



Direct Acting Antivirals and Tumor Occurrence, Recurrence Amongst Hcv-Related Cirrhotic Patients, Treated Hcc And Post Liver Transplant Patients

Thesis

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

سبحانك لا علم لنا
إلا ما علمتنا إنك أنت
العليم العظيم

صدق الله العظيم

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List of Contents

Title	Page No.
List of Tables	5
List of Figures	8
List of Abbreviations	12
Introduction	i
Aim of the Work.....	17
Review of Literature	
▪ HCV, Structure, Course and Diagnosis	18
▪ Chronic HCV	32
▪ Chronic HCV and Hepatocellular Carcinoma	55
▪ Hepatitis C AND LIVER Transplantation	71
▪ Management of HCV Infection.....	98
Patients and Methods	122
Results	128
Discussion	196
Summary and Conclusion	206
References	209
Arabic Summary	—

List of Tables

Table No.	Title	Page No.
Table (1):	HCV infection following liver transplantation median term natural history studies.	79
Table (2):	Predictors of Disease Severity in Liver Transplantation.....	83
Table (3):	Hepatitis C Following Liver Transplantation: Therapeutic Approaches.....	92
Table (4):	Key definitions in the categorization of patient treatment history.....	102
Table (5):	Hepatitis C virus treatment regimens recommended in treatment-naïve patients with genotypes 1–4, with comparison between EASL and AASLD-IDSA guidelines	110
Table (6):	Socio-demographic data among 60 hepatic patients:.....	128
Table (7):	Baseline clinical data among 60 hepatic patients.....	129
Table (8):	Baseline laboratory data among 60 hepatic patients:.....	132
Table (9):	Baseline radiological & endoscopic data among 60 hepatic patients:.....	133
Table (10):	Follow up (3-month) clinical data among 60 hepatic patients.	136
Table (11):	Follow up (3-month) laboratory data among 60 hepatic patients.....	137
Table (12):	Follow up (3-month) radiological data among 60 hepatic patients.....	138
Table (13):	Follow up (6-month) clinical data among 60 hepatic patients.	139
Table (14):	Follow up (6-month) laboratory data among 60 hepatic patients.....	140
Table (15):	Follow up (6-month) radiological data among 60 hepatic patients.....	141
Table (16):	End-point (EP) data among 60 hepatic patients.	143

List of Tables Cont...

Table No.	Title	Page No.
Table (17):	Comparison between the 3 groups as regards socio-demographic data using Kruskal-Wallis and Chi square tests.	144
Table (18):	Comparison between the 3 groups as regards baseline clinical data using Kruskal-Wallis and Chi square tests.	147
Table (19):	Comparison between the 3 groups as regards baseline laboratory data using Kruskal-Wallis and Chi square tests.....	150
Table (20):	Comparison between the 3 groups as regards baseline radiological & endoscopic data using Kruskal-Wallis and Chi square tests.	155
Table (21):	Comparison between cirrhotic HCV patients as regards serial clinical assessments:	158
Table (22):	Comparison between cirrhotic HCV patients as regards serial laboratory measurements using Friedman's test:.....	159
Table (23):	Comparison between cirrhotic HCV patients as regards serial radiological assessments:	161
Table (24):	Comparison between treated HCC patients as regards serial clinical assessments.	163
Table (25):	Comparison between treated HCC patients as regards serial laboratory measurements using Friedman's test.....	165
Table (26):	Comparison between treated HCC patients as regards serial radiological assessments.....	168
Table (27):	Comparison between Post-liver transplant patients as regards serial clinical assessments.	169
Table (28):	Comparison between Post-liver transplant patients as regards serial laboratory measurements using Friedman's test.....	171

List of Tables Cont...

Table No.	Title	Page No.
Table (29):	Comparison between Post-liver transplant patients as regards serial radiological assessments.....	173
Table (30):	Comparison between the 3 groups of patients as regards serial clinical and laboratory measurements using repeated measures ANOVA test (3-Factor study).....	174
Table (31):	Comparison between the 3 groups as regards end-point (EP) data using Chi square test.	184
Table (32):	Logistic regression model for the Factors affecting HCC occurrence in all patients using Backward method.....	186
Table (33):	Mean survival time of patients with HCC recurrence (13) and patients without (47).	189
Table (34):	Roc-curve of some baseline laboratory markers to discriminate patients with HCC recurrence (13) from patients without (47).....	190
Table (35):	Comparison between the 3 groups as regards end-point (EP) data using Chi square test.	198

List of Figures

Fig. No.	Title	Page No.
Figure (1):	Hepatitis C viral genome.....	19
Figure (2):	Clinical course of acute HCV infection.....	25
Figure (3):	CDC Recommended Testing Sequence for Identifying Current HCV Infection.....	31
Figure (4):	Algorithm for the investigation of small screen-detected lesions on ultrasound.....	67
Figure (5):	Gender among 60 hepatic patients.	129
Figure (6):	Clinical data among 60 hepatic patients.	130
Figure (7):	Baseline Child-Pugh classification among 60 hepatic patients.	131
Figure (8):	Baseline U/S data among 60 hepatic patients.....	134
Figure (9):	Baseline fibro-scan data among 60 hepatic patients.	135
Figure (10):	Follow up (3-month) Child-Pugh classification among 60 hepatic patients.....	136
Figure (11):	Follow up (6-month) Child-Pugh classification among 60 hepatic patients.....	139
Figure (12):	Follow up (6-month) U/S data among 60 hepatic patients.	142
Figure (13):	Follow up (6-month) tri-phasic CT data among 60 hepatic patients.	142
Figure (14):	End-point (EP) data among 60 hepatic patients.....	143
Figure (15):	Comparison between the 3 groups as regards age.	145
Figure (16):	Comparison between the 3 groups as regards gender.	146
Figure (17):	Comparison between the 3 groups as regards baseline Child-Pugh score.....	148
Figure (18):	Comparison between the 3 groups as regards cirrhosis.....	149

List of Figures Cont...

Fig. No.	Title	Page No.
Figure (19):	Comparison between the 3 groups as regards baseline Child-Pugh class.	149
Figure (20):	Comparison between the 3 groups as regards baseline AFP and Urea.....	152
Figure (21):	Comparison between the 3 groups as regards baseline hemoglobin, TLC and albumin.....	152
Figure (22):	Comparison between the 3 groups as regards baseline platelets, AST and ALT.....	153
Figure (23):	Comparison between the 3 groups as regards baseline total, direct bilirubin, creatinine and INR.	153
Figure (24):	Comparison between the 3 groups as regards baseline HCV PCR.....	154
Figure (25):	Comparison between the 3 groups as regards Fib-4 calculator.....	156
Figure (26):	Comparison between the 3 groups as regards baseline abdominal U/S.....	157
Figure (27):	Comparison between the 3 groups as regards baseline fibro-scan.	157
Figure (28):	Comparison baseline and follow up ALT and AST measurements in cirrhotic HCV patients.....	160
Figure (29):	Comparison baseline and follow up HCV PCR measurements in cirrhotic HCV patients.....	160
Figure (30):	Comparison baseline and follow up radiological measurements in cirrhotic HCV patients.....	162
Figure (31):	Comparison baseline and follow up clinical measurements in treated HCC patients.....	164

List of Figures Cont...

Fig. No.	Title	Page No.
Figure (32):	Comparison baseline and follow up AFP, AST, ALT and urea measurements in treated HCC patients.	167
Figure (33):	Comparison baseline and follow up HCV PCR measurements in treated HCC patients.	167
Figure (34):	Comparison baseline and follow up Triphasic CT (recurrence) measurements in treated HCC patients.	168
Figure (35):	Comparison baseline and follow up Child-Pugh score measurements in post-liver transplant patients.	170
Figure (36):	Comparison baseline and follow up AST, ALT measurements in post-liver transplant patients.	172
Figure (37):	Comparison baseline and follow up HCV PCR measurements in post-liver transplant patients.	172
Figure (38):	Comparison between the 3 groups of patients regarding serial Child-Pugh score assessments.	175
Figure (39):	Comparison between the 3 groups of patients regarding serial AFP assessments.	176
Figure (40):	Comparison between the 3 groups of patients regarding serial platelets assessments.	177
Figure (41):	Comparison between the 3 groups of patients regarding serial AST assessments.	178
Figure (42):	Comparison between the 3 groups of patients regarding serial ALT assessments.	178

List of Figures Cont...

Fig. No.	Title	Page No.
Figure (43):	Comparison between the 3 groups of patients regarding serial total bilirubin assessments.....	179
Figure (44):	Comparison between the 3 groups of patients regarding serial direct bilirubin assessments.....	180
Figure (45):	Comparison between the 3 groups of patients regarding serial albumin assessments.....	180
Figure (46):	Comparison between the 3 groups of patients regarding serial creatinine assessments.....	181
Figure (47):	Comparison between the 3 groups of patients regarding serial urea assessments.....	182
Figure (48):	Comparison between the 3 groups of patients regarding serial HCV PCR assessments.....	183
Figure (49):	Comparison between the 3 groups as regards HCC end point.	185
Figure (50):	Correlation between HCC recurrence and baseline platelets.....	187
Figure (51):	Correlation between HCC recurrence and baseline Child-Pugh score and hemoglobin.....	188
Figure (52):	Correlation between HCC recurrence and baseline platelets.....	188
Figure (53):	Kaplan-Meier survival curve of the 3 groups.	189
Figure (54):	ROC curve of hemoglobin level.	193
Figure (55):	ROC curve of platelets level.....	194
Figure (56):	ROC curve of INR level.....	195

List of Abbreviations

Abb.	Full term
<i>3-F</i>	<i>3-factor study</i>
<i>ALT</i>	<i>Alanine transaminase</i>
<i>ANOVA</i>	<i>Analysis of variance</i>
<i>AST</i>	<i>Aspartate transaminase</i>
<i>B-NHL</i>	<i>B cell Non Hodgkin's lymphoma</i>
<i>BOC</i>	<i>Boceprevir</i>
<i>CDC</i>	<i>Centers for Disease Control and Prevention</i>
<i>CLD</i>	<i>Chronic liver diseases</i>
<i>CMV</i>	<i>Cytomegalovirus</i>
<i>CSPH</i>	<i>Clinically significant portal hypertension</i>
<i>CT</i>	<i>Computed tomography</i>
<i>DAA</i>	<i>Direct acting antivirals</i>
<i>DCP</i>	<i>Des-gamma carboxyprothrombin</i>
<i>EIA</i>	<i>Enzyme immune analysis</i>
<i>EMA</i>	<i>European regulatory agency</i>
<i>FBS</i>	<i>Fasting blood sugar</i>
<i>GAR</i>	<i>Global Alert and Response</i>
<i>Hb</i>	<i>Hemoglobin</i>
<i>HbA1C</i>	<i>Glycosylated hemoglobin</i>
<i>HBsAg</i>	<i>Hepatitis B surface antigen.</i>
<i>HCC</i>	<i>Hepatocellular carcinoma</i>
<i>HCV</i>	<i>Hepatitis C virus infection</i>
<i>HE</i>	<i>Hepatic encephalopathy</i>
<i>HFLs</i>	<i>Hepatic focal lesions.</i>
<i>HRQoL</i>	<i>Health-related quality of life</i>
<i>HRS</i>	<i>Hepatorenal syndrome</i>
<i>HSP-70</i>	<i>Heat shock protein 70</i>

List of Abbreviations Cont...

Abb.	Full term
<i>HVPG</i>	<i>Hepatic venous pressure gradient</i>
<i>IDUs</i>	<i>Intravenous drug use</i>
<i>IFN-α</i>	<i>Interferon-α</i>
<i>INR</i>	<i>International normalized ratio</i>
<i>IR</i>	<i>Insulin resistance</i>
<i>LDL</i>	<i>Low-density lipoproteins</i>
<i>MC</i>	<i>Mixed cryoglobulinemia</i>
<i>NAFLD</i>	<i>Non-alcoholic fatty liver disease</i>
<i>NAT</i>	<i>Nucleic acid test</i>
<i>NIs</i>	<i>Nucleoside inhibitors</i>
<i>NNIs</i>	<i>Non-nucleoside inhibitors</i>
<i>NS5B</i>	<i>Non-structural protein 5B</i>
<i>PCR</i>	<i>Polymerase chain reaction</i>
<i>PEG</i>	<i>Pegylated interferon</i>
<i>PegIFNa</i>	<i>Pegylated interferon</i>
<i>PH</i>	<i>Portal hypertension</i>
<i>PIVKA II</i>	<i>Prothrombin Induced by Vitamin K Absence II</i>
<i>PPV</i>	<i>Positive predictive value</i>
<i>RBV</i>	<i>Ribavirin</i>
<i>RF</i>	<i>Rheumatoid factor</i>
<i>RFA</i>	<i>Radiofrequency ablation</i>
<i>RIBA</i>	<i>Recombinant immunoblotting assay</i>
<i>RNA</i>	<i>Ribonucleic acid</i>
<i>SOF</i>	<i>Sofosbuvir</i>
<i>SVR</i>	<i>Sustained virological response</i>
<i>T and D. Bil</i>	<i>Total and direct bilirubin</i>
<i>TLC</i>	<i>Total leucocytic count</i>
<i>TVR</i>	<i>Telaprevir</i>

List of Abbreviations Cont...

Abb.	Full term
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<i>USPSTF</i>	<i>US Preventive Services Task Force</i>
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<i>VLDL</i>	<i>Very-low density lipoproteins</i>
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INTRODUCTION

Hepatitis C virus (HCV) infection is responsible for chronic hepatitis C, a necro-inflammatory process of the liver that progresses towards liver cirrhosis in about 20- 30% of patients (*Thein et al., 2008*).

When liver cirrhosis is established, liver cancer may occur at an average 3.5% annual rate (*Lok et al., 2009; Sangiovanni et al., 2010*).

During the past decades, treatment of chronic hepatitis C with pegylated interferon and ribavirin led to cure of HCV infection in about 50% of treated patients (*Fried et al., 2002; Von Wagner et al., 2005*).

A sustained virological response (SVR), as undetectable HCV RNA after therapy end, has been associated with a reduced risk of developing hepatocellular carcinoma (HCC) (*Veldt et al., 2007; Morgan et al., 2013; El-Serag et al., 2016*).

The recent introduction of new antiviral drugs, directly targeting HCV replication, allowed achieving SVR rates in over 90% of treated patients, irrespective of the liver fibrosis stage (*Charlton et al., 2015; Leroy et al., 2016*).

Reig et al, reported the impact of direct acting antivirals on the risk of hepatocellular carcinoma (HCC) recurrence after