Hepatic epithelioid hemangioendothelioma (EHE) is a rare vascular tumor with low- to intermediate-grade malignant potential. We describe cross-sectional imaging findings of pathologically confirmed EHE including preliminary observations on lesion characteristics and apparent diffusion coefficients (ADCs) at diffusion-weighted MR imaging (DWI). CT and MRI examinations in five patients were retrospectively reviewed. Two radiologists evaluated lesion growth patterns, attenuation, signal intensity characteristics, and contrast enhancement patterns. Additionally, DWI features on low and high b-value images as well as ADCs were assessed in three patients. Imaging features of EHE included multifocal hepatic disease (n = 5), predominantly subcapsular location (n = 5), coalescence of nodules (n = 5), capsular retraction (n = 3), and intralesional calcifications (n = 3). Contrast-enhanced CT and MR images showed variable degrees of peripheral rim enhancement. T2-weighted MR images, low b-value DWI and ADC maps frequently depicted a “target-sign” appearance of tumor nodules. A markedly hyperintense central area corresponding to hypocellular stroma was surrounded by a moderately hyperintense outer rim reflecting hypercellular tumor regions. The mean ADC of lesions was
Cross-sectional imaging displayed typical features of EHE. The mean ADC value of lesions was found to be relatively high in comparison with other hepatic malignancies, which may be helpful in suggesting the diagnosis.