



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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Role of Diffusion Weighted MRI Imaging in Characterization of Hepatic Focal Lesions in Cirrhotic Patients in Comparison to Dynamic Cross Sectional Imaging

Thesis

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

لَسْبَدَّانِكَ لَا نَعْلَمُ لَنَا
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
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List of Abbreviations

Abb.	Full term
3D	Three-dimensional
AASLD	American Association for the Study of Liver Diseases
ADC	Apparent diffusion coefficient
AUC	Area under curve
BCLC	Barcelona Clinic Liver Cancer
BH.....	Breath-hold
CHA.....	Common hepatic artery
CI	Confidence interval
CT	Computed tomography
DN	Dysplastic nodule
DWI	Diffusion weighted
FNHs	Focal nodular hyperplasias
HBV	Hepatitis B virus
HCC	Hepatocellular carcinoma
HCV	Hepatitis C virus
INR	International normalized ratio
LR	Likelihood ratio
MDCT.....	Multidetector row CT
MIP	Maximum intensity projection
MRA.....	MR angiography
MRI.....	Magnetic resonance imaging
PT	Prothrombin time
RARE.....	Rapid acquisition with relaxation enhancement
RF	Radio frequency
RN.....	Regenerative nodules
ROI	Region of interest
Sens	Sensitivity

List of Abbreviations Cont...

Abb.	Full term
SGE.....	Spoiled Gradient-Echo
SNR	Signal-to-noise ratio
SPAIR.....	Spectral Attenuated Inversion Recovery
spec	Specificity
TE	Echo time
TR.....	Repetition time

INTRODUCTION

Liver cirrhosis is a major public health problem worldwide. Common causes of cirrhosis include hepatitis C virus, hepatitis B virus, alcohol consumption and non-alcoholic steatohepatitis (*Min and ByungIhn, 2011*).

Chronic infection with HCV is the leading cause of end-stage liver disease, hepatocellular carcinoma (HCC) and liver-related death in Egypt. HCV causes chronic hepatitis in 60%–80% of the patients, and 10%–20% of those patients develop cirrhosis over 20–30 years of HCV infection. About 1%–5% of the patients with liver cirrhosis may develop liver cancer and 3%–6% may decompensate during the following 20–30 years. The risk of death in the following year after an episode of decompensation is between 15% and 20% (*Westbrook and Dusheiko, 2014*).

Hepatocellular carcinoma (HCC) ranks sixth in cancer incidence and third in cancer mortality worldwide (*Ferlay et al., 2010*).

There is now broad agreement that in cirrhosis, there is a stepwise progression from regenerative nodules (RN) to hepatocellular carcinoma (HCCs) along the following pathway: RN, low-grade dysplastic nodule (DN), high-grade dysplastic nodule (DN), and HCC (*Matsui, 2004; Choi, 1998*).