SEROPREVELANCE OF HUMAN CYTOMEGALO VIRUS IN PATIENTS WITH HEPATOCELLULAR CARCINOMA

Thesis

Submitted for partial fulfillment of Master Degree
in Internal Medicine

BY

Mohamed Abd El Salam Abd El Wahab
M.B.,B.Ch,
Faculty of Medicine – Mansura University

Supervised By

Prof. Dr. Sayed Mohamed Shalaby
Professor of Internal Medicine
Ain Shams University

Prof. Dr. Noha Abd El Razek El Nakeeb
Professor of Internal Medicine
Ain Shams University

Dr. Mohamed Lotfy Soliman
Lecturer of Internal Medicine
Ain Shams University

Faculty of Medicine
Ain Shams University
2015

List of Contents

List of Abbreviations

Abbreviation	*Term*
ADH2	Aldehyde dehydrogenase2
AFB1	Aflatoxin B1
AIH	Autoimmune hepatitis
ALDH2	Aldehyde dehydrogenase2
ALT	Alanine amino tranferase
AR	Androgen receptor
AST	Aspartate amino transferase
ATM	Ataxia telangiectasia mutated
BMI	Body Mass Index
CLD	Chronic Liver Disease
CYP17	Cytochrome P450c17 alpha
DC	Dendritic cell
EBV	Epstein Barr virus
ELISA	Enzyme-linked immuno sorbent assay
EPHx	Epoxide hydrolases
FGF	Fibroblast Growth Factor
GGT	Glutamyl transferase
GST	Glutathione-S transferases
GSTM1	Glutathione S-transferaseM1
HBsAg	Hepatitis B surface Antigen
HBV	Hepatitis B virus
HCC	Hepatocellular carcinoma
HCMV	Human Cytomegalovirus
HCV	Hepatitis C virus

Abbreviation	*Term*
HIV	Human Immune deficiency virus
hTERT	Human telomerase reverse transcriptase
HV	Hepatic veins
IE	Immediate early
IF	Immuno fluorescence
IFN	Interferon
IL	Interleukin
iNOS	Isoforom of nitric oxide synthase
LB	Liver Biopsy
MAPK	Mitogen-activated protein kinase
MHC	Major histocompitability comlex
MMPs	Matrix metalloproteinases
NAFLD	Non-alcoholic fatty liver disease
NASH	Non- alcoholic Steatohepatitis
NK	Natural killer
OC	Oral contraceptive
PDGFR	Platlet derived Growth Factor receptor
PGE2	Prostaglandin E2
PI3-K	Phosphatidyl inositol3-kinase
PT	Prothrombine Time
PV	Portal vein
PVE	Portal vein embolization
TACE	Trans arterial chemo embolization
TAMS	Tumour- associated macophages
TGF	Transforming Growth Factor

Abbreviation	*Term*
TSP-1	Thrombospodin
uPAR.....	Urokinase receptor
VC.....	Vinyl chloride
VEGF.....	Vascular endothelial growth factor
WHO.....	World Health Organization

List of Tables

List of Tables (Cont…)

List of Figures

INTRODUCTION

The Human Cytomegalo Virus (HCMV) infection was demonstrated in 52.3% of chronic HBV, and 36% of chronic HCV patients ***(Bayram A et al., 2009).***

HCV patients co-infected with HCMV infection can be regarded as high risk groups for liver disease progression where they should be monitored for the long term outcome of the disease ***(Tabll et al., 2011).***

Histologic activity scores (necroinflammation and fibrosis) of HCMV-positive patients were higher than that of HCMV-negatives in both HBV and HCV groups ***(Bayram A et al., 2009).***

The Human Cytomegalo Virus (HCMV) seroprevalence was significantly higher in patients with HCC (74%) and lower in patients without Hepatpcellular Carcinoma (HCC) ***(Quentin Lepiller et al., 2011).***

Preliminary histological studies from liver biopsies from HCC-positive patients highlighted that HCMV DNA can be

detected in tumour area of some of the patients studied ***(Quentin Lepiller et al., 2011).***

Latent CMV and/or EBV infection may deteriorate the prognosis of HCV-infected patients. All HCV patients with cirrhosis or HCC expressed a latent CMV and EBV infection. ***(Gerakari et al., 2011).***

AIM OF THE WORK

To assess the prevalence of HCMV in patients with liver cirrhosis and hepatocellular carcinoma (HCC).