

A Beach Ball Sized Liver Cyst

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Introduction

- Hepatic cysts are rare, usually benign and typically found incidentally on imaging. They develop from a diverse number of pathological causes ranging from idiopathic, infectious congenital, malignant to parasitic etiologies. Colon, kidney, prostate, ovary/testis, squamous cell lung cancer, GIST, sarcomas and neuroendocrine cancers commonly metastasize to the liver and must be excluded (1). Simple hepatic cysts comprise the majority of common hepatic lesions occurring in ~2% of the population with a slight female predilection (2). “Massive cysts” occupying large amounts of volume are found almost exclusively in women over 50 years of age (3).

Objective

Recognize and manage multiple large liver cysts as a rare manifestation.

CLINICAL COURSE

- Retrospective case report of a patient who presented to the emergency department for severe abdominal pain. We present a case of 65 year old female with a massive hepatic cyst, in addition to other smaller isolated cystic bodies, who initially presented with progressively worsening right upper quadrant abdominal pain, pressure and distention for 2 months duration. Her symptoms included nausea, non-bilious vomiting, dyspnea and diminishing appetite. Labs noted transaminitis and an elevated total bilirubin. An impressive abdominal MRI with and without contrast showed a single lesion measuring 21 x 14 x 20 cm, resulting in compression of the adjacent intra hepatic biliary duct (Figure 1). Additional simple cysts within the liver parenchyma surrounded the larger cyst. The patient was initially managed medically and later underwent robotic assisted laparoscopic liver cyst fenestration and unroofing with omentopexy. During this procedures, the surgical team drained approximately 30 mL of black fluid, in addition to removing the cystic structures. The final pathological report confirmed the non-malignant nature of the simple hepatic cyst.

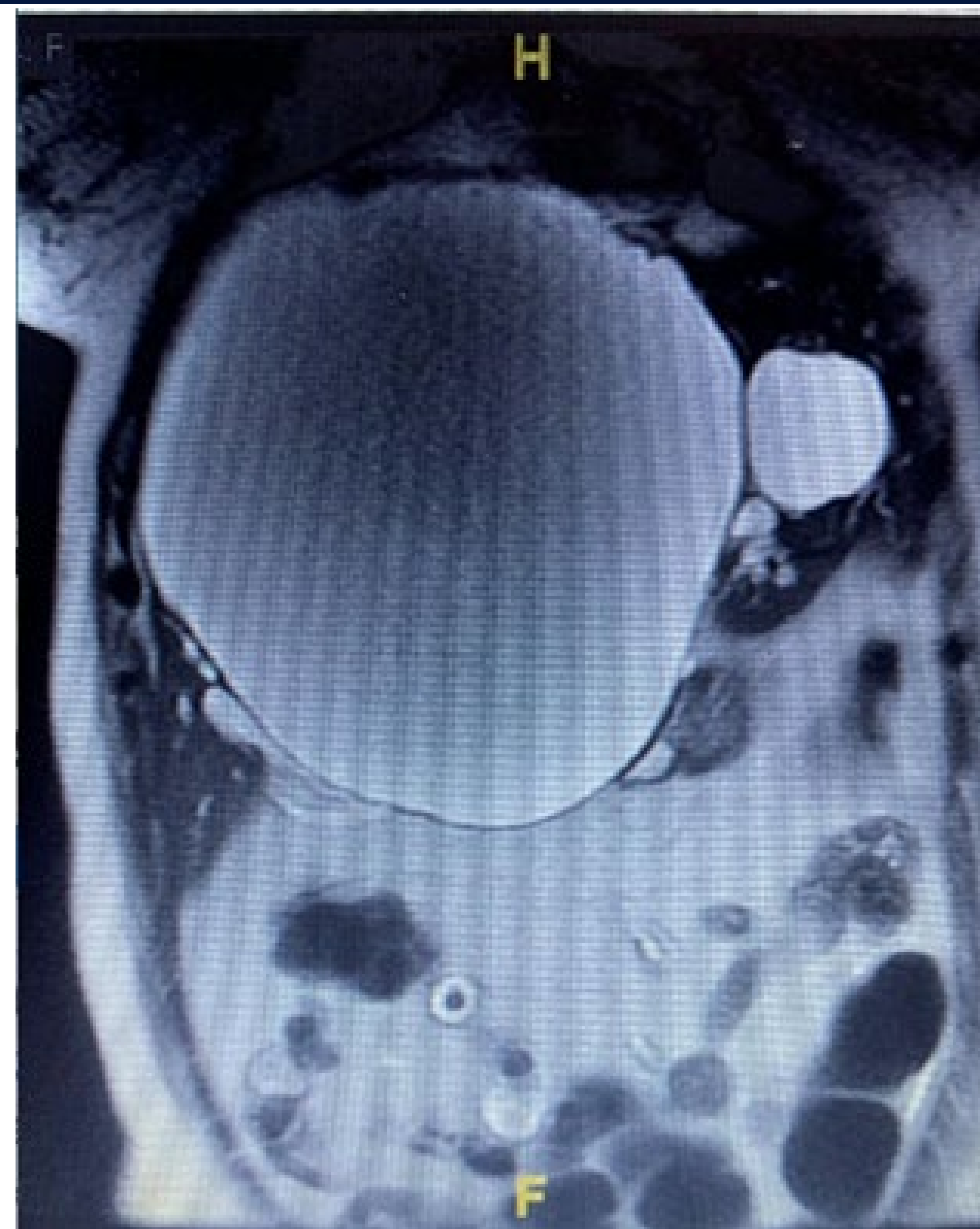


Figure 1. Abdominal MRI with and without contrast: Multiple hepatic simple cysts, largest being 21 x14 x 20 cm, which compressed the central biliary system and resulted in significant intrahepatic biliary ductal dilation though normal common bile duct caliber

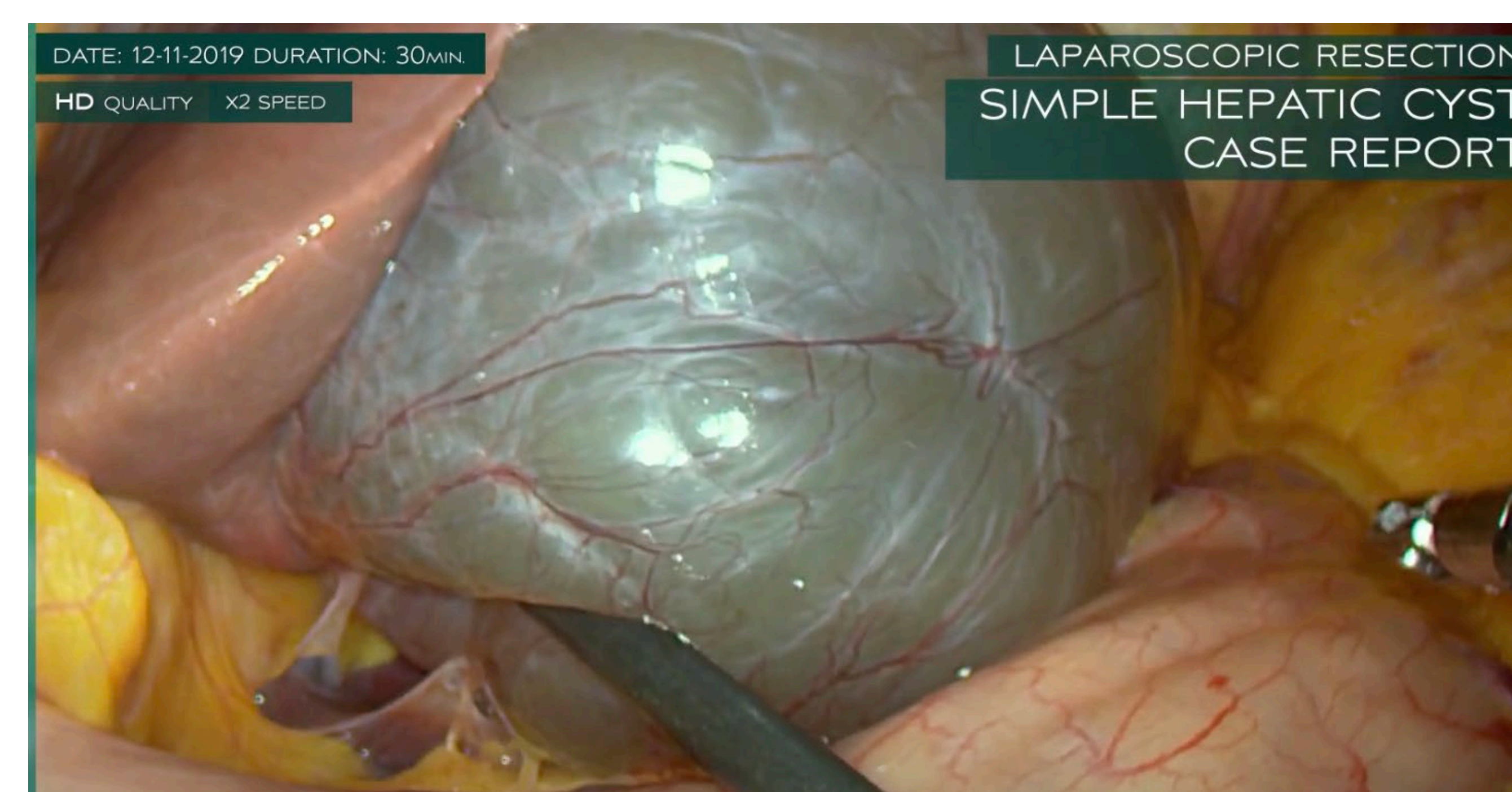


Figure 2. Laparoscopic Resection of a simple hepatic cyst done at Leskovac Serbia General Hospital. Illustrating the gross anatomical appearance and extensive. (6)

MANAGEMENT

- Symptomatic cystic structures with progressively increasing size warrant surgical/diagnostic intervention due to concern for more malignant processes, such as mucinous cystic neoplasm (3). Intervention also manages mass effect, as one case report of a massive cyst reported symptoms mimicking gastric outlet obstruction due to compression of the duodenum (5). After initial treatment of large symptomatic non-malignant simple hepatic cysts via aspiration and removal of the cystic body, regular follow up monitors for potential reoccurrence (4). Several centers reported reoccurrence rates reaching 14.3 percent with morbidity rates, due to complications, reaching 15 percent (3).

Conclusion

- Simple hepatic cysts although benign may present as rapidly growing abdominal mass or progressive abdominal distention. Symptoms manifest due to compression of adjacent organs such a nausea, vomiting, fullness. It is imperative, however, that any mass be assessed with imaging and biopsy to differentiate from other more malignant processes such as cystadenocarcinoma. Management typically entails surgical removal with periodic follow up.

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