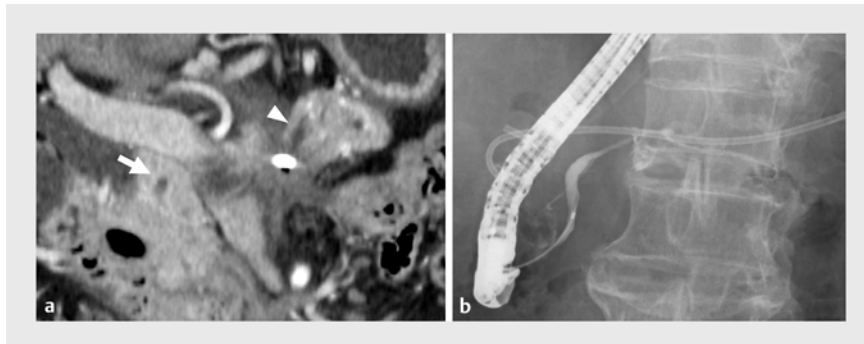


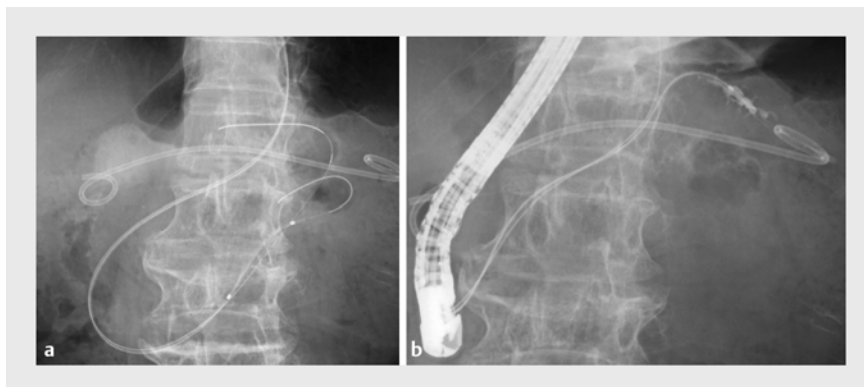
## A release from WONderland: endoscopic ultrasonography-guided reconnection of disconnected pancreatic ducts across a walled-off necrosis cavity



► **Fig. 1** Complete disconnection of the main pancreatic duct at the body of the pancreas in a patient with walled-off necrosis (WON) associated with biliary pancreatitis. A double-pigtail stent was previously placed into the cavity of the WON from the duodenum. **a** Coronal view of computed tomography delineated a disconnection between upstream (arrowhead) and downstream (arrow) pancreatic ducts for 3 cm. **b** Endoscopic retrograde pancreatography.



► **Fig. 2** Endoscopic ultrasonography-guided pancreatography revealed disconnection of the main pancreatic duct.



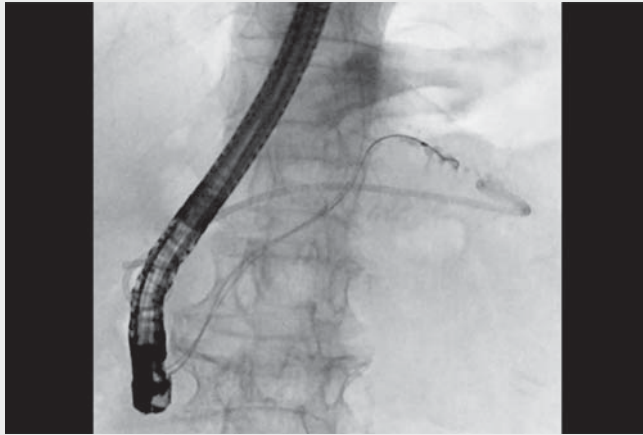
► **Fig. 3** The rendezvous technique using a guidewire passed through the cavity of the walled-off necrosis (WON). **a** A 0.025-inch guidewire was advanced in an antegrade manner through the gastropancreatic fistula to the WON cavity, the downstream main pancreatic duct, and the duodenum. **b** The guidewire was successfully advanced into the tail of the pancreas in a retrograde manner alongside the rendezvous guidewire.

First, the distal MPD was punctured using a 19-gauge needle (EZshot3; Olympus Medical, Tokyo, Japan) under endoscopic ultrasonography (EUS) guidance (► **Fig. 2**). Pancreatogram revealed complete obstruction of the MPD at the pancreas body and a plastic stent was inserted in a retrograde fashion into the tail of the pancreas. In the second session after fistula maturation, a guidewire was advanced through the occluded MPD, and a plastic stent was inserted into the WON cavity. In the third session, a guidewire was successfully advanced across the disconnected pancreas into the downstream MPD, and then the duodenum (► **Fig. 3 a**). Leaving the guidewire in situ, a duodenoscope was advanced to the ampulla, and the guidewire left in the duodenum was withdrawn through the working channel in a rendezvous fashion. Subsequently, by using a double-lumen catheter (Uneven double lumen cannula; Kaneka, Osaka, Japan), a second guidewire was successfully advanced into the pancreas tail (► **Fig. 3 b**). Finally, a 5-Fr transpapillary stent was successfully placed across the disconnected pancreas. Although short-term outcomes of WON have improved due to the development of endoscopic treatment, DPDS potentially poses long-term consequences for patients. This EUS-guided rendezvous

Disconnected pancreatic duct syndrome (DPDS) in cases with walled-off necrosis (WON) is associated with recurrence of pancreatic fluid collection [1] and new-onset diabetes [2]. Transpapillary stent placement across disconnected pancreas has been attempted but the technical success rate of this procedure is low [3, 4].

An 82-year-old man was hospitalized for endoscopic management of DPDS. Com-

puted tomography revealed a disconnected pancreas by the intervening WON and endoscopic retrograde pancreatography confirmed complete disconnection of the main pancreatic duct (MPD) (► **Fig. 1**). As transpapillary stent placement across the disconnected MPD was unsuccessful, we proceeded to reconnection of the MPD using a rendezvous technique [5].



**Video 1** Reconnection of completely disconnected pancreatic ducts across a walled-off necrosis cavity using an endoscopic ultrasound-guided rendezvous technique.

approach (**▶ Video 1**) may be an effective treatment option that enables the reconnection of a completely disconnected MPD.

Endoscopy\_UCTN\_Code\_TTT\_1AS\_2AD

### Competing Interests

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