Pancreatic ascites: complication after endoscopic ultrasound-guided fine needle aspiration of a pancreatic cyst

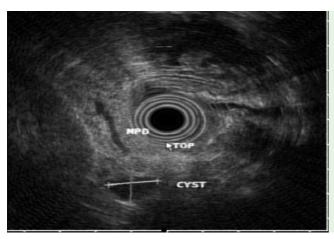


Fig. 1 Pancreatic tail cyst.

Pancreatic ascites can result from disruption of the pancreatic duct with the resultant intraperitoneal accumulation of pancreatic juice. A 71-year-old female was admitted to our hospital with complaints of diffuse, sharp abdominal pain for the last 7 days. One week prior to admission she had undergone an endoscopic ultrasound-guided fine needle aspiration (EUS-FNA) of a pancreatic tail cyst; a 22-gauge needle was used to aspirate clear fluid from what appeared to be a 13-mm side branch intraductal papillary mucinous neoplasm (**° Fig. 1**).

Upon presentation her abdomen was diffusely tender with no rebound or guarding. A computed tomography (CT) scan of the abdomen revealed a loculated collection in her left upper abdomen measuring $10 \text{ cm} \times 4.7 \text{ cm}$, inflammatory changes around the pancreas consistent with acute pancreatitis, and pancreatic duct dilation (**Fig. 2**).

A drain placed via CT guidance produced serosanguineous fluid, and the amylase level was 7809 U/L. The patient subsequently underwent an endoscopic retrograde cholangiopancreatography (ERCP) for pancreatic duct stenting. At the time of the ERCP an ampullary adenoma was biopsied, which revealed a tubular-villous adenoma with high-grade dysplasia (**• Fig. 3**).

The pancreatic collection progressively resolved over a period of 4-6 weeks, following treatment with pancreatic duct

stenting, percutaneous drainage, and intravenous antibiotics.

Well-documented complications of pancreatic EUS-FNA include pancreatitis, nonspecific abdominal pain, infection, hemosuccus pancreaticus, and retroperitoneal bleeding [1,2]. Our case is a previously unreported and serious complication of pancreatic EUS-FNA. It is possible that the ampullary mass created a high-pressure pancreatico-biliary system and



Fig. 2 Loculated collection on computed tomography.

our FNA "track" passing through the main pancreatic duct allowed for decompression causing pancreatic ascites. The endoscopic placement of a transpapillary pancreatic duct stent could facilitate healing of ductal disruptions by partially occluding the leaking duct or bypassing the pancreatic sphincter, converting the normally high-pressure pancreatic ducts to a low-pressure system with preferential flow through the stent [3].

Endoscopy_UCTN_Code_CPL_1AL_2AF

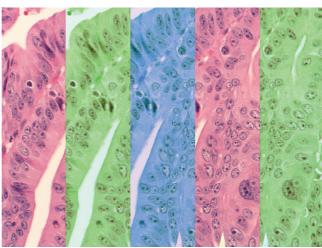


Fig. 3 Tubular-villous adenoma with highgrade dysplasia.

J. P. Babich¹, R. J. Bonasera¹, J. Klein², D. M. Friedel¹

- Division of Gastroenterology, Hepatology, and Nutrition, Winthrop University Hospital, Mineola, New York, USA
- Department of Pathology, Winthrop University Hospital, Mineola, New York, USA

References

- 1 Al-Haddad M, Wallace M, Woodward S et al. The safety of fine needle aspiration guided by endoscopic ultrasound: a prospective study. Endoscopy 2007; 40: 204–208
- 2 Singh P, Gelrud A, Schmulewitz N, Chauhan S. Hemosuccus pancreaticus after EUS-FNA of pancreatic cyst. Gastrointest Endosc 2008; 67: 543
- 3 *Carr-Locke DL, Gregg JA*. Endoscopic manometry of pancreatic and biliary sphincter zones in man: basal results in healthy volunteers. Dig Dis Sci 1981; 26: 7 15

Bibliography

DOI 10.1055/s-0029-1214479 Endoscopy 2009; 41: E211 – E212 © Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

Corresponding author

J. P. Babich MD

jpbabich@aol.com

Division of Gastroenterology, Hepatology, and Nutrition Winthrop University Hospital 222 Station Plaza North Suite 429 Mineola New York 11501 USA Fax: +1-516-663-4617