

Removal of migrated biliary stent by use of an enteral stent in a patient with gastric outlet obstruction caused by nonresectable pancreatic adenocarcinoma with prior loop gastrojejunostomy

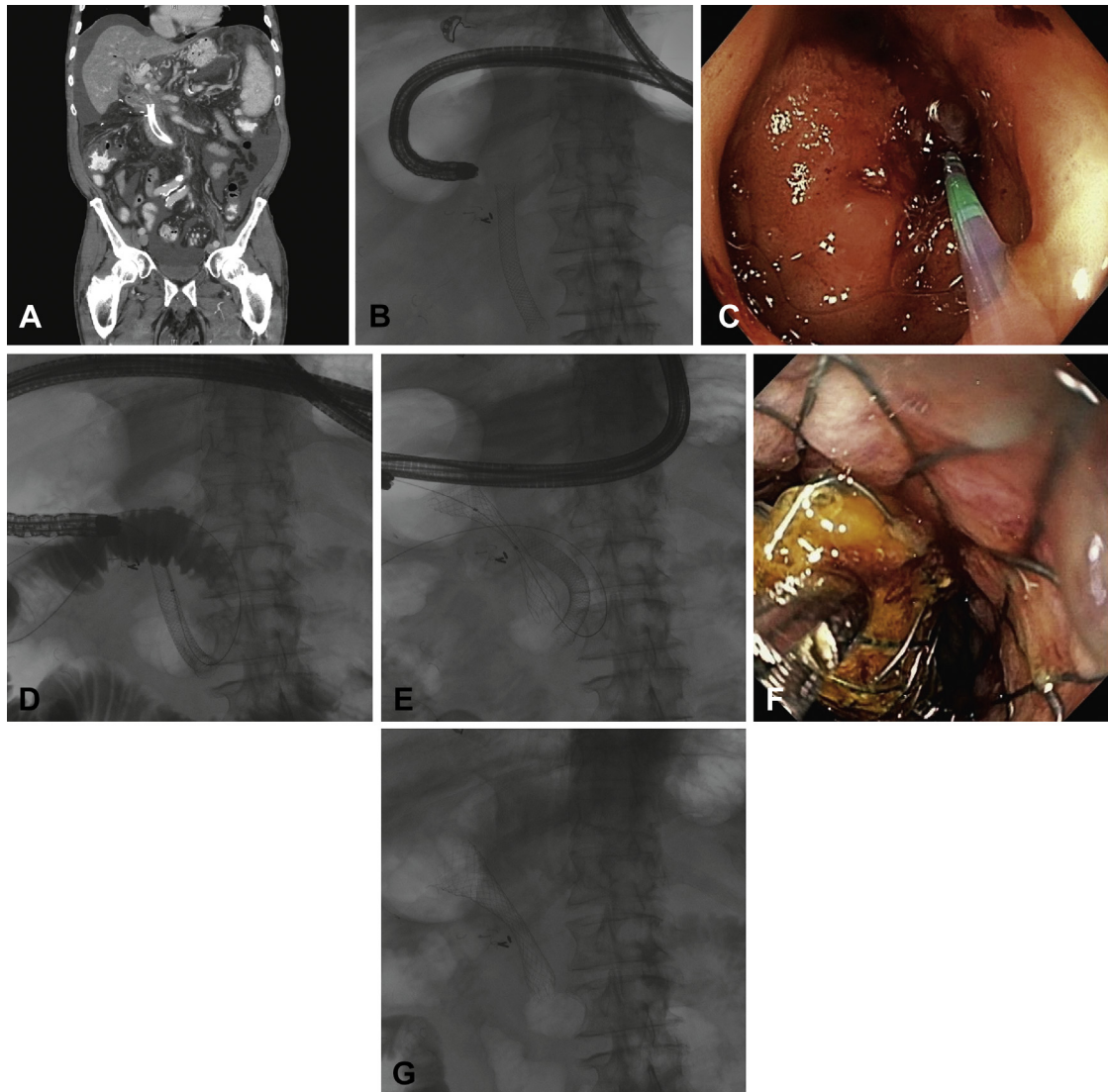


Figure 1. **A**, Coronal plane of CT view of abdomen and pelvis with and without intravenous contrast medium showing migrated biliary stent in the second to third portion of the duodenum. **B**, Fluoroscopic scout film of migrated biliary stent in the right upper quadrant of the abdomen. **C**, Endoscopic view of duodenal bulb obstruction with intubation by a tandem catheter. **D**, Fluoroscopic view of duodenum confirming successful passage of guidewire, intubation of duodenal stricture with a tandem catheter, and contrast medium filling the lumen adjacent to migrated biliary stent. **E**, Fluoroscopic view of deployed duodenal stent over duodenal stricture and adjacent migrated biliary stent. **F**, Endoscopic view of migrated biliary stent being removed with rat-tooth forceps through a deployed duodenal stent. **G**, Fluoroscopic view showing only duodenal stent and confirming removal of migrated biliary stent.

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

An 80-year-old man with nonresectable pancreatic adenocarcinoma complicated by gastric outlet obstruction at the duodenal bulb, who had undergone a postloop gastrojejunostomy at an outside hospital, presented for removal of a migrated biliary stent in the second to third portion of the duodenum as shown by CT (Fig. 1A). The patient had previously undergone unsuccessful attempts at endoscopic access of the duodenum at the time of his diagnosis, which led to surgical loop gastrojejunostomy. A partially covered metal stent measuring 10 mm × 80 mm had previously been placed by an interventional radiologist through a transhepatic approach for biliary obstruction. The patient was referred to us for removal of the migrated biliary stent from the duodenum to prevent adverse events including infection, obstruction, bleeding, or perforation.

Scout imaging revealed a migrated metal biliary stent in the right upper quadrant of the abdomen (Fig. 1B). Upper endoscopy with a 29F endoscope (GIF-H180; Olympus America, Center Valley, Pa) verified complete obstruction at the duodenal bulb (Fig. 1C; Video 1, available online at www.VideoGIE.org). A pediatric colonoscope (PCF-H190DL; Olympus America) was then used to intubate both jejunal limbs to the extent of the endoscope through the gastrojejunostomy; however, the migrated biliary stent could not be reached. A wire was passed under fluoroscopic guidance through the duodenal stenosis. A tandem catheter was passed across the

stenosis, and injection of contrast medium revealed the wire and the catheter to be intraluminal (Fig. 1D).

We then placed a 22 mm × 60 mm Wallflex duodenal stent over a 0.035-inch guidewire across the duodenal stenosis under fluoroscopic guidance (Fig. 1E). A 16F endoscope (GIF-XP190N; Olympus America) was advanced through the duodenal stent, and the migrated biliary stent was removed through the duodenal stent with pediatric biopsy forceps (Figs. 1F and G). The patient was seen in the clinic 1 month later for follow-up, at which point he had no recurrent biliary obstructive symptoms, repeated liver tests showed normal results, and he was doing well after the procedure with no adverse events.

DISCLOSURE

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