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

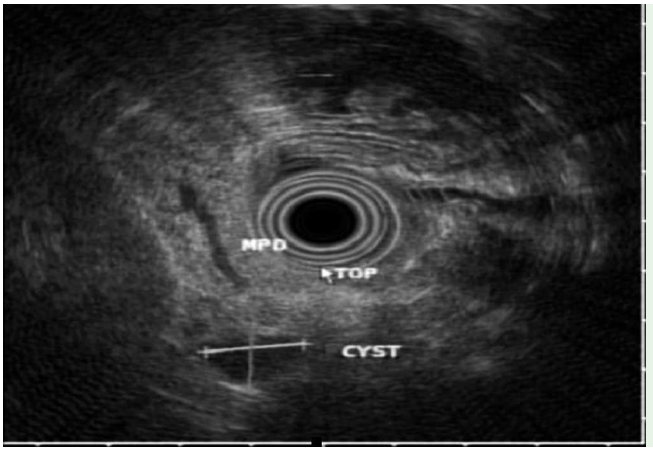

Fig. 1 Pancreatic tail cyst.

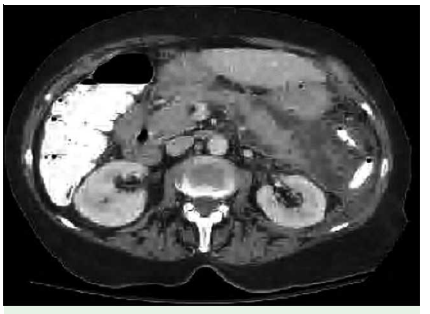

Fig. 2 Loculated collection on computed tomography.

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 cm × 4.7 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 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].

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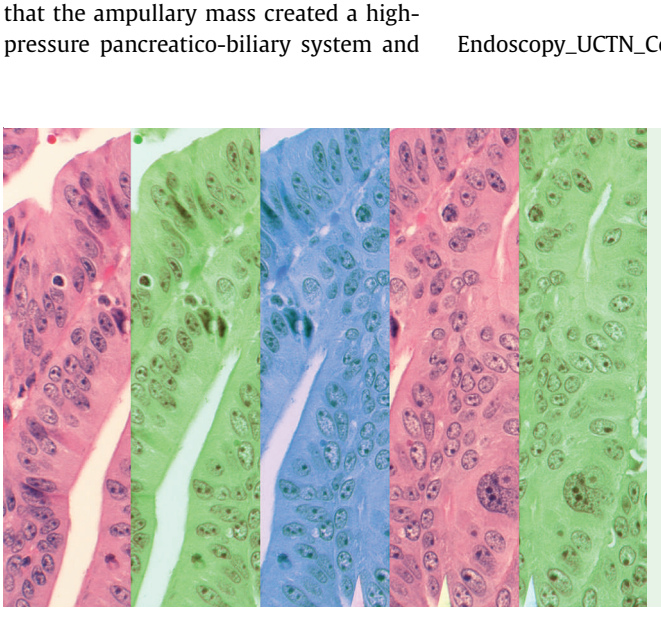

Fig. 3 Tubular-villous adenoma with high-grade dysplasia.

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Bibliography

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