Role of Multiparametric MRI in Characterization of Hepatocellular Carcinoma

Thesis

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By

Anas Abd El-Azem Mohamed Mohamed

M.B.B.Ch., M.Sc Radiodiagnosis - Ain-Shams Univeristy

Under The Supervision Of

Prof. Dr. Hesham Mahmoud Ahmed Mansour

Professor of Radiodiagnosis
Faculty of Medicine - Ain Shams University

Prof. Dr. Rania Ali Maarouf

Assistant professor of Radiodiagnosis
Faculty of medicine - Ain Shams University

Dr. Gamal Niazi

Lecturer of Radiodiagnosis
Faculty of medicine-Ain Shams University

Faculty of Medicine
Ain-Shams University
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*First and foremost, thanks are due to **Allah**, the most Beneficent and Merciful.*

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Anas Abdel-Azeem

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List of Abbreviations

2D	Two dimentional.
3D	Three dimensional.
AASLD	American Association for the Study of Liver Diseases.
ADC	Apparent diffusion coefficient.
AFP	Alpha feto-protein.
AJCC	American Joint Committee on Cancer
APS	Arterio-portal shunts.
ART	Arterial.
BBEPI	Black-blood echoplanar imaging.
BCLC	Barcelona Clinic Liver Cancer
CHA	Common hepatic artery.
CT	Computed tomography.
DCE-MRI	Dynamic contrast enhanced-magnetic resonance imaging
DEL	Delayed
DNs	Dysplastic nodules.
DSC-MRI	Dynamic susceptibility contrast-magnetic resonance imaging.
DW	Diffusion weighted.
DWI	Diffusion weighted imaging.
EPI	Echo planner imaging.
FIESTA	Fast imaging employing steady state acquisition sequence.

FOV	Field of view.
FRFSE	Fast recovery fast spin echo.
FSE	Fast spin echo.
FSPGR	Fast spoiled gradient.
Gd-DTPA	Gadolinium-diethylenetriamine pentaacetic acid.
Gd-EOB-DTPA	Gadolinium ethoxybenzyl diethylenetriamine pentaacetic acid
GRE	Gradient recalled echo
HA	Hepatic artery
HCC	Hepatocellular carcinoma
HCV	Hepatitis C virus
IP	In-phase
LAVA	Liver Acquisition with Volume Acquisition.
LI-RADS	Liver Imaging-Reporting And Data System
ME	Maximum enhancement
MIP	Maximum intensity projection.
MRE	Maximum relative enhancement
MRI	Magnetic resonance imaging.
ms	millisecond
NEX	Number of excitations.
OP	Out-of-phase.
PACS	Picture archiving and communication system
PET	Positron-emission tomography
PI	Parallel imaging.
PST	Performance status test

PV	Portal vein
RE	Relative enhancement
RES	Reticuloendothelial system
RNs	Regenerative nodules.
ROI	Regions of interest
s/mm^2	Second per square millimeter.
Sat	Saturation.
SE	Spin echo.
SI	Signal intensity.
SNR	Signal to noise ratio.
SPIO	Superparamagnetic iron oxide.
SSTSE	Single shot turbo spin echo.
T	Tesla.
TE	Echo Time
THRIVE	T1-weighted high resolution isotropic volume examination.
TR	Repetition time
True-FISP	True fast imaging with steady state precession
TSE	Turbo spin echo.
TTP	Time to peak
US	Ultrasound
VIBE	Volumetric interpolated breath hold examination.

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