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DEPARTMENT OF IMAGING SCIENCES

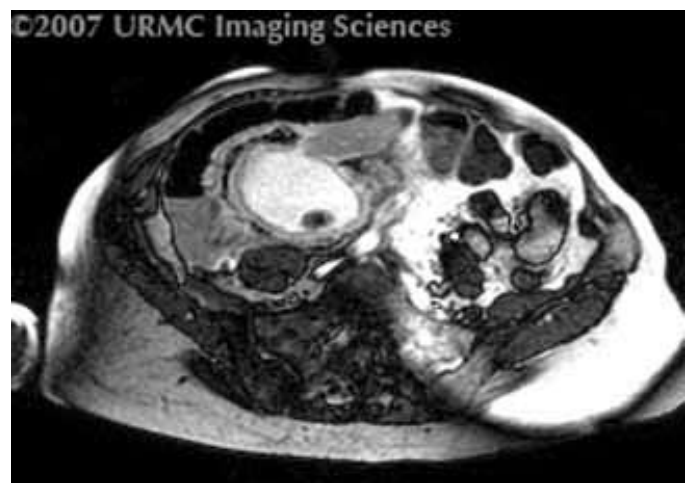
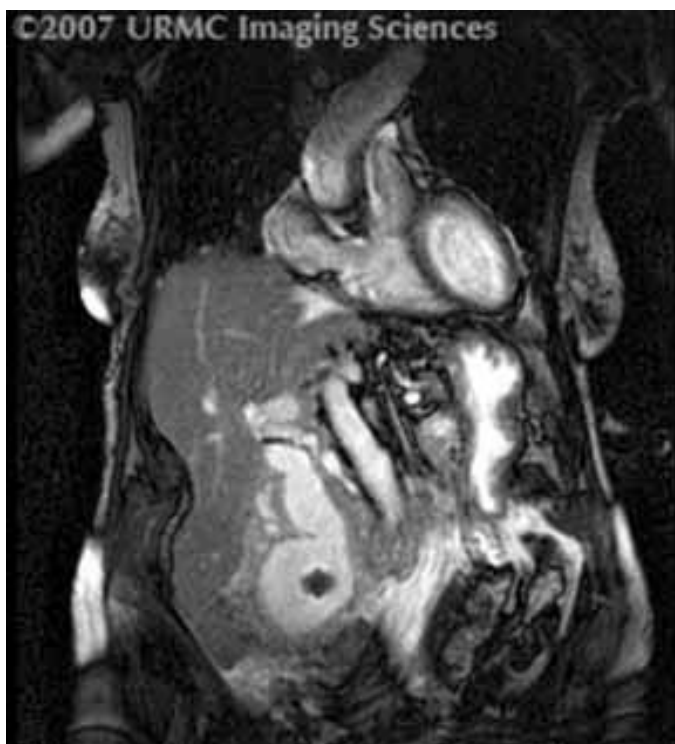
Imaging Sciences Interesting Cases

CASE 41

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CLINICAL PRESENTATION: Patient is an 83-year-old woman who presented with right upper quadrant pain after a fall. She had elevated total bilirubin of, alkaline phosphatase, AST, and ALT were all elevated. Amylase and lipase were normal. A gallbladder ultrasound revealed mild thickening of the gallbladder wall, with pericholecystic fluid, and a common bile duct of 1 cm. She was admitted to the hospital and placed on antibiotics.

IMAGING FINDINGS: The gallbladder is markedly distended. There are gallstones present within the gallbladder. There is marked gallbladder wall thickening, gallbladder wall edema and gallbladder wall enhancement. There is no stone in the common bile duct.



Figures 1 and 2. Coronal and axial FFE images demonstrate a gallstone within a distended gallbladder. Note the wall thickening and edema.

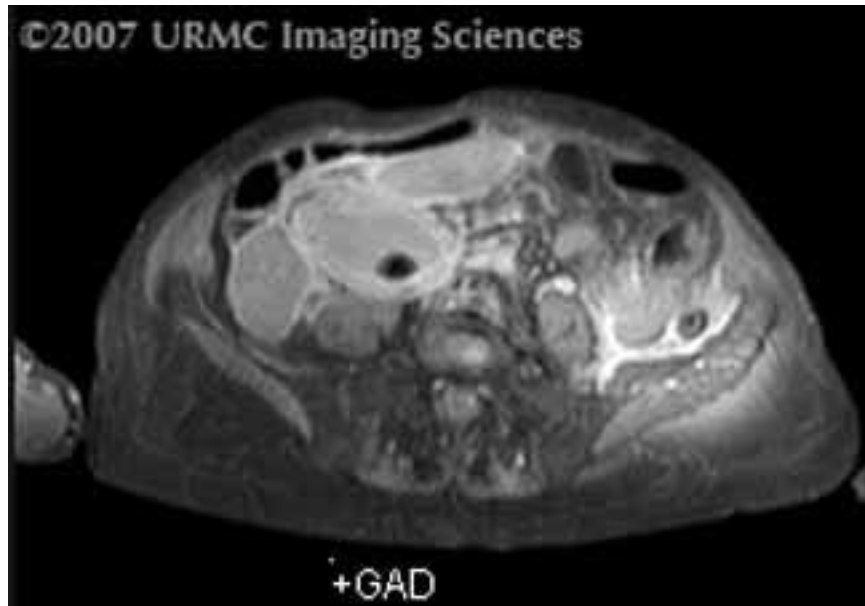


Figure 3. Post-gadolinium image demonstrates enhancement of the gallbladder wall.

DIAGNOSIS: Acute Cholecystitis

DISCUSSION: Though acute cholecystitis is generally diagnosed by ultrasound or a nuclear medicine scan, it can also be seen on MRI. This patient presented with a picture of biliary obstruction and thus, an MRCP was requested. The typical findings of acute cholecystitis on MRI are seen in this patient: gallstones, and gallbladder wall thickening, edema, and enhancement. There was mild intrahepatic ductal dilatation but no gallstones in the common bile duct (not shown).

Surgery revealed distended, inflamed gallbladder, and areas of patchy necrosis on the wall, with the final clinical diagnosis of acute cholecystitis.

REFERENCES:

1. Loud PA, Semelka RC, Kettritz U, Brown JJ, Reinhold C. MRI of acute cholecystitis: comparison with the normal gallbladder and other entities. *Magn Reson Imaging*. 1996;14(4):349-55. [PubMed]