

Stenting for pancreatic duct disruption

Myung-Hwan Kim

Professor, Division of Gastroenterology, University of Ulsan College of Medicine, Asan Medical Center, Seoul, South Korea

Main pancreatic duct (MPD) disruption with leakage of pancreatic juice is a complication resulting from episodes of acute/chronic pancreatitis, pancreatic malignancy, abdominal trauma or following pancreatic surgery.

Disruption is defined as “partial” when the MPD can be opacified upstream from the disruption during ERCP and “complete” when no communications between the upstream and downstream parts of the MPD can be demonstrated. The latter is called disconnected pancreatic duct syndrome (DPDS). DPDS results from necrosis of a central portion of the neck/body of the pancreas that disconnects the MPD, causing persistent drainage of pancreatic juice from the upstream viable gland.

The transpapillary stent can be placed either bridging the disruption in the pancreatic duct or within the pancreatic fluid collection (PFC) itself. Stenting across the disruption site may have a better outcome than the latter. In the setting of PFC developing as a consequence of ductal disruption, a partial MPD disruption may heal by transluminal drainage alone if stent is kept in for a sufficient time. If DPDS is present, percutaneous drainage increases the risk of developing permanent pancreaticocutaneous fistula. Early recognition of DPDS may obviate potentially harmful percutaneous drainage. If ERCP finds a completely disconnected pancreatic duct, treatment could start with transluminal drainage rather than percutaneous drainage. An initial percutaneous drainage may render additional transluminal drainage of the collection more difficult by reducing its size.