

Endoscopic recovery of multiple migrated plastic stents during EUS-guided transmural drainage of pancreatic fluid collections

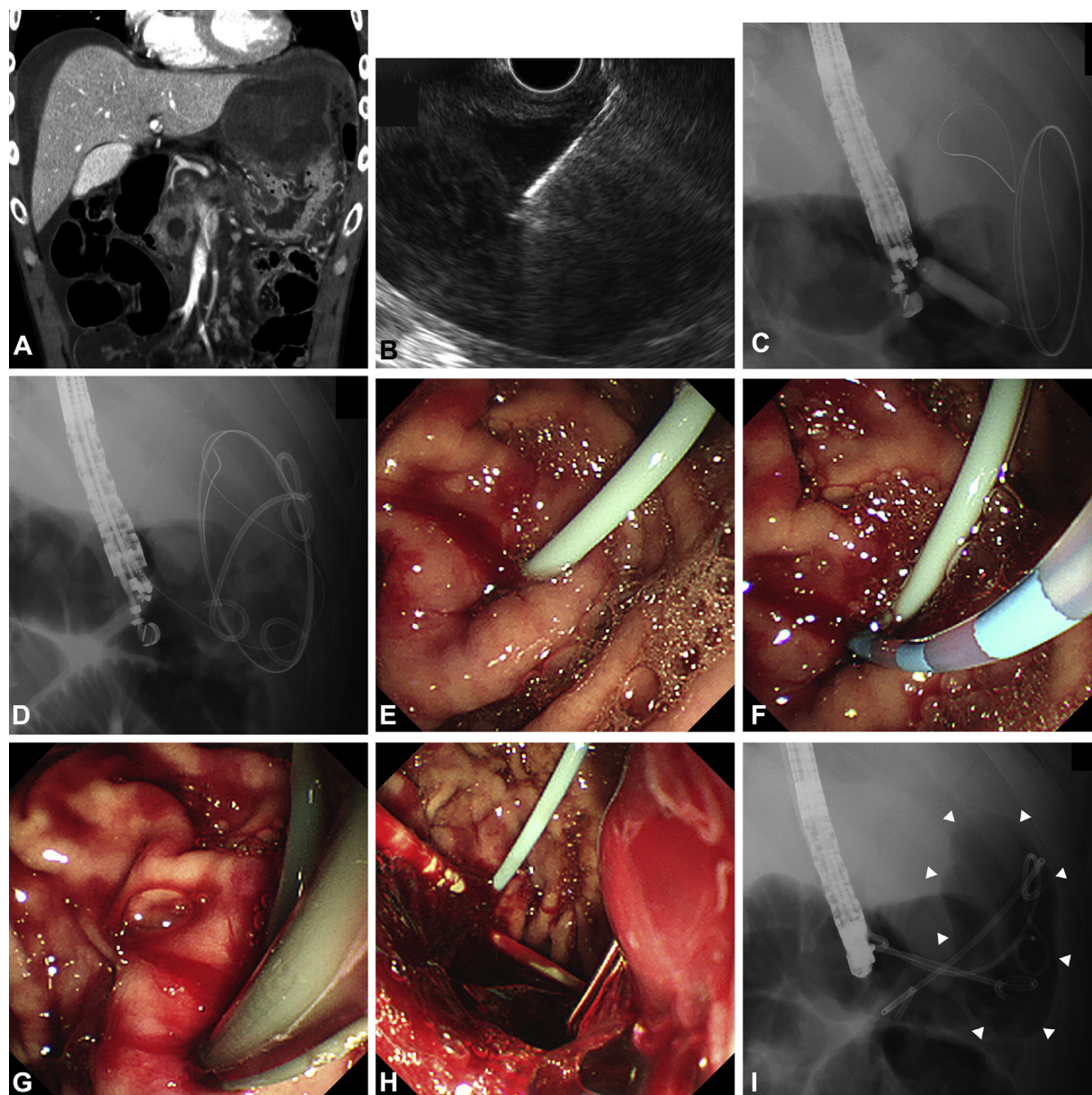


Figure 1. **A**, Coronal section of a contrast-enhanced CT image showing pancreatic walled-off necrosis with spontaneous rupture located around the stomach. **B**, EUS view showing an aspiration needle punctured into the pancreatic necrotic cyst. **C**, Fluoroscopic view showing that a fistula of the stomach and the pancreatic necrotic cyst was dilated using a dilation balloon catheter. **D**, Fluoroscopic view showing that released plastic stents appeared to be away from the endoscope in the stomach and within the pancreatic necrotic cyst. **E**, Endoscopic view showing only the nasocystic catheter from the fistula without the plastic stents; migration of the stents into the pancreatic necrotic cyst was suspected. **F**, Endoscopic view showing the tip of a cannulation catheter directed to the fistula to pass a guidewire into the fistula. **G**, Endoscopic view showing that a snare was inserted into the pancreatic necrotic cyst alongside a nasocystic catheter through the fistula. **H**, Endoscopic view showing the nasocystic catheter and 2 plastic stents from the fistula. **I**, Fluoroscopic view showing the 2 successfully recovered plastic stents and the nasocystic catheter for transgastric drainage of the pancreatic necrotic cyst (*arrowheads*).

Written transcript of the video audio is available online at www.VideoGIE.org.

EUS-guided transmural drainage of pancreatic fluid collections is widely used, and multiple stents and nasocystic drainage are necessary for effective drainage in cases of pancreatic necrosis. Stent migration into the necrotic cyst is a possible adverse event of such procedures. Retrieval of migrated stents by the direct insertion of an endoscope into the cyst can be considered, but there is a high incidence of severe adverse events. We describe a case of multiple plastic stent migration into a pancreatic necrotic cyst, in which the stents were successfully recovered by use of a minimally invasive endoscopic technique.

A 43-year-old man was referred with abdominal pain and appearance of ascites resulting from the imminent rupture of walled-off pancreatic necrosis (Fig. 1A). Endoscopic drainage was performed through the stomach with the aim of inserting 2 double-pigtail plastic stents and a nasocystic catheter. A fistula was dilated with a dilation balloon catheter after the pancreatic necrotic cyst was punctured with a 19G aspiration needle and a guidewire was placed (Figs. 1B and C). Release of the stents was performed under fluoroscopy only (Fig. 1D) because the view from the endoscope was poor as a result of the outflow of necrotic material from the fistula. At the time of nasocystic catheter placement, it was revealed that both stents had migrated into the cyst (Fig. 1E). The nasocystic catheter was left in place, and the US endoscope was exchanged for a side-viewing therapeutic duodenoscope. The tip of a cannulation catheter was moved toward the fistula (Fig. 1F), and a guidewire was passed through into the fistula alongside the nasocystic catheter. By passage of the wire in a squeezed snare loop, insertion of the snare into the cyst was performed safely with wire guidance (Fig. 1G). The migrated stents

were grasped with the snare under fluoroscopy and pulled out to the stomach (Figs. 1H and I) (Video 1, available online at www.VideoGIE.org). No procedure-related adverse events occurred, and the patient was asymptomatic and able to eat the following day.

The usefulness of metal stents for endoscopic drainage of pancreatic fluid collections has recently been reported. Recovery of migrated stents with a snare might also be a useful method for metal stents. The endoscopic technique with use of a snare is safe and useful for recovering migrated stents from pancreatic necrotic cysts.

DISCLOSURE

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