Role of Gadoxetic acid-enhanced MRI in the management of HCC patients - the surgeons perspective

KOK SY(1), WONG SW(1), TAM TL(1), FUNG TP(1), LOKE T(2), CHAN CS(2)
(1)Department of Surgery, United Christian Hospital (2)Department of Radiology, United Christian Hospital

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Introduction
Gadoxetic acid-enhanced MRI has shown to be accurate in the diagnosis of early HCC.

Objectives
The objectives of this study is to evaluate the clinical impact of Gadoxetic acid-enhanced MRI on the management of HCC patients

Methodology
From January 2011 to July 2014, total 73 patients suffered from HCC with doubtful findings on the CT scans were subjected to Gadoxetic acid-enhanced MRI. The median interval between two scans was 7 weeks. The clinical outcome on these patients were analyzed.

Result
Total 73 patients (M:F = 10:63) were included for analysis. The mean age was 62 years old and 71% of patients were hepatitis B carrier. 29 patients suffered from recurrent HCC and the mean AFP level was 353ng/ml. The CT findings from all these patients were either indeterminate on the diagnosis of HCC or inconclusive on the actual number of HCC. The additional Gadoxetic acid-enhanced MRI has changed the clinical management in 54 (73.9%) patients. It confirmed the diagnosis of HCC in 37 patients and exclude other indeterminate lesions in 3 patients. Besides, a total number of 79 additional HCC was found in 21 patients. Among the 79 lesions, 37 (46.8%) lesions were small than 1cm in size and 22 (27.8%) lesions were between 1 to 2 cm in size. As a result, 17 patients required change of management to TACE or systematic therapy. Conclusion: Gadoxetic acid-enhanced MRI was useful in the management of HCC patients with doubtful CT finding. It could change the clinical management in 73.9% of patients.