



Long-Term Follow up of Hepatic Cyst after Endoscopic Ultrasound-Guided Sclerotherapy

Tamasha Persaud MD¹, Enad Dawod MD², Shawn Shah MD², Reem Sharaiha MD MSc², Kartik Sampath MD²

Department of Internal Medicine¹, Department of Gastroenterology²
New York Presbyterian-Weill Cornell Medicine, Department of New York, NY

INTRODUCTION

- Hepatic cysts can be found in up to 18% of the population. (1)
- For symptomatic cysts, management includes surgical unroofing or sclerotherapy.
- Endoscopic ultrasound (EUS)-guided sclerotherapy with ethanol has emerged as an alternative to surgical intervention and percutaneous drainage (PCD) with sclerotherapy.
- There are few long-term data and randomized control trials comparing the efficacy of these interventions.
- This case highlights the outcome and long-term follow-up of EUS-ablation with ethanol for a large, symptomatic hepatic cyst.

CASE DESCRIPTION

- A 47-year-old female with a history of Systemic Lupus Erythematosus initially presented with dyspnea and intermittent right upper quadrant pain.
- Her cardiopulmonary workup was otherwise unremarkable. Liver function tests were within normal limits.
- Liver MRI showed a 6.9cm left lobe (segment III) unilocular hepatic cysts.
- Tumor markers were negative.
- EUS-guided cyst ablation with 100% ethanol lavage was performed.
- Analysis of cyst fluid was benign.
- CT scan one month after ablation showed decreased hepatic cyst to 3.5cm and patient reported significant improvement in symptoms.
- Two months later, a second EUS-guided ablation was done in attempt to achieve complete cyst eradication.
- MRI after second ablation demonstrated further decrease in size of hepatic cyst to 2.6cm.
- Twenty-four months after initial ablation imaging showed stable reduction in size of hepatic cyst (1.8cm).
- Now, thirty-seven months after ablation, patient remains symptom free.

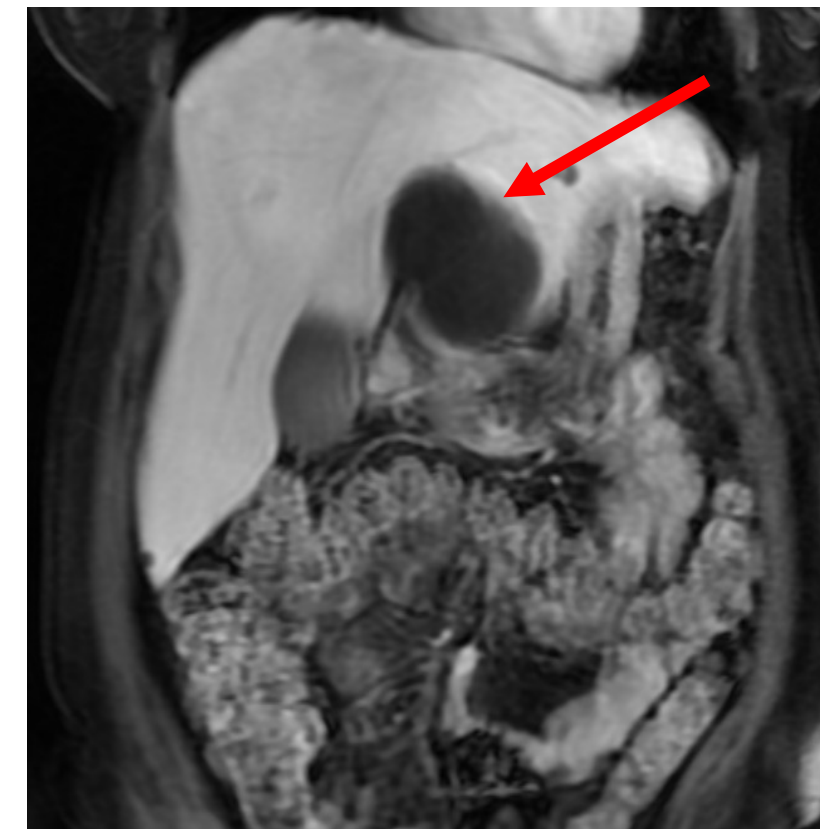


Figure 1. MRI Liver showing hepatic cyst prior to endoscopic ablation

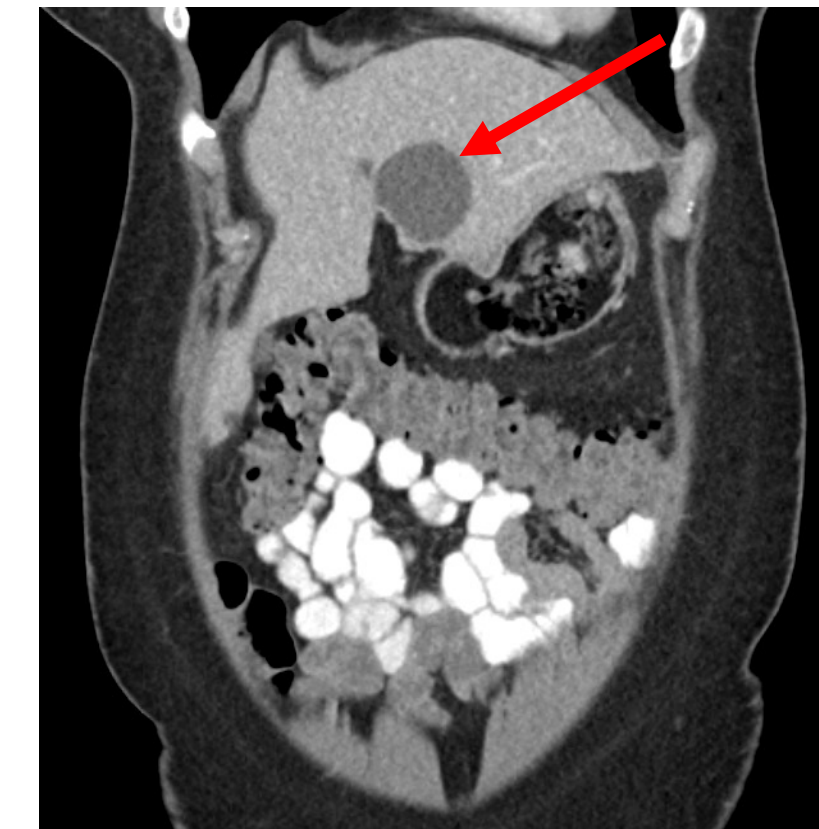


Figure 2. CT abdomen/pelvis showing hepatic cyst 1 month after initial ablation



Figure 3. MRI Liver showing hepatic cyst 4 month after initial ablation



Figure 4. CT abdomen/pelvis showing hepatic cyst 24 months after initial ablation

DISCUSSION

- Prior to intervening on large hepatic cysts, it is necessary to ensure that symptoms do not derive from alternative etiologies.
- The approach to management of symptomatic simple hepatic cysts depends on location, comorbidities and patient preference.
- EUS-guided sclerotherapy is a promising alternative to surgery and PCD with sclerotherapy.
- EUS-guided ablation allows for easier access to the left, caudate and posterior segments of the liver and is overall safe. (1)
- A single center retrospective study reported 100% cyst reduction at 15 month follow up in the group that received EUS-guided sclerotherapy. (2)
- Symptom response to nonsurgical EUS-guided sclerotherapy can be a diagnostic tool to help ascertain if the given hepatic cyst is contributing to symptoms.
- This case further illustrates the efficacy and long-term durability of EUS-guided sclerotherapy for a symptomatic hepatic cyst.
- Second-session EUS-guided sclerotherapy may contribute to good long-term outcomes, as in this case.
- Larger, longitudinal studies are warranted.

REFERENCES

1. Carrim ZI, et al. The prevalence of simple renal and hepatic cysts detected by spiral computed tomography. Clin Radiol. 2003 Aug;58(8):626-9
2. Seo DW, et al. Ethanol lavage of huge hepatic cysts by using EUS guidance and a percutaneous approach. Gastrointest Endosc. 2014 Dec;80(6):1014-21.