epstein Barr (EBV)	34
* Human B19 Parvo Virus	35
* Human T Cell Lymphotropic Virus (HTLV-I/II)...	37
* Human Herpes Virus-6	38
* Human Herpes Virus-8	39
Approach to diagnosis of hepatitis C Virus	41
* Introduction	41
* Detection of IgG HCV Ab by ELISA	42
* Disadvantage of ELISA	43
* Detection of IgM to hepatitis C Virus Core Antigen by ELISA	44
* The Recombinant Immunoblot Assay (RIBA)	45
* Methods of HCV RNA detection	49
- Hybridization assay	49
- Detection of Circulating HCV RNA using salt	49
hybridization	
- Detection of HCV RNA by in situ hybridization	50
* Polymerase Chain Reaction (PCR)	51
* Principle of PCR	52
- RT PCR	54
- Combined RT PCR or one step method	55
* Other PCR approaches	57
- Nested-set PCR	58
- Multi-Target-PCR	59
- Capture and RT PCR of HCV RNA with safety	59
primers	
- Real time PCR	60
- A high - throughput detection system for HBV DNA and HCV RNA	61
- Branched DNA (bDNA) Assay	61
* Advantages of PCR over other diagnostic techniques.	62
* PCR Drawbacks	64
* Detection of HCV genome	66
* Typing assays	67
* Microarray technology	68