

Acute cholecystitis complicated by suspected perforation with hepatic involvement: case report, literature review, and management of a rare pathologic process

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Background

- Perforation of the gallbladder is a rare but significant complication of unrecognized acalculous cholecystitis or acute cholecystitis with cholelithiasis.
- It is thought to occur in approximately 0.8% of acute gallbladder pathology.
- Intrahepatic perforations with abscess formation or subcapsular fluid collections are even more rare with only a few reported cases in literature.
- Gallbladder perforations are based on the Niemeier classification.
- Definitive management includes IR guided cholecystostomy tube, hepatic drainage, and interval cholecystectomy.

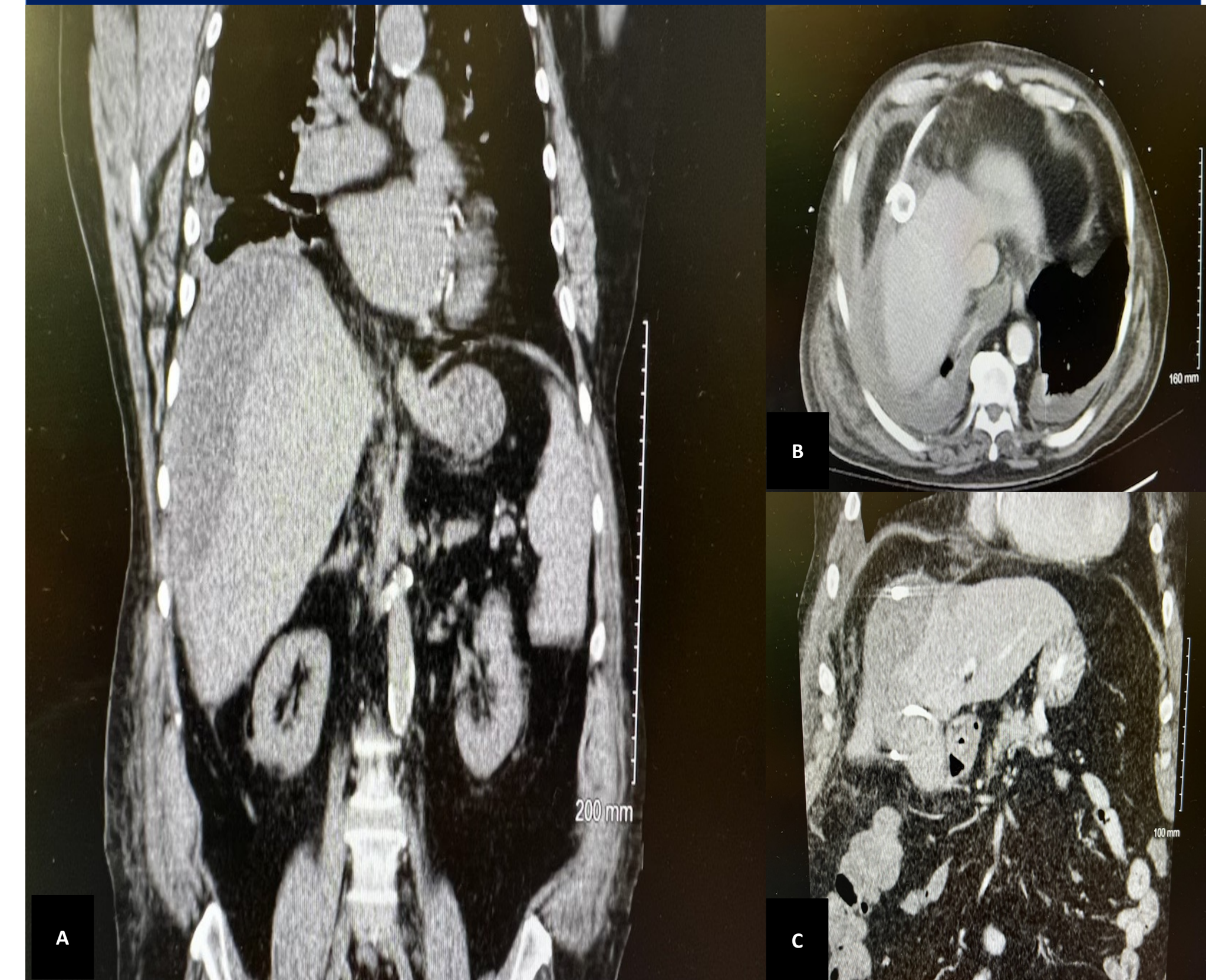
Methods

Here we present a rare case of acute cholecystitis in a 75 year old male complicated by perforation with hepatic involvement, its diagnostic workup, and management.

Case Presentation

- 75-year-old male with past medical history significant for coronary artery disease s/p coronary artery bypass graft, atrial fibrillation s/p ablation currently on Eliquis, gout, and undiagnosed diverticulosis
- Presented as a transfer from an outside facility for right upper quadrant abdominal pain and melena
- Patient was tachycardic in atrial fibrillation, hypotensive with systolics in the 80s, awake and following commands appropriately upon arrival
- CT imaging from outside facility was significant for gallbladder inflammation with free fluid in the pelvis concerning for perforation
- ED ultrasound showed gallbladder wall thickening with hepatic subcapsular fluid collection concerning for intrahepatic gallbladder perforation. Lab work with hepatic function panel and total bilirubin unremarkable
- Patient was poor surgical candidate and was scheduled to undergo IR drain placement of the subcapsular hepatic fluid collection and cholecystostomy tube placement
- Was later found to have a persistent rent in the fundus of the gallbladder with fistulous communication near the right hepatic lobe, and subsequently the perihepatic space
- Eventually discharged with both drains in place
- He is scheduled to follow up in outpatient clinic for close monitoring and interval cholecystectomy

Imaging



Conclusion

- This case report adds to the limited literature on gallbladder perforations complicated by hepatic involvement.
- Gallbladder perforation with hepatic involvement is uncommon, thus lower on our list of differential diagnoses. However, it is imperative to consider to aid early resuscitative and therapeutic efforts to avoid further increased risk of morbidity and mortality in this rare pathology.



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