

**Name of Journal:** *World Journal of Hepatology*

**Manuscript NO:** 63850

**Manuscript Type:** ORIGINAL ARTICLE

### *Retrospective Study*

**Comparison of unenhanced magnetic resonance imaging and ultrasound in detecting very small hepatocellular carcinoma**

Impact of MRI to detect small HCC

### **Abstract**

#### BACKGROUND

In hepatocellular carcinoma, detection and treatment prior to growth beyond 2 cm are important as a larger tumor size is more frequently associated with microvascular invasion and/or satellites. In the surveillance of very small hepatocellular carcinoma (HCC) nodules ( $\leq 2$  cm in maximum diameter, Barcelona clinical stage 0), we demonstrated that the tumor markers AFP and PIVKA-II are not so useful. So, we must

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1	<b>Crossref</b> 49 words Kristina Tzartzeva, Joseph Obi, Nicole E. Rich, Neehar D. Parikh, Jorge A. Marrero, Adam Yopp, Akbar K. Waljee, Amit G.	2%
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The correct characterization of **liver lesions** in imaging studies is of major importance, not only to the radiologist and the referring clinician but also to the patient. The relatively recent addition of hepatocyte-specific contrast agents (HSCAs) to the radiologist's armamentarium has had a significant impact on our ability to achieve a confident and correct diagnosis when using MR imaging. The article describes the mechanism of action of HSCAs, discusses the optimization of MR imaging protoc...

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Diagnostically problematic cases using US are often referred for a computed tomography (CT) or **magnetic resonance imaging (MRI)** examination. With the introduction of multi-slice CT (MSCT) **imaging**, the use of MSCT in oncologic patients to search for lung, liver, and lymph node metastases in the body has substantially increased [ 12 , 13 ].

## [Hepatocellular carcinoma - Cancer Therapy Advisor](https://www.cancertherapyadvisor.com/home/decision...)

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Sep 24, 2018 · However, the inadequate sensitivity of US has been a concern. **Magnetic resonance imaging** (MRI) is known to have high sensitivity **in detecting** hepatic malignancies, even without contrast enhancement. The purpose of our study is to **compare** US with noncontrast (**unenhanced**) MRI for HCC surveillance of high-risk patients. Methods/design

**Cited by:** 18

**Author:** Chansik An, Do Young Kim, Jin Young Choi,...

**Publish Year:** 2018

## [PDF] Noncontrast magnetic resonance imaging versus ...

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The purpose of our study is to **compare** US with noncontrast (**unenhanced**) MRI for HCC surveillance of high-risk patients. Methods/design: MIRACLE-HCC (usefulness of noncontrast **Magnetic Resonance imAging** versus nonContrast ultrasonography for surveiLlancE of **HepatoCellular Carcinoma**) is a prospective, single-center, nonblinded, balanced-

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How effective is ultrasonography for HCC surveillance? ▾

What is hepatocellular carcinoma (HCC)? ▾

How is HCC different from MDCT and MRI? ▾

What is a contrast enhanced ultrasound? ▾

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Apr 01, 2020 · NPV was higher for **non-enhanced MRI** (99.1%) than **ultrasonography** (96.9%). Per-lesion and per-exam PPVs were higher for **non-enhanced MRI** (56.9% and 61.8%, respectively) than for **ultrasonography** (16.7% and 17.7%, respectively). The estimated scan time of **non-enhanced MRI** ...

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The purpose of this study was to **compare** the diagnostic sensitivity of **unenhanced magnetic resonance (MR) imaging**, and **MR imaging** with a new superparamagnetic iron oxide (SPIO)-enhanced contrast ...

### Hepatocellular carcinoma in cirrhotic livers: detection ...

<https://pubs.rsna.org/doi/abs/10.1148/radiology.195.1.7892448>

PURPOSE: To evaluate diagnostic accuracy with **unenhanced** and superparamagnetic iron oxide (SPIO)-enhanced **magnetic resonance (MR) imaging** for **detection** of **hepatocellular carcinoma (HCC)** in ...

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Contrast-enhanced **ultrasound** using SonoVue® (sulphur hexafluoride microbubbles) compared with contrast-enhanced computed tomography and contrast-enhanced **magnetic resonance imaging** for the characterisation of focal liver lesions and **detection** of liver metastases: a systematic review and cost-effectiveness analysis

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Author: M. Westwood, M. Joore, J.P.C. Grutters, K. ...

Publish Year: 2013

### Recent advances in the imaging of hepatocellular carcinoma

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4379204>

Mar 25, 2015 · **Imaging** characteristics and diagnosis of HCC. Gray scale US is the most commonly used **imaging** test for surveillance since it is relatively inexpensive, noninvasive, and well accepted by patients.<sup>4,5,6</sup> A systematic review of 14 US studies on the accuracy of US in diagnosing HCC published the sensitivity of 69% and specificity of 97%.<sup>14</sup> However, the diagnostic performance of US is ...

Cited by: 5

Author: Myung-Won You, So Yeon Kim, Kyoung Wo...

Publish Year: 2015

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