

Hepatic angiomyolipomas in a post renal transplant patient: Imaging characteristics mimic hepatocellular carcinoma

Kiran K. Dhanireddy and Mohd Raashid Sheikh

University of Southern California, USA

Introduction: Angiomyolipoma (AML) is a rare, generally benign mesenchymal tumor most commonly presenting within the kidneys of patients with tuberous sclerosis complex (TSC). AML with hepatic involvement (HAML) is rare. Variable amounts of adipose tissue, smooth muscle, and vascular involvement within the tumor can lead to misdiagnosis. The radiologic features of HAML may lead to misdiagnosis as hepatocellular carcinoma (HCC). Malignant transformation and spontaneous rupture have been reported with HAML. Therefore, aggressive surgical intervention has been suggested as the appropriate therapeutic intervention; however, debate within the surgical community still continues.

Case Report: A 47-year-old male previously diagnosed with TSC and associated renal AML underwent bilateral nephrectomy and cadaveric renal transplantation. Six years after renal transplant, multiple hepatic lesions were discovered after an episode of abdominal pain. On CT, the lesions demonstrated arterial enhancement and washout consistent with hepatocellular carcinoma. Contrast-enhanced ultrasonography demonstrated a hyperechoic enhancing lesion with imaging characteristics consistent with HCC. On MRI, the lesions demonstrated a variable amount of fat within a hyperintense lesion on T2-weighted images. Taken together, the radiological findings were suggestive but not definitive for HAML. The patient underwent liver resection and pathology confirmed the diagnosis of HAML.

Conclusion: The radiologic characteristics of HAML are similar to HCC. The use of multiple imaging modalities may be useful in confirming the diagnosis of HAML prior to aggressive surgical management.