

بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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لم ترد بالأصل



Value of Plasma Squamous Cell Carcinoma Antigen-IgM Immune Complexes (SCCA-IgM IC) as a Novel Biomarker for Monitoring Hepatocellular Carcinoma Treatment Outcome

Thesis

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In Internal Medicine*

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Abstract

Abstract

Background: Assessment of the levels of Squamous Cell Carcinoma Antigen-IgM Immune Complexes (SCCA-IgM IC) as a serum biomarker to assess the prognosis and treatment outcome of HCC after locoregional treatment

Aim of the work: Evaluation of plasma squamous cell carcinoma antigen-IgM immune complex (SCCA-IgM IC) level as a biomarker to predict response to treatment with radiofrequency ablation (RF) and/or transarterial chemoembolization (TACE) in HCC patients.

Patients and methods: This study was conducted at the Internal Medicine department, Faculty of Medicine, Ain Shams University, during the period from July 2016 to November 2018 on 60 sequentially recruited patients with HCC undergoing locoregional treatment (RF and/or TACE). Patients were divided into two groups, Group A: 40 patients underwent TACE, Group B: 20 patients Underwent RF, all patients were followed up at 3 and 6 months post treatment. Patients who were excluded, those with HCC with late stage of the BCLC (Barcelona clinic liver cancer) staging system, patients with decompensated liver disease (Child-Pugh C), Hepato-renal syndrome or renal insufficiency, patients who had history of organ transplant or previously treated HCC. **Results:** SCCA IgM IC serum level was significantly lower in patients without recurrence post TACE than patients with HCC recurrence at 3 and 6 months post treatment. SCCA IgM IC showed promising results especially when combining with AFP in diagnosis and monitoring of treatment response of HCC **Conclusion:** the use of SCCA IgM IC in combination with AFP serum level may prove to be useful in assessing prognosis of HCC locoregional treatment

Key words: Hepatocellular carcinoma, Squamous Cell Carcinoma Antigen-IgM Immune Complexes, radiofrequency ablation, transarterial chemoembolization, liver cirrhosis.



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List of Abbreviations

1L	First-Line Therapy
2L	Second-Line Therapy
A1AT	α 1-antitrypsin
AASLD	American Association for the Study of Liver Diseases
AFP	Alpha-fetoprotein
AIH	Auto-immune Hepatitis
Alb.	Albumin
ALD	Alcoholic Liver Disease
ALT	Alanine Aminotransferase
AMA	Antimitochondrial Antibody
ANA	Antinuclear Antibody
ASH	Alcoholic Steatohepatitis
ASMR	Age-Standardized Mortality Rate
AST	Aspartate Aminotransferase
BCLC	Barcelona Clinic Liver Cancer
BCP T1762/A1764	Basal core promoter T1762/A1764 and precore A1896 gene
BMI	Body Mass Index
BSC	Best Supportive Care
BUN	Blood Urea Nitrogen
CBC	Complete Blood Count
CEUS	contrast-enhanced Ultrasonography
CLD	Chronic Liver Disease
CPT	Child-Pugh-Turcotte
CSPH	clinically significant portal hypertension
CT	Computed Tomography
CT FNA	CT-guided fine-needle aspiration
CYP	Cytochrome P450
D BIL	Direct Bilirubin
DAAs	Direct-acting antiviral
DEBs	Drug-eluting beads
DNA	Deoxyribonucleic Acid

List of Abbreviations

EASD	European Association for the Study of Diabetes
EASL	European Association for The Study of The Liver
EASO	European Association for the Study of Obesity
ELISA	Enzyme-Linked Immunosorbent Assay
FNA	Fine Needle Aspiration
Fr	French
GPC3	Glypican-3 precursor
HBV	Hepatitis B Virus
HCC	Hepatocellular Carcinoma
HCV	Hepatitis C Virus
HCV Ab	Anti-HCV Antibody
HE	Hepatic Encephalopathy
HFE-HC	HFE Hemochromatosis
HFL	hepatic focal lesions
HGB	Haemoglobin
IC	Immune Complex
Ig	Immunoglobulin
INR	International Normalized Ratio
IV	Intra Venous
IVC	Inferior Vena Cava
K	Potassium
LDH	Lactate Dehydrogenase
LI-RADS	Liver Imaging Reporting and Data System
LT	liver transplantation
LYVE1	Lymphatic vessel endothelial hyaluronan receptor 1
MDCT	Multi-detector helical CT
MELD	Model for End-Stage Liver Disease
MHZ	Megahertz
MOH	Ministry of Health
MRI	Magnetic resonance imaging
mTOR	Mammalian Target of Rapamycin
MWA	Microwave Ablation
NA	Sodium

List of Abbreviations

NAFLD	Non-alcoholic Fatty Liver Disease
NASH	Non-alcoholic Steatohepatitis
NS3	Non-structural protein 3
NS5A	non-structural 5A
OLT	orthotopic liver transplantation
P53	Tumour protein p53
PBC	Primary Biliary Cholangitis
PCR	Polymerase Chain Reaction
Plt.	Platelet Count
PMN	Polymorphonuclear Neutrophil
PT	Prothrombin Time
RCTs	Randomized Controlled Trial
RF	Radiofrequency
RFA	Radiofrequency Ablation
RNA	Ribonucleic Acid
SBRT	Stereotactic Body Radiation Therapy
SCCA	squamous cell carcinoma antigen
SCCA-IgM	squamous cell carcinoma antigen-IgM
SD	Standard Deviation
SIRT	Selective internal radiation therapy
T BIL	Total Bilirubin
T2DM	Type 2 Diabetes Mellitus
TACE	Trans-arterial chemoembolization
TARE	Trans-arterial radioembolization
TLC	Total Leucocytes Count
UDCA	Ursodeoxycholic acid
US	Ultrasonography
US FNA	US-guided fine-needle aspiration
WBC	White Blood Cells

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