

**Hepatocellular carcinomas: correlation of enhancement degree with pathologic grades triple contrast MR imaging****Joo-Hee Kim<sup>1</sup> · Myeong-Jin Kim<sup>1</sup> · Young Nyun Park<sup>2</sup> · Kyung Sik Kim<sup>3</sup> ·****Woo Jung Lee<sup>3</sup>**<sup>1</sup>Diagnostic Radiology, <sup>2</sup>Pathology, <sup>3</sup>Surgery,  
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**목적** : To correlate the histological differentiation of hepatocellular carcinomas (HCCs) with finding on triple contrast-enhanced MR imaging using gadolinium-chelates, superparamagnetic iron oxides (SPIO), and mangafodipir trisodium.

**대상 및 방법** : Ten patients with proven HCC underwent triple contrast-enhanced MRI before surgical resection. Subjective ratings of the enhancement pattern and degree were compared with the histological grades determined on surgical specimen. Quantitative measurements of signal-to-noise ratio (S/N) of the lesion and the lesion-to-liver contrast-to-noise ratio (C/N) on the enhanced MR images, and the degree of S/N and C/N changes between the unenhanced and enhanced images were also correlated with the histological grades.

**결과** : Among the 10 HCCs, there were one well-differentiated (WD), five moderately differentiated (MD), three poorly differentiated (PD), and one undifferentiated (UD) lesions were found. On the gadolinium enhanced images, one WD, four MD, one PD, and one UD HCCs showed strong enhancement. On the ferumoxides-enhanced MRI, one MD and one PD HCCs showed strong enhancement. On the teslascan enhanced MRI, one MD showed strong enhancement.

**결론** : In this preliminary study with small number of cases, the histologic differentiation of HCC did not show direct correlation with the enhancement pattern on triple contrast MR imaging. Further study with larger number of cases and attempt to correlate with other histologic factors should be performed.