



Prevalence of HCV Antibodies in Haemodialysis Patients in Al Sharkia Governorate (Sector B)

Thesis

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List of Abbreviations

ACEIs	:	Angiotensin converting enzyme inhibitors
ALT	:	Alanine Aminotransferases
ANA	:	Antinuclear antibodies
ARBs	:	Angiotensin II receptor antagonists
AST	:	Aspartate Aminotransferases
C	:	Complement
CDC	:	Center for Diseases Control and Prevention
CKD	:	Chronic kidney disease
DM	:	Diabetes mellitus
DOPPS	:	Dialysis outcomes and practice patterns study
EDHS	:	Egyptian Demographic Health Survey
EHMs	:	Extrahepatic manifestations
EIF	:	Eukaryotic initiation factor
ELISA	:	Enzyme Linked Immunosorbent Assay
ESRD	:	End stage renal disease
ETR	:	End-of treatment response
FAD	:	Food & Drug administration
GN	:	Glomerulonephritis
HBsAg	:	Hepatitis B surface antigen
HCV	:	Hepatitis C Virus
HBV	:	Hepatitis B Virus
HCC	:	Hepatocellular carcinoma
HCWs	:	Health care workers
HD	:	Hemodialysis
HGF	:	Hepatocyte growth factor

List of Abbreviations (Cont.)

HIV	:	Human Immunodeficiency Virus
HTN	:	Hypertension
IFNs	:	Interferons
Ig	:	Immunoglobulin
IgA	:	Immunoglobulina
IHD	:	Intermittent hemodialysis
IRES	:	Internal Ribosome Entry Site
ITP	:	Immune thrombocytpaenic purpura
K/DOQI	:	kidney Disease Outcomes Quality Initiative
KT	:	Kidney Transplantation
LDL	:	Low Density Lipoprotien
MC	:	Mixed Cryoglobulinemia
MGN	:	Membranous Glomerulonephritis
MHD	:	Maintenance Hemodialysis
MPGN	:	Membranoproliferative glomerulonephritis
NAT	:	Nucleic Acid Tests
NCR	:	Non Coding Region
NHANES	:	National health and nutrition examination survey
NIH	:	National Institute of Health
NKF	:	National Kidney Foundation
ORF	:	Open Reading Frame
PCR	:	Polymerase Chain Reaction

List of Abbreviations (Cont.)

PTDM	:	Post Transplant diabetes mellitus
PTLDs	:	Post Transplant Lymphoproliferative Disorders
RIBA	:	Recombinant Immunoblot Assay
RNA	:	Ribo Nucliec Acid
RRT	:	Renal Replacement Therapy
RVR	:	Rapid viral response
SOC	:	Standard Of Care
SVR	:	Sustained Viral Response
TMA	:	Transcription –mediated amplification
UTR	:	Untranslelated region
WHO	:	World health organization

Introduction

Hepatitis C is the most common cause of chronic viral liver disease in haemodialysis patients (HD) (*Hinrichsen et al., 2002*).

Hepatitis c virus was first identified 1989 when it was found to be the primary causative agent of non A non B hepatitis. Since then, appreciation of the significant worldwide health impact of HCV infection has grown (*Perez et al., 2005*), HCV is mainly transmitted by blood transfusion. The introduction of routine screening for HCV in blood donors (1990) contributed significantly to the control of HCV transmission (*Hissar et al., 2006*), the prevalence of HCV antibody is high in patients undergoing hemodialysis (*Sezer et al., 2006*).

The natural history of HCV in hemodialysis patients remains controversial because the course of HCV infection typically extends over decades, whereas hemodialysis patients have higher morbidity and mortality rates than those without renal disease, limiting long term follow up (*Fabrizi et al., 2002*).

The prevalence of HCV infection among HD patients varies from country to country and from one center to another,

the reported prevalence of HCV infection among dialysis patients in developed countries ranges from 3.6 to 20% (**Jadoul et al., 2004**), it is much higher in developing countries (**Jaiswal et al., 2002**).

Several risk factors are suggested to be related to HCV dissemination in HD centers, Repeated blood transfusions, shared dialysis machines, surgery, nosocomial route and multi dose drug vials are the major suggested routes for spread of HCV infection in HD unit (**Nobakht et al., 2001**), Partial immune suppression found in HD patients, resulting in a poor antibody response, may play a role in sensitizing them to acquire the infection through uncommon ways (**Bailey et al., 2001**).

Despite screening methods and use of erythropoietin for reducing blood transmission, these patients are at the risk of hepatitis C (**Laguna et al., 2005**).

Aim of the Study

This study was cross sectional retrospective analysis which aims to study the prevalence of HCV antibodies among haemodialysis patients and factors affecting HCV seroconversion in El-Sharkia Governorate sector B.

Short Note About

El Sharkia Governorate

One of the biggest regions in Egypt. It is about 4911 km. The number of population is about 8 millions which is considered as one of the highest density regins in Egypt. The capital is El-Zagazig city which is considered as the biggest city in it where it is consists of 15 different cities. The number of counties are 13 counties in it. It has also El-Zagazig university. Also, it has an excellent geographic location where it is located in the east of the delta so it is considered as the eastern gate of Egypt which protect there eastern part against any enemy coming from east. Also it is in the middle between eastern delta cities which gives her a great advantages as transportation connection between all the delta cities. Moreover, all the prophets pass through it coming to or from their land. It is famous for bringing up the Arabian horses, that main jobs is the farming. The famous person from it: is Ahmad Oraby who is considered as a famous leader in it. (www.Wikipedia.com).

EL-Sharkia map

