

Introduction

- ❑ Liver cirrhosis is a significant risk factor for the development of primary liver cancers such as hepatocellular carcinoma and cholangiocarcinoma.
- ❑ Radiographic advances have provided a means of diagnosing liver malignancies, at times without the need for liver biopsy.
- ❑ We present a patient with alcohol-related liver cirrhosis who had cross-sectional imaging findings suggestive of primary liver malignancy; however, multiple biopsies confirmed the mass to be fibrosis with mild hepatitis.

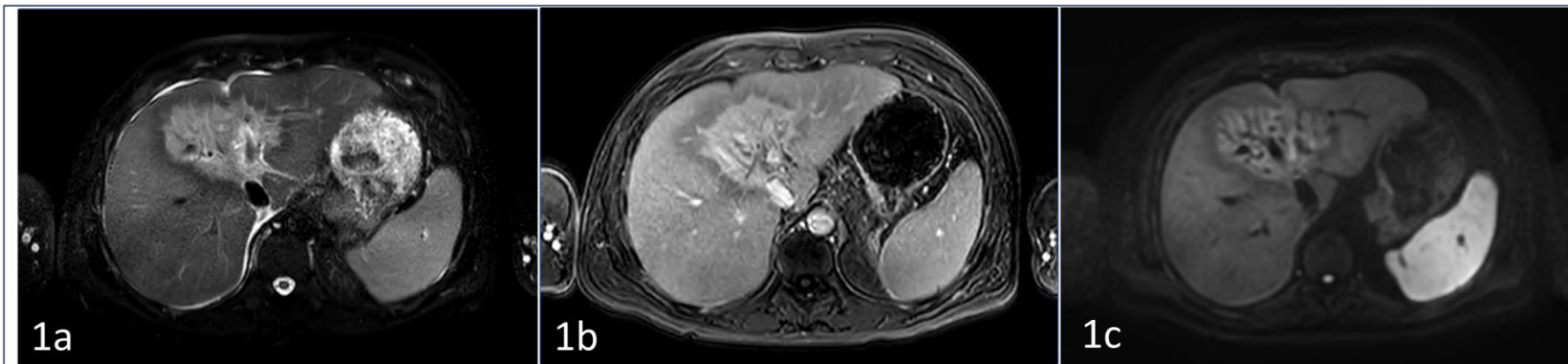


Figure 1. 1a) Pre-contrast MR T2 weighted image showing a large central hepatic mass and lobular contour of liver consistent with cirrhosis. 1b) Post-gadolinium T1 fat-saturated MR image demonstrating enhancement of the liver lesion in the hepatic venous phase. The lesion showed high retention index of contrast on 5-minute delayed images (not included). 1c) Diffusion-weighted MR image showing the liver lesion with significantly restricted diffusion suggestive of infiltrative type of cholangiocarcinoma.

Case Description

- ❑ A 40-year-old male with limited interaction with healthcare presented to the ED with new bilateral lower extremity edema.
- ❑ Workup demonstrated mild hepatitis with bilirubinemia suggestive of alcoholic hepatitis; alternative etiologies of liver disease were ruled out with serological tests.
- ❑ Cross sectional imaging with CT abdomen & pelvis revealed a nodular appearing liver suggestive of cirrhosis along with a 6.8 cm x 8.7 cm mass with irregular margins situated between the right and left lobes of the liver.
- ❑ Dedicated 3-phase MR imaging of the mass demonstrated progressive enhancement in the portal venous phase and hepatic venous phase, with retention of contrast on 5-minute delayed images [Image 1a, b, c].
- ❑ Overall, these findings suggested infiltrative cholangiocarcinoma. Multifocal disease was ruled out, and tumor markers CEA and AFP were unremarkable.
- ❑ Liver biopsy obtained via laparotomy demonstrated fibrosis, but with no evidence of malignancy.
- ❑ To rule out biopsy sampling error, two additional biopsies later that month concurred cirrhotic liver segments with areas of mild hepatitis. Tumor markers CK20 and CDX2 were negative, and no atypical cells were present.
- ❑ It was concluded that this liver lesion represented extensive hepatic fibrosis and mild hepatitis due to ongoing alcohol use, but no malignancy.

Discussion

- ❑ Radiological Imaging plays a major role in the diagnosis of primary liver malignancy. This is often carried out with triple-phase CT or MR imaging.
- ❑ It is important to note that various benign tumors and non-tumorous liver lesions may mimic the imaging appearance of primary liver malignancy.
- ❑ Benign mimickers of HCC include:

❑ Nontumorous Arterioportal shunts	❑ Focal nodular Hyperplasia
❑ Hemangiomas	❑ Hereditary Hemorrhagic Telangiectasia
❑ Focal Fat Sparing and deposits	❑ Inflammatory Lesions
❑ Confluent Fibrosis	❑ Angiomyolipoma
- ❑ Our case demonstrates an unusual radiographic appearance of hepatic fibrosis and highlights some of the limitations of the radiographic image in distinguishing benign from malignant lesions

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References:

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