

Gastrohepatic Ligament Bronchogenic Cyst Diagnosed by EUS FNA

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Introduction

- Bronchogenic cysts pose diagnostic and therapeutic challenges due to its varied locations and presentations.

Take Home Points

- EUS serves as a tool to characterize and biopsy intra-abdominal solid and cystic lesions.
- Bronchogenic cysts present incidentally, symptomatically or with complications. No standard exists for management of asymptomatic cysts.

Case

- 58-year-old woman presented with two weeks of epigastric and RUQ abdominal pain.

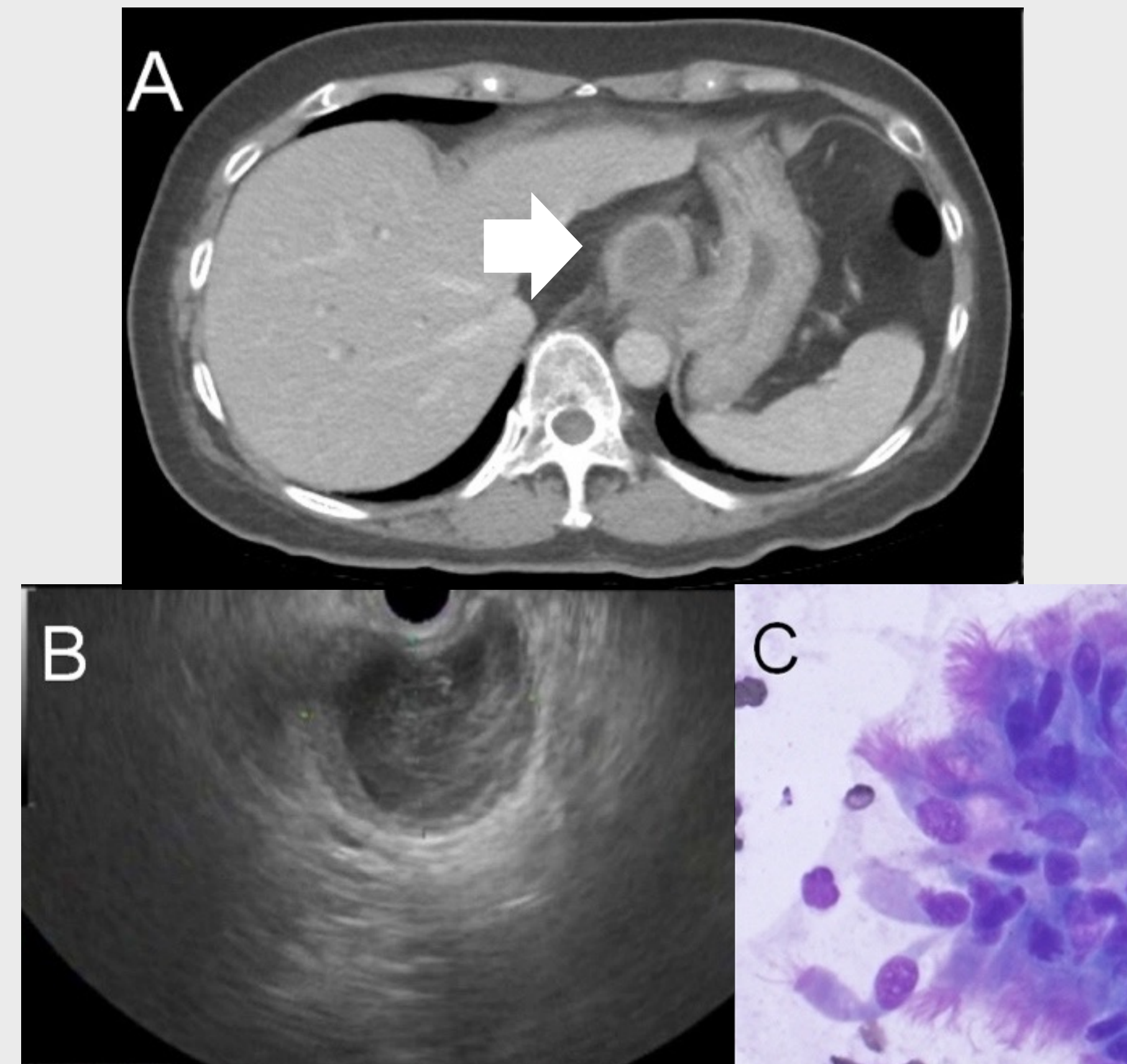
Labs/Imaging

- Elevated liver enzymes: AST 1265, ALT 1890, ALP 328, TB 4.3, DB 3.4.
- Workup negative for pancreatitis, acute hepatitis, and acetaminophen toxicity.
- CT scan: biliary duct dilatation with a 5mm stone in the common bile duct, 3.5 x 3.6 cm thick-walled mass with rim enhancement and hypodense central component within the gastrohepatic ligament (GHL) (A).

Clinical Course

- EUS: hypoechoic cystic lesion with concentric 4mm thick wall (B).
- Fine needle aspiration (FNA) of cyst produced 14ml of brown and viscous fluid. Also FNA of decompressed cyst wall performed.
- Cyst fluid amylase <3 U/L, CEA 157 ng/mL, cytology negative for malignancy. Cytology of cyst wall showed benign ciliated columnar epithelial cells consistent with a bronchogenic cyst (C).
- ERCP was performed during EUS for stone extraction.
- Underwent cholecystectomy with improvement of symptoms and liver enzymes. Bronchogenic cyst undergoing surveillance.

Figures



Discussion

- Foregut-derived malformations of the respiratory tract are relatively rare but the most common primary cyst of the mediastinum accounting for 6-15% of primary mediastinal masses.
- Location depends on the embryological stage of development: most in the mediastinum, uncommonly in the lung parenchyma, esophagus, heart, subdiaphragm, and retroperitoneum. One case has been published of a bronchogenic cyst in the GHL.
- Reported prevalence: 1:42,000-68,000 admissions in two series.

Varied Presentations

- Asymptomatic and incidentally found on CXR or CT.
- Cough, fever, pain, and dyspnea.
- Complications: compression of mediastinal structures, recurrent infection, hemorrhage, rupture, and malignant degeneration.

Diagnosis/Treatment

- Traditionally, surgical excision for diagnosis and management.
- EUS FNA serves as a less invasive method for diagnosis.
- Controversy exists for management of asymptomatic cysts with several reports advocating for complete removal due to likelihood of development of symptoms and potential for serious illness.