

Introduction

Acinar cell neoplasms are rare, constituting < 2% of all pancreatic lesions. Acinar cell cystadenoma (ACC) was first described as a non-neoplastic entity in 2002. The exact ethology has been debated, primarily whether it originates from or carries a risk of underlying neoplasia. Pancreatic intraepithelial neoplasia is presumed to be one of the common non-invasive precursors of pancreatic ductal adenocarcinoma, intraductal papillary mucinous neoplasm, and mucinous cystic neoplasm. This report presents a rare case of an ACC with low-grade pancreatic intraepithelial neoplasia requiring surgical resection.

Case Presentation

A 60-year-old female with an unremarkable medical history presented with epigastric pain for two weeks. The physical exam was unremarkable. Her initial laboratory workup was notable for the mild isolated elevation of alkaline phosphatase but otherwise unremarkable. Computed tomography of the abdomen revealed a 5.0 x 4.0 cm cystic lesion in the pancreatic head with thick internal septations (Image A)

Case Presentation

Magnetic resonance cholangiopancreatography showed a 5.2 x 4.5 x 6.8 cm lobulated cystic lesion in the pancreatic head with a microcystic configuration, multiple thin internal septations, and a hypointense central scar (Image b). An endosonographic exam showed a large multi-cystic lesion in the pancreatic head region with normal ductal anatomy and the remainder of the pancreas (Image c). Fine-needle aspiration showed a carcinoembryonic antigen level of 555 ng/ml & amylase of 13,593 U/L. No KRAS or GNAS mutations or loss of heterozygosity were detected. Because of the symptomatic nature of the large lesion, the patient underwent a Whipple procedure for resection. Pathology revealed a complex cystic lesion with well-differentiated acinar cells and patches of ductal epithelium compatible with ACC. Histology confirmed the presence of low-grade pancreatic intraepithelial neoplasia with no invasive carcinoma identified. Ten regional lymph nodes were negative for neoplasia.

Patient Follow-up

The patient recovered well from surgery, and repeat imaging two months later was unremarkable.

Conclusion

Acinar cell cystadenoma (ACC) is a rare benign pancreatic lesion. High-grade pancreatic intraepithelial neoplasia may represent a precursor of pancreatic ductal adenocarcinoma, intraductal papillary mucinous neoplasm, and mucinous cystic neoplasm. Low-grade pancreatic intraepithelial neoplasia is usually found in more benign pancreatic lesions. Resection is recommended in symptomatic patients.

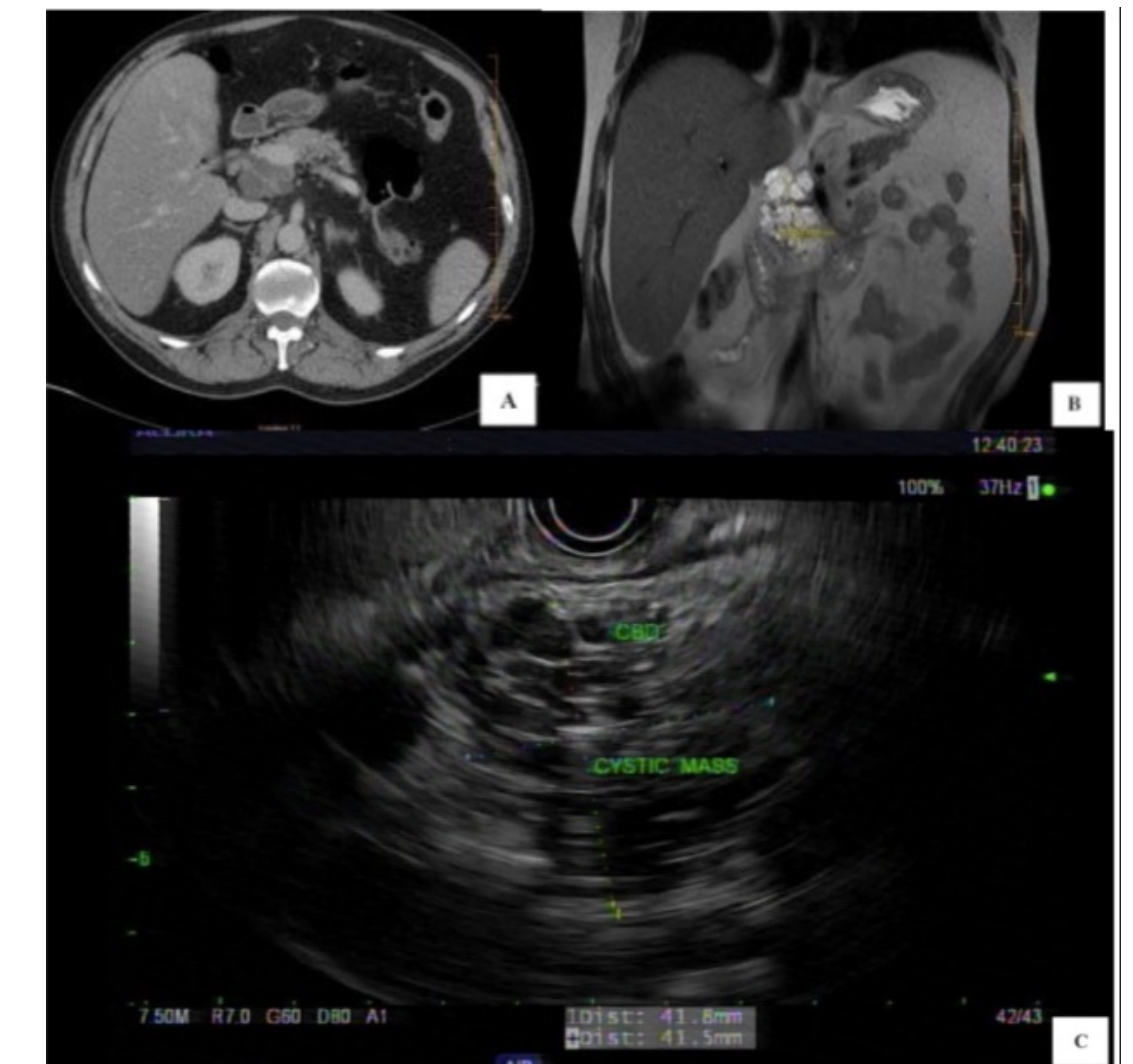


Image 1. Radiographic findings in the patient diagnosed with acinar cell cystadenoma.

Contact

Somtochukwu Onwuzo, MD
Cleveland clinic – Fairview Hospital
Email: onwuzos@ccf.org
Phone: 8325189058