

*Outcome of Management Of Hepatocellular
Carcinoma Patients In Specialized Multidisciplinary
Clinic In Kasr El-Aini Hospital*

Thesis

*Submitted for partial fulfillment of Master Degree in
Infectious Diseases and Endemic Hepatic and Gastro-enteric
Diseases*

By

Mona Ahmed Ali Naser
(M.B.B.CH., Cairo University)

Supervised by

PROF. DR. Ashraf Omar Abd El-Aziz
Professor of Endemic Medicine
Faculty of Medicine
Cairo University

DR. Yasmin Saad Ibrahim
Assistant Professor of Endemic Medicine
Faculty of Medicine
Cairo University

DR. Tamer Mahmoud El-Baz
Assistant Professor of Endemic Medicine
Faculty of Medicine
Cairo University

**Faculty of Medicine
Cairo University**

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ABSTRACT

BACKGROUND: Hepatocellular carcinoma (HCC) is the second leading cause of cancer related death worldwide as well as in Egypt. Due to the diversity of available treatment options and patients' presentations, a multidisciplinary team should decide clinical management of HCC.

AIM: This study was designed to evaluate the outcome of management of HCC patients and evaluate the impact of multidisciplinary approach on the outcome.

MATERIAL AND METHODS: This retrospective study was performed on all patients (924) with HCC who attended and sought medical advice in Kasr El-Ainy HCC clinic. Clinical, laboratory and imaging assessments were done. HCC was diagnosed and treated according to EASL and BCLC guidelines and then attended the follow up during the period from February 2009 to November 2014.

RESULTS: Almost all cases developed HCC on top of cirrhosis (99.7%) that was mainly due to HCV(86%). Most of our patients were Child-Pugh A (52.3%) or B (36.7%) and commonly presented with small single lesions. According to the BCLC guidelines, different lines of treatment were offered to the patients; curative treatment was provided to 223(24.1%) patients, palliative treatment was applied to 417(45.1%) patients, 87(9.4%) of patients had combined treatment while supportive symptomatic care was provided to the rest of the patients 197(21.3%). The overall median survival was 14.2 months which reach up to 26 months with curative treatment. Five variables were proved to be independent prognostic factors, these factors are serum bilirubin, albumin and AFP, size of the lesion and the application of specific treatment (curative and palliative).

CONCLUSION: Multidisciplinary management leads to rapid and definitive treatment decisions which leads to better prognosis and improved survival.

KEYWORDS: Hepatocellular carcinoma; Survival; Prognosis

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LIST OF ABBREVIATIONS

AASLD	American Association for the Study of Liver Diseases
AAT	Alpha1-Antitrypsin
AFP	Alpha Feto-Protein
AFU	α -l-Fucosidase
AICR	American Institute for Cancer Research
AIH	Autoimmune Hepatitis
AIP	Acute Intermittent Hepatic Porphyria
AJCC	American Joint Committee on Cancer
APASL	Asian Pacific Association for the Study of the Liver
ART	Assessment for Retreatment
BCLC	Barcelona Clinic for Liver Cancer
BMI	Body mass index
CD	Cluster Differentiation
CLIP	Cancer of Liver Italian Program
CR	Complete Response
CT	Computed Tomography
CTP	Child-Turcotte-Pugh
CUPI	Chinese University Prognostic Index
DCP	Desgamma-Carboxy Prothombin

List of Abbreviations

DCR	Disease Control Rate
DDLT	Deceased Donor Liver Transplantation
DEB	Doxorubicin-eluting beads
DLK1	Delta-Like 1
DNA	Double-Stranded Nucleic Acid
EASL	European Association for the Study of the Liver
EHS	Extra-Hepatic Spread
ESLC	Egyptian Society of Liver Cancer
FAH	Fumaryl-Acetoacetate Hydrolase
FDG	Fluoro-Deoxy-Glucose
GGT	γ -Glutamyl Transferase
GP73	Golgi Protein 73
GPC3	Glypican-3
GPI	Glycosyl-Phosphatidyl-Inositol
GRETCH	Group d'Etude et De Traitement du Carcinome Hepatocellulaire
HBsAg	HBV Surface antigen
HBV	Hepatitis B virus
HCC	Hepatocellular carcinoma
HCP	Hereditary Copro-Porphyrria
HCV	Hepatitis C virus
HCV Ab	Hepatitis C virus Antibodies

List of Abbreviations

HGF	Hepatocyte Growth Factor
HIV	Human immunodeficiency Virus
HLA	Human Leukocyte Antigen
HMBS	Hydroxy-Methyl-Bilane Synthase
HR	Hepatic Resection
HSP	Heat Shock Protein
HTA	Hepatoma-Associated gene
HVPG	Hepatic venous pressure gradient
HVWP	Hepatic Venous Wedge Pressure
IARC	International Agency for Research
IFN-α	Interferon- α
IGF	Insuline-like Growth Factor
JIS	Japan Integrated Scoring
JNCI	Journal of National Cancer Institute
JNK	c-Jun N-terminal Kinase
JSH	Japan Society of Hepatology
LCA	Lectin lens agglutinin
LDLT	Living Donor Liver Transplantation
LRT	Loco-regional Therapy
LT	Liver Transplantation
MAPK	Mitogen-Activated Protein Kinase

List of Abbreviations

MDCT	Multidetector Computed Tomography scan
MDT	Multi-Disciplinary Team
MELD	Model for End stage Liver Disease
miR	Micro Ribo-Nucleic Acid
mRECIST	modified Response Evaluation Criteria in Solid Tumors
MRI	Magnetic Resonance imaging
mRNA	Messenger Ribo-Nucleic Acid
mTOR	mammalian Target Of Rapamycin
MUC	Mucin-1
MWA	Microwave ablation
NAFLD	Non-Alcoholic Fatty Liver Disease
NASH	Non-Alcoholic Steato-Hepatitis
NCCN	National Comprehensive Cancer Network
NCI	National Cancer Institute
NK	Natural Killer
OR	Objective Response
PAI	Percutaneous Acetic acid Injection
PBC	Primary Biliary Cirrhosis
PCT	Porphyria Cutanea Tarda
PD	Progressive Disease
PDGFR	Platelet-Derived Growth Factor Receptor

List of Abbreviations

PEI	Percutaneous Ethanol Injection
PET	Positron Emission Tomography
PFS	Progression-Free Survival
PR	Partial Response
PSC	Primary Sclerosing Cholangitis
PST	Performance Status Test
PTEN	Phosphatase and Tensin
RCT	Randomised Control Trial
RE	Radio-Embolization
RECIST	Response Evaluation Criteria in Solid Tumors
RFA	Radio-Frequency Ablation
RNA	Ribo-Nucleic Acid
RT	Radiation Therapy
SCCA	Squamous Cell Carcinoma Antigen
SD	Stable Disease
SIRT	Selective Internal Radiation Therapy
SLE	Systemic Lupus Erythematosus
TACE	Trans-Arterial Chemo-Embolization
TAE	Trans-Arterial Embolization
TAG-72	Tumor-Associated Glycoprotein 72
TGF-β1	Transforming growth factor- β 1

List of Abbreviations

TIPS	Transjugular Intrahepatic Portosystemic Shunt
TNM	Tumor size-lymph Nodes-Metastasis
TTP	Time To Progression
UCSF	University of California San Francisco
UDCA	Urso-Deoxy-Cholic Acid
UROD	Uroporphyrinogen decarboxylase gene
US	Ultrasonography
VA	United States Department of Veterans Affairs
VEGF	Vascular Endothelial Growth Factor
VEGFR	Vascular Endothelial Growth Factor Receptor
Vil 1	Villin 1
VP	Variegate Porphyria
WCRF	World Cancer Research Fund International
WD	Wilson's Disease
ZAG	Zinc- α 2-Glycoprotein

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