

Learning Objectives

- Hepatic inflammatory pseudotumor (HIP), albeit rare, is an important benign pathology to be included in differentials for hepatic masses.

Outcomes

- Patient initiated on Zosyn and mass aspirated, yielding negative cultures
- CA19-9 obtained, initially at 1084 U/mL
- Repeat MRCP 1 week after initial imaging showed interval decrease in liver lesion sizes with down trending liver enzymes
- Biopsy of mass with pathology demonstrated lymphoplasmacytic inflammation and fibroblastic infiltration suggestive of hepatic inflammatory pseudotumor
- Patient discharged from the hospital with PO regimen of ciprofloxacin and metronidazole
- Repeat MRCP 3 months post hospital discharge showed significant reduction in liver lesion sizes

Discussion

- Inflammatory pseudotumors are benign, non-neoplastic lesions that can be found in numerous organs, primarily lung and CNS although also commonly in liver
- Given characteristics and morphologies in the liver, pseudotumor can often be misconstrued as a malignant lesion
- Lesions are typically associated with concomitant infections or inflammatory processes, although exact etiology is unknown
- Liver biopsies are the best diagnostic tool to differentiate hepatic pseudotumors from malignant processes such as hepatocellular carcinoma, cholangiocarcinoma, or abscess
- Pathology can be variable however typical demonstrations include dense inflammatory infiltrate with spindle cells
- Given its semblance to malignant processes, accurate diagnoses can prevent unnecessary invasive treatments
- Treatment varies between surveillance and surgical resection depending on disease severity

Case Presentation

- 66 M with past medical history of compensated Hepatitis C cirrhosis previously treated direct-acting antivirals with sustained virologic response presenting after a syncopal episode, weakness, abdominal pain
- Patient became hypotensive and tachycardic upon arrival to ED, thus patient transferred to ICU for pressor support
- Initial labs significant for leukocytosis (WBC 13920/ μ L), thrombocytopenia (PLT 22), acute renal failure (Cr 6.2), COVID positive
- Liver enzymes were elevated at ALP 256 U/L, ALT 328 U/L, AST 330 U/L, T bili 6.3, INR 1.2.
- RUQ US showed intrahepatic and extrahepatic biliary ductal dilation with common bile duct dilation of 0.9 cm
- Initial MRCP showed diffuse thickening of intra and extra hepatic bile ducts suggestive of cholangitis and several hepatic masses concerning for abscess vs metastatic cholangiocarcinoma
 - Several cystic masses measuring 3.0 x 4.0 cm, 3.1 x 2.6 cm, and 3.8 x 3.6 cm

Imaging

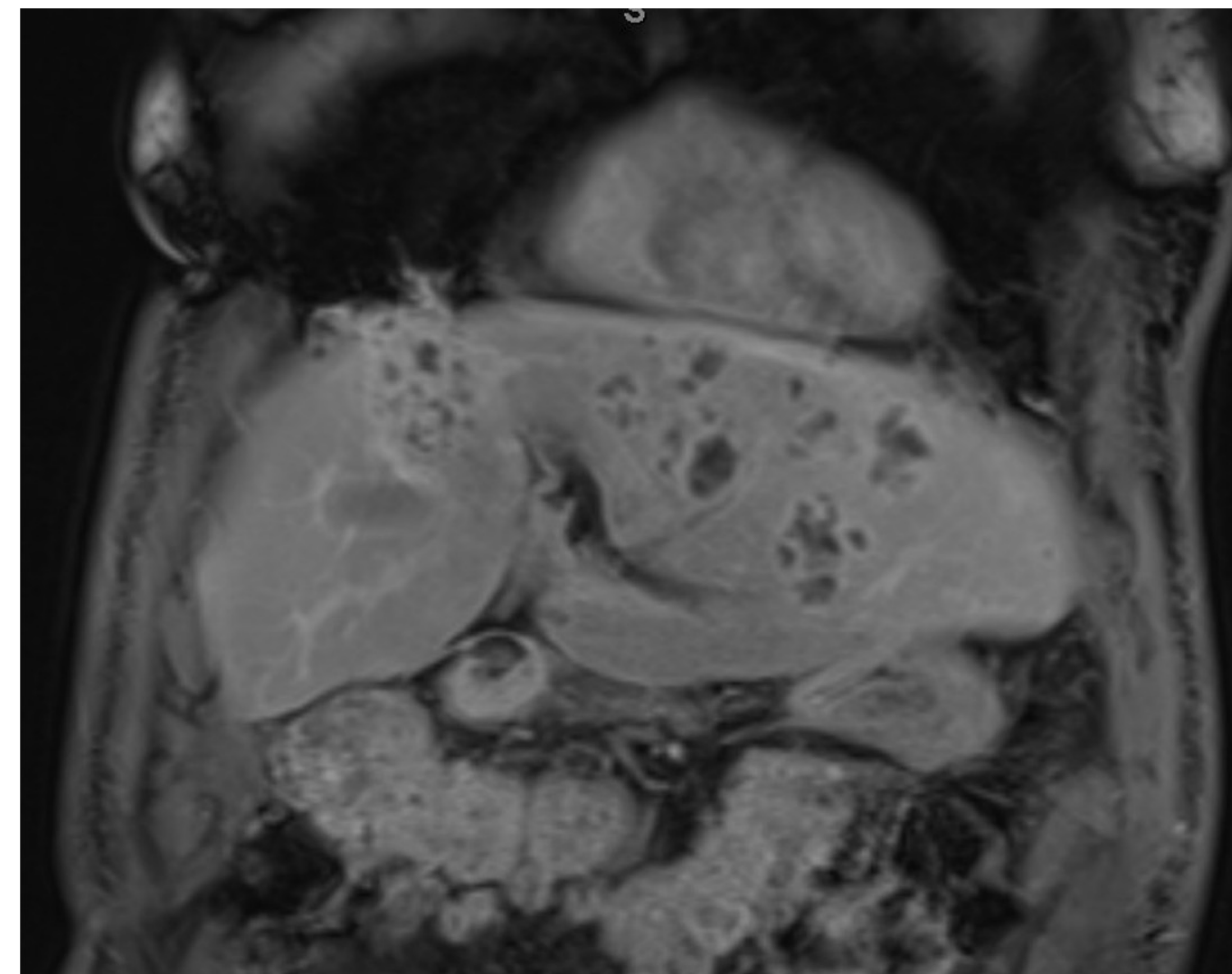


Image 1. Coronal cross-section of initial MRCP demonstrating multiple hepatic lesions

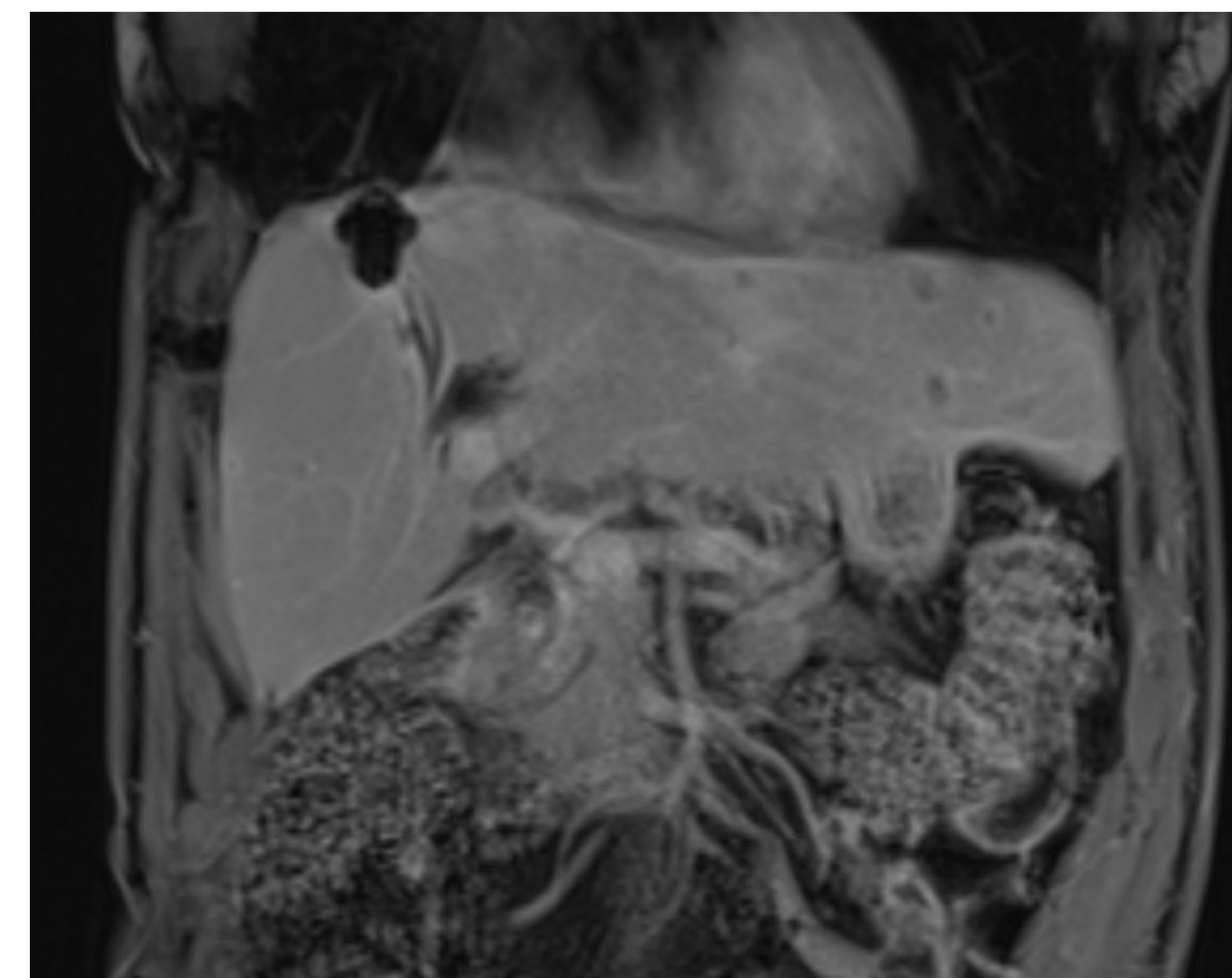


Image 2. Coronal cross-section of surveillance MRCP 3 months later demonstrating drastic improvement in hepatic lesions

Conclusions

- Hepatic pseudotumors are benign pathologies typically associated with concomitant inflammatory or infectious process
- Biopsies are definitive methods of differentiating pseudotumors from other malignant processes such as hepatocellular carcinoma, especially in individuals with risk factors
- Accurate diagnoses of such masses can protect patients from invasive painful procedures typically reserved for treatment of malignant masses
- Treatment consists generally of supportive management or surgery if presence of severe disease

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