



Endoscopic Ultrasound Guided Drainage of a Massive Right Sided Hemorrhagic Liver Cyst : The Rapidly Evolving Field of Endo -Hepatology

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INTRODUCTION

- Incidence of Liver Cysts : 5% of population, being more common in women.
- Therapeutic interventions : reserved for acutely symptomatic patients or liver cysts with life threatening complications like bleeding.
- Our case below details a unique patient with a massive right sided hemorrhagic liver cyst drained under the guidance of an endoscopic ultrasound(EUS), along with a literature review of its applications in the rapidly evolving field of Endo-Hepatology.

CASE DESCRIPTION

Background :

- 76 year old male with a known history of benign hepatic cyst, presented to the emergency room with sudden onset right upper quadrant abdominal pain, nausea and vomiting.
- Physical examination : markedly distended, diffusely tender abdomen with palpable hepatomegaly

Significant Labs :

- Hemoglobin : 6.7 g/dL(known baseline - 9 g/dL)

Imaging :

- Compared to previous imaging from 2014 (Figure A), CT abdomen revealed significant enlargement of a known right hepatic cyst (largest dimension: 24.2 X 16 X 25.6 cm) (Figure B).

Diagnosis :

- Right sided Hemorrhagic liver cyst with acute blood loss anemia

Management :

- blood transfusions for volume resuscitation

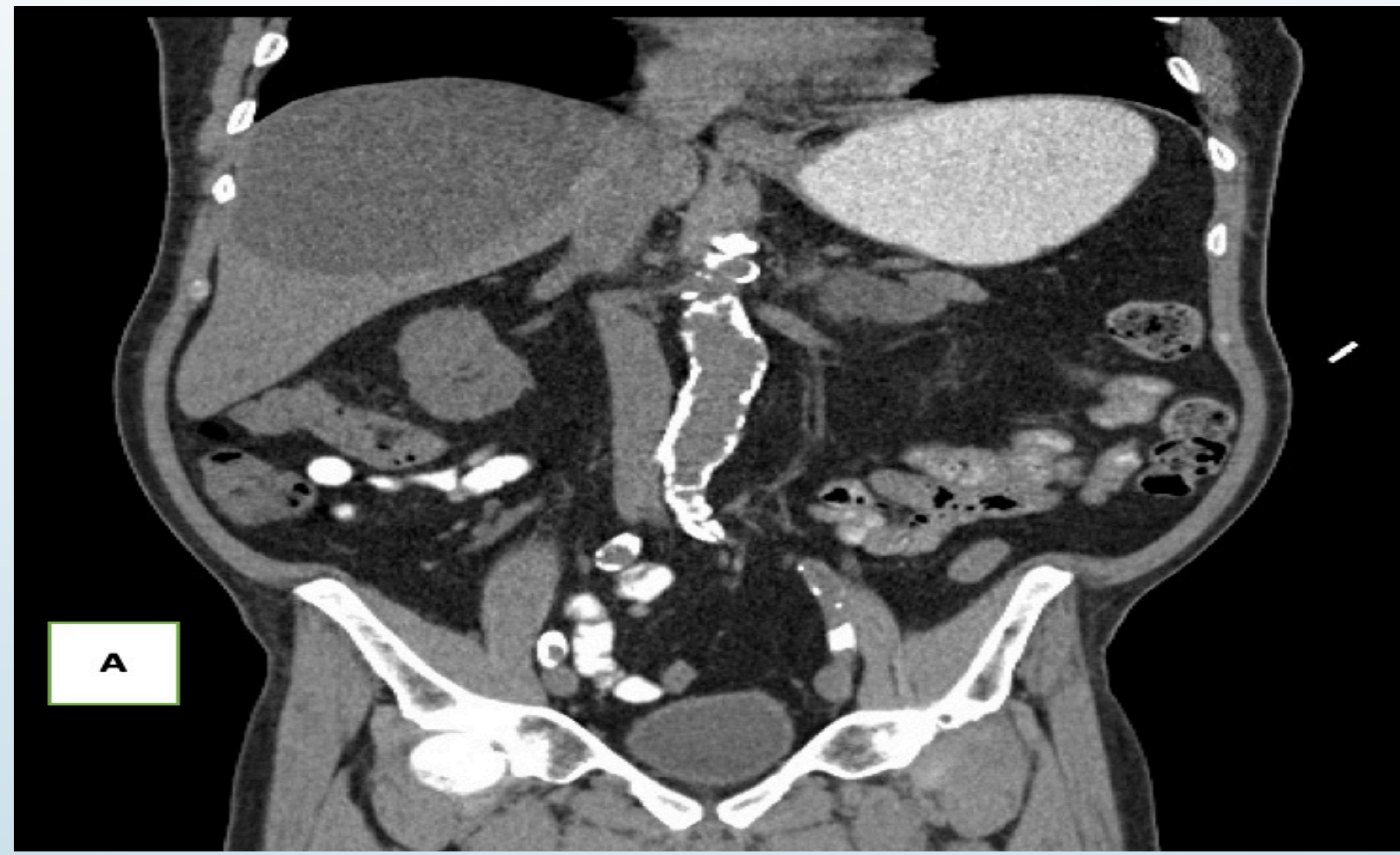


Figure A : CT Abdomen from 2014 showing a benign right sided hepatic cyst



Figure B : CT Abdomen from 2022 showing significant enlargement of the known right hepatic cyst (largest dimension : 24.2 X 16 X 25.6 cm)

- Management (continued..) :**
- EUS guided drainage of liver cyst using Lumen-Apposing Metal Stent was performed, draining 2.8 liters of dark reddish-brown fluid,
 - NG tube placement post procedure to prevent aspiration : drained an additional 1.1 liter of fluid
 - Following the procedure, patient was monitored in the ICU and reported significant improvement in abdominal pain/distension, with stable vital signs and hemoglobin.

DISCUSSION

- Diagnostic imaging is essential in delineating the characteristics of liver cysts to determine appropriate pathway for intervention.
- Decision regarding choice of intervention for liver cysts : should be individualized for each patient, based on location, size, complexity of lesion, co-morbidities, abdominal anatomy and physician's experience.
- Therapeutic interventions for liver cysts - predominantly performed via percutaneous (PC) route, with EUS being deemed as a safe alternative when PC intervention is not favorable.
- EUS : traditionally preferred for drainage of left/caudate lobe liver cysts, whereas percutaneous drainage is preferred for right lobe/ hepatic dome cysts.
- Other benefits of EUS in Endo-Hepatology : detection of smaller, focal liver lesions, elastography, liver biopsies, portosystemic pressure monitoring, thermal ablative therapy.

REFERENCES

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