



Diffusion MRI as an alternative for dynamic contrast MRI in evaluation of hepatocellular carcinoma

A THESIS

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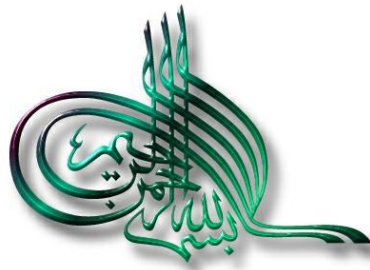
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Abstract

Background: Hepatocellular carcinoma (HCC) is a major worldwide health concern. Magnetic resonance imaging (MRI) is now preferred when further characterization of hepatic masses is needed , Dynamic contrast enhanced MRI examination has become a routine component of abdominal imaging, yet the high cost/benefit ratio and risk of contrast media side effects remain an issue. DWI (diffusion-weighted imaging) is a simple and sensitive method that enables qualitative and quantitative assessment without the use of gadolinium chelates, which makes it a highly attractive technique, particularly in patients with renal dysfunction.

Key words: hepatocellular carcinoma (HCC), diffusion weighted images (DWIs), apparent diffusion coefficient (ADC).

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Abbreviations

AASLD	American Association For The Study Of Liver Diseases
ACR	American college of radiology
ADC	Apparent Diffusion Coefficient
AFP	alpha fetoprotein
AP	Arterio-portal
BH	Breath hold
CE	Contrast Enhanced
CLEAR	Constant LEvel AppeaRance
CKD	chronic kidney disease
CNR	contrast to noise ratio
CT	Computed Tomography
DCE-MRI	Dynamic contrast enhanced Magnetic Resonance Imaging
DN	dysplastic nodule