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Management of Hepatic Cysts

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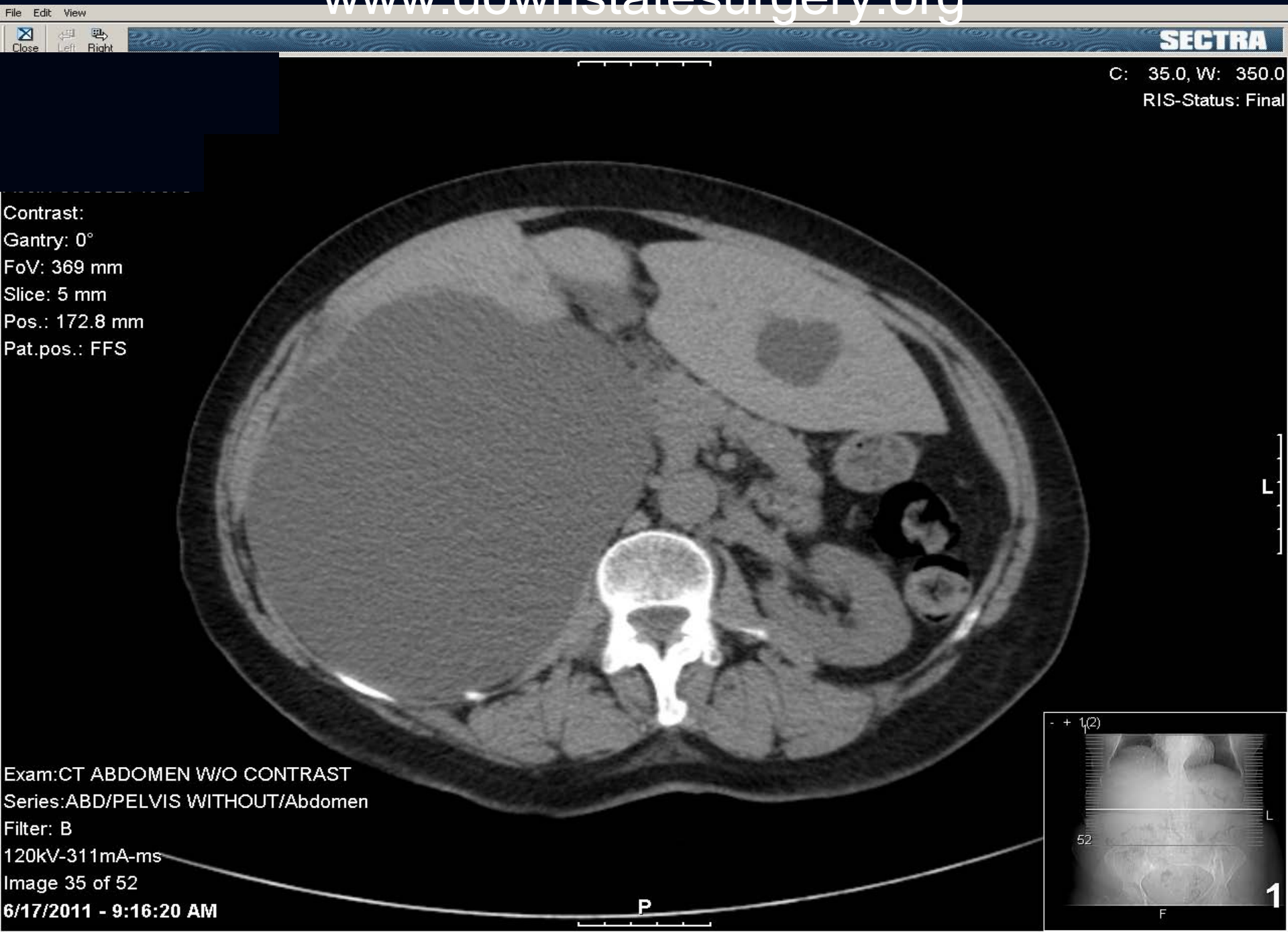
Case Presentation

- CC: RUQ pain
- HPI: 77yr old AAF presents with 6month history of dull constant non radiating RUQ abdominal pain. Denies any history of fever, jaundice, weight loss and obstructive symptoms.
- PSH: s/p Laparoscopic fenestration of giant hepatic cysts (December 2010)
- PMH: HTN
- Meds: Procardia, Bisoprolol Allergy: NKDA
- Social: Denies tobacco, ETOH/drugs

Case Presentation

- Physical Exam
  - T 99 HR 54 BP 128/67
  - Abd- soft, fullness RUQ, mild focal tenderness
  - Chest- CTA bilat CVS-S1S2 no murmur
- Labs
  - WBC 10.4, H/H 12.2/35.5, Platelets 250
  - BMP- 135/3.8/105/26/10/0.7/183
  - LFTs- 7.3/3.9/56/47/73/0.7
  - Coagulation profile-WNL



Surgery

- Laparoscopic fenestration and drainage of multiple giant hepatic cysts with excision of cyst wall

Hospital course

- POD#1- Tolerated diet.
- POD#3-Discharged home.

Pathology

- Pathology
  Simple cysts lined by flattened epithelium.

Management of cystic diseases of the liver

- Non parasitic cystic masses in the liver with prevalence of 5%.
- Frequently incidental findings on imaging studies
- Usually asymptomatic and seen more in adult women.
- Lined by single layer of cuboidal or columnar epithelium resembling biliary epithelial cells with no malignant potential
- Differential diagnosis includes neoplastic cysts (cystadenomas) which have malignant potential.

Classification of hepatic cysts

True cysts	False cysts
Congenital	Hepatic abscess
Simple cysts	Posttraumatic hematoma
Adult Polycystic liver disease	Biloma
Bile duct related-Caroli disease	
Acquired	
Primary neoplastic- cystadenoma	
Secondary neoplastic-metastasis from solid organs	

Clinical Presentation

- Abdominal pain
- Abdominal fullness/distension
- Early satiety, nausea and vomiting
- Spontaneous rupture, infection and biliary compression with obstructive jaundice

Diagnosis

Simple hepatic cyst

- Unilocular
- Thin regular wall
- No nodules
- Thin, straw-colored fluid
- Absent mucin
- Absent tumor markers

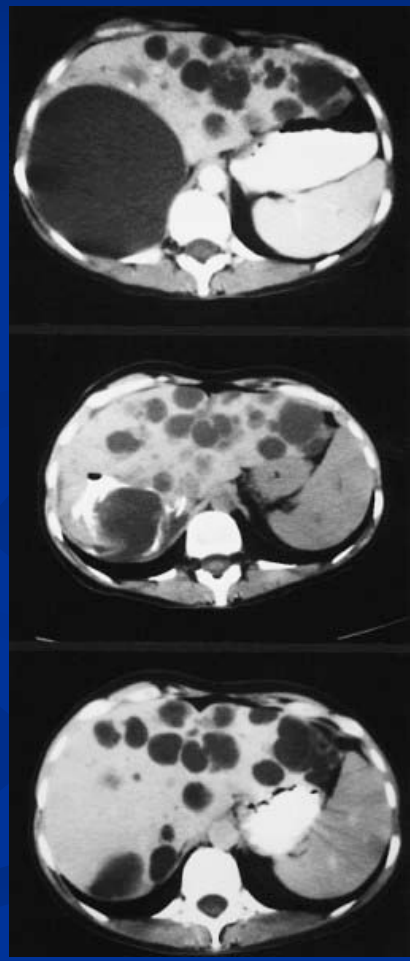
Neoplastic hepatic cyst

- Multilocular
- Thick irregular wall
- Mural nodules
- Thick green/brown fluid
- Mucin in fluid
- Elevated CEA/CA19-9

Treatment of Simple hepatic cysts

Percutaneous aspiration

- Temporary relief of symptoms
- Recurrence rate about 100%
- Repeated aspirations may result in cyst infection
- Aspiration with sclerosants (e.g. ethanol, minocycline) provides relief in about 80-90% of patients
- Surgically unfit patients.



Treatment of Simple hepatic cysts

Cyst wall resection

- Fenestration/Unroofing /Marsupialization
- Laparoscopic or open approach
- Lowest recurrence rate (5-10%)
- Cyst wall excised at junction with hepatic parenchyma
- Ablation of cyst wall lining to minimize recurrences
- Presence of bile in drainage fluid necessitates isolation of bile leak and ligation

Treatment of hepatic cysts

Enucleation/Cystectomy

- Neoplastic cysts or recurrent simple hepatic cysts can be managed by enucleation
- Dissection within the plane of the pseudocapsule allows separation of the cyst from the liver parenchyma.
- No risk of recurrence when done appropriately.
- Associated with minimal blood loss and fewer complications when compared to hepatic resection.

Conclusions

- Simple hepatic cysts are common benign mass-occupying lesions in the liver.
- Symptomatic hepatic cysts can be treated by cyst wall excision or enucleation.
- This can be performed successfully with negligible morbidity and mortality.