

Poorly differentiated pancreatic carcinoma with sarcomatoid differentiation: confocal endomicroscopy of an uncommon pancreatic cystic lesion

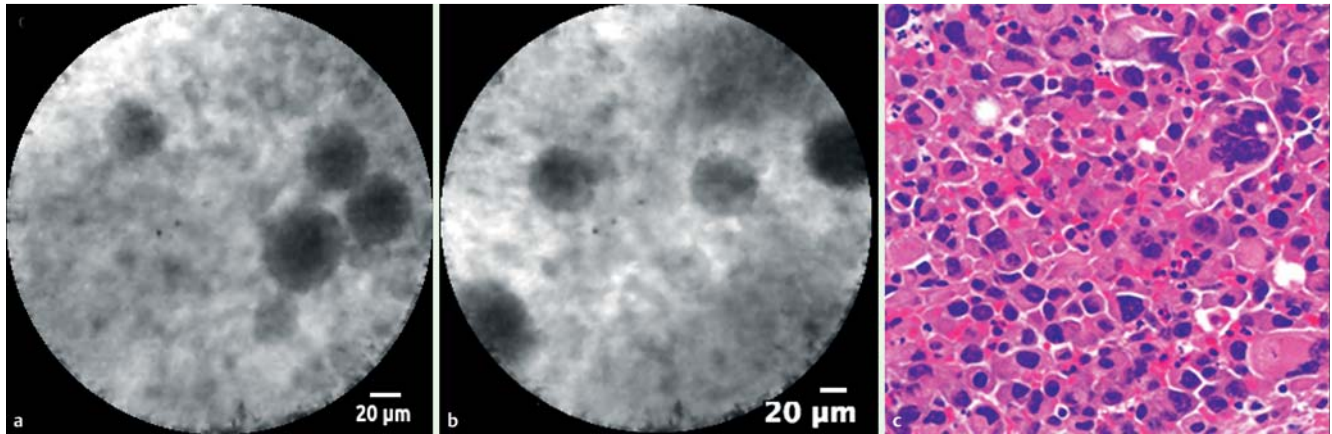


Fig. 1 Needle-based confocal endomicroscopy (nCLE) and histopathology of a poorly differentiated cystic pancreatic carcinoma with sarcomatoid differentiation. **a, b** Images from in vivo endoscopic ultrasound (EUS)-guided nCLE showing sheets of epithelioid cells with giant cells harboring large nuclei. **c** Histopathology of the resected tumor showing sheets of loosely cohesive large pleomorphic epithelioid cells with scattered multinucleated giant cells.

A 71-year-old man with a history of diabetes presented with unexplained weight loss. A cystic lesion was discovered incidentally in the tail of his pancreas during a computed tomography (CT) scan of the chest. A subsequent CT scan of the abdomen 5 months later revealed interval enlargement of the lesion to 6×5 cm, compared with 3.5×3 cm on the initial imaging. No pancreatic ductal dilatation was noted.

An endoscopic ultrasound (EUS) revealed a cystic lesion of 4.5×3.8 cm in size with intracystic hypoechoic debris in the pancreatic tail. During EUS, needle-based confocal endomicroscopy (nCLE) with an AQ-Flex miniprobe (Cellvizio, Mauna Kea Technologies, Paris, France) demonstrated sheets of cells (10 μm in diameter) with some very large cells (40–60 μm) containing prominent nuclei, which were suggestive of malignancy (▶ Fig. 1 a, b; ▶ Video 1). Fine needle aspiration (FNA) was performed with cytology revealing cells suggestive of adenocarcinoma in a background of extensive necrosis.

The patient subsequently underwent distal pancreatectomy and splenectomy with en bloc wedge resection of the stom-

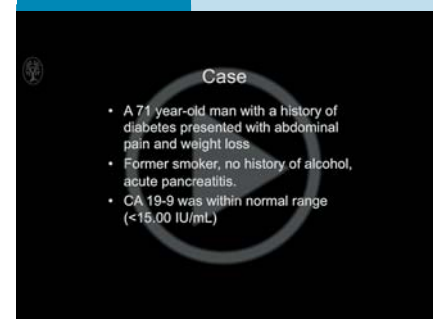
ach because of an intraoperative finding of tumor invasion into the posterior body of the stomach. Histopathology of the surgical specimen showed poorly differentiated carcinoma with sarcomatoid differentiation. Microscopically, the lesion was composed of sheets of loosely cohesive large pleomorphic epithelioid cells with scattered multinucleated giant cells (▶ Fig. 1 c; ▶ Video 1). The resection margins were negative for carcinoma but two of seventeen lymph nodes were positive for metastatic carcinoma.

Poorly differentiated carcinomas of the pancreas that present as a cystic lesion are rare. The morphology is attributed to cystic degeneration of a solid tumor rather than a primary cystic lesion [1]. To our knowledge, this is the first report of EUS-guided nCLE being used to evaluate a pancreatic cystic lesion in which large malignant cells were convincingly visualized. This report adds to the growing body of literature describing EUS-nCLE in pancreatic cystic lesions.

Endoscopy_UCTN_Code_CCL_1AF_2AZ_3AB

Competing interests: None

Video 1



Endoscopic ultrasound (EUS)-guided in vivo needle-based confocal laser endomicroscopy (nCLE) and final histopathology of a cystic poorly differentiated pancreatic carcinoma.

Feng Li¹, Samer El-dika¹, Rohan M. Modi², Wei Chen³, Somashekar G. Krishna¹

¹ Division of Gastroenterology, Hepatology and Nutrition, The Ohio State University Wexner Medical Center, Columbus, Ohio, USA

² Department of Internal Medicine, The Ohio State University Wexner Medical Center, Columbus, Ohio, USA

³ Department of Pathology, The Ohio State University Wexner Medical Center, Columbus, Ohio, USA

Acknowledgments

▼
This study was funded by an American College of Gastroenterology pilot research grant (S.K.): ClinicalTrials.gov NCT02516488.

Reference

- 1 *Adsay NV*. Cystic neoplasia of the pancreas: pathology and biology. *J Gastrointest Surg* 2008; 12: 401–404

Bibliography

DOI <http://dx.doi.org/10.1055/s-0042-118457>
Endoscopy 2016; 48: E363–E364
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author

Somashekar G. Krishna, MD, MPH
Sections of Pancreatic Disorders
and Advanced Endoscopy
Division of Gastroenterology,
Hepatology and Nutrition
395 W. 12th Avenue, 2nd floor
Columbus
Ohio
USA
Sgkrishna@gmail.com
somashekar.krishna@osumc.edu