

**Small (2 cm) Hepatic Lesions in Colorectal Cancer Patients: Detection and Characterization on Mangafodipir Trisodium-enhanced MR Imaging****김경원, 김아영, 박성호, 김현진, 박미숙, 김태경, 하현권, 김포년, 이문규**

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**목적 :** To evaluate whether mangafodipir trisodium (Mn-DPDP)-enhanced magnetic resonance (MR) imaging improves the detection and characterization of small (2 cm) hepatic lesions in patients with colorectal carcinoma, compared with spiral CT.

**대상 및 방법 :** Sixty-nine patients who had or were suspected of having focal liver lesions underwent spiral CT and Mn-DPDP-enhanced MR imaging and constituted the study population. Two experienced radiologists independently reviewed CT and MR images for the number of hepatic lesions seen and whether the lesion appears to be benign or metastasis, and their interpretations were correlated with the reference diagnoses including histopathologic diagnoses in 35 patients. The lesions were categorized as small (2.0 cm in diameter) or large lesion (> 2.0 cm) according to their size. The differences between Mn-DPDP-enhanced MR imaging and spiral CT with regard to the detection rates for hepatic lesions and metastases as well as to the false positive rates for hepatic metastases were analyzed by using the McNemar test. The performance of Mn-DPDP-enhanced MR imaging and spiral CT in indicating metastases of focal liver lesions was analyzed by using receiver operating characteristic curves.

**결과 :** There was no statistically significant differences between Mn-DPDP-enhanced MR imaging and spiral CT in detection of neither all nor small focal hepatic lesions ( $p = .383$  and  $.210$ ). However, concerning the differentiation between benign and metastatic lesions, Mn-DPDP-enhanced MR imaging was superior to spiral CT, both for all hepatic lesions ( $p = .023$ ) and small ones ( $p = .015$ ), and changed the diagnosis of hepatic metastasis in nine of 69 patients (13.0%). Among 12 metastases that was found at Mn-DPDP-enhanced MR imaging and missed at spiral CT, 11 (91.7%) lesions were small. Mn-DPDP-enhanced MR imaging showed significantly higher detection rate than spiral CT regarding to small hepatic metastases ( $p = .022$ ).

**결론 :** Mn-DPDP-enhanced MR imaging is superior to spiral CT in characterization of the focal hepatic lesions and in detection of small (2 cm) hepatic metastases in patients with colorectal carcinoma.