

**EP036****Angiomyolipoma mimicking Hepatocellular carcinoma on preoperative magnetic resonance image: The way to prevent unnecessary surgery for HAML.****Hyeo Seong HWANG¹**, Young Nyun PARK², Dai Hoon HAN^{*1}, Gi Hong CHOI¹, Kyung Sik KIM¹, Jin sub CHOI¹¹Department of Surgery, Yonsei University College of Medicine, Korea²Department of Pathology, Yonsei University College of Medicine, Korea

Introduction : The Image of magnetic resonance (MR) of hepatic angiomyolipoma (AML) is often mistaken for hepatocellular carcinoma (HCC). In this study, clinicopathological, and imaging features of hepatic AML misdiagnosed with a malignant tumor before surgery were reviewed.

Methods : A total of 34 patients diagnosed with hepatic AML by surgery (n=20) or biopsy (n=14) were included (2008-2020). Twenty female and 14 male patients with a mean age of 52.9 years (range 28-78) were followed up for about 68.23 months.

Results : Only one patient was positive for HBsAg among 34 cases, and preoperative levels of serum alpha-fetoprotein and protein induced by vitamin K absence-II were not increased for all patients. Two patients showed non-alcoholic fatty liver disease. Twenty-nine patients have solitary liver tumor and the remainder has multiple ones. In two cases, renal AML was simultaneously diagnosed. In preoperative MRI, AML was misdiagnosed as HCC(n=14, 41.2%), adenoma(n=1, 2.9%), cholangiocellular carcinoma(n=1, 2.9%), intrahepatic metastasis of malignant tumor (n=2, 5.8%), or inconclusive opinions (n=6, 17.6%). In subgroup analysis, overall survival was not different (P = 0.496), on the contrary, biopsy group showed significantly short length of hospitalization (P = 0.001), small tumor size (23.5mm versus 45.8mm, P = 0.017), better diagnostic accuracy (50% versus 15.0%, P = 0.011). In immunohistochemical analysis, several antibodies were detected including HMB45 (in 32 cases), SMA (n=19), CD 34 (n=7), Melanin A (n=5).

Conclusions : Since AML is a benign tumor, for the suspicious HCC suddenly discovered in a patient without clinical risk factors, it is better to perform biopsy first to prevent unnecessary surgery.

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