

Endoscopic retrieval of a proximally migrated biliary stent: digital cholangioscope to the rescue

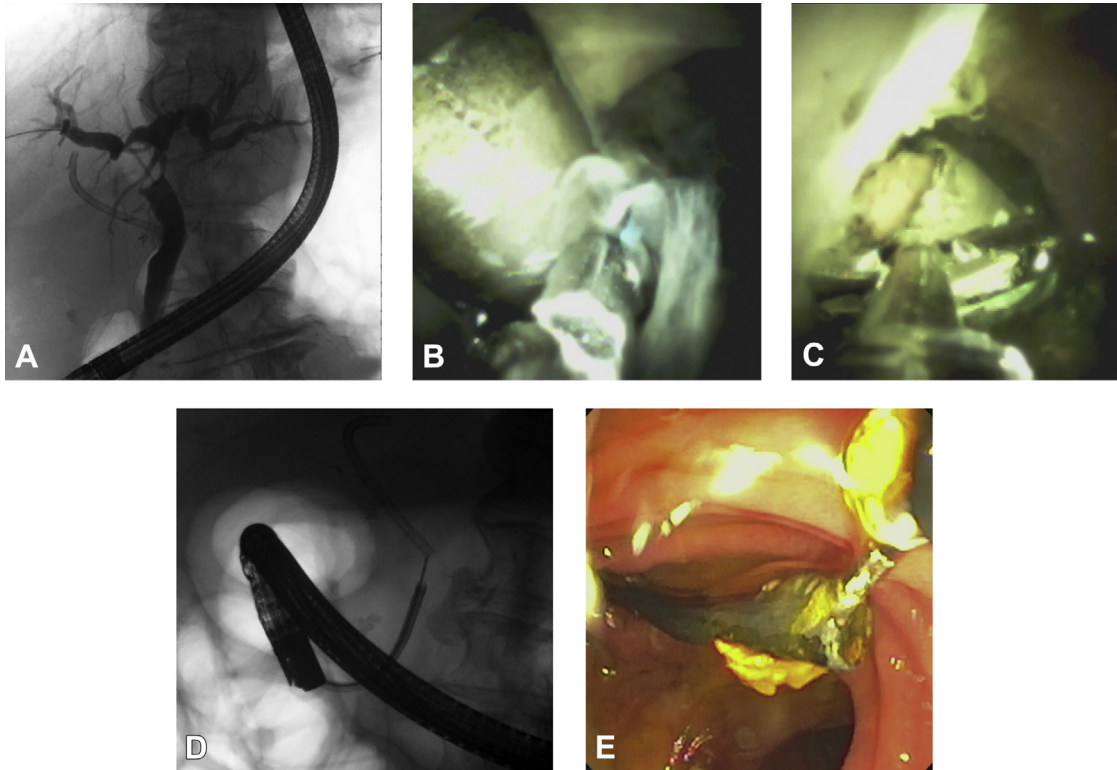


Figure 1. **A**, Fluoroscopic image demonstrating the proximally migrated stent within the aberrant right hepatic duct. **B**, Digital cholangioscopic image of the stent grasped with the cholangioscope biopsy forceps near the downstream segment of the stent. **C**, Digital cholangioscopic image at the distal terminal end of the stent. **D**, Corresponding fluoroscopic image. **E**, Endoscopic image of the stent in the duodenal lumen.

Endoscopic techniques for the retrieval of proximally migrated biliary stents include the following: fluoroscopy-guided grasping of the stent with a rat-tooth forceps, balloon placement parallel to the stent with traction retrieval, cannulation of the stent lumen with a wire (standard technique, or use of the curved plastic tip of a modified Soehendra stent retriever [Cook Medical, Bloomington, Ind]) followed by use of standard or modified Soehendra stent retriever, wire-guided retrieval basket, and snare. The technique used depends on the extent of proximal stent migration, the presence of ductal dilatation or biliary stricture, and the endoscopist's experience. This report describes the retrieval of a proximally migrated biliary stent within an

aberrant right hepatic duct (RHD) using a digital cholangioscope (SpyGlass DS system; Boston Scientific, Natick, Mass) (Video 1, available online at www.VideoGIE.org).

A 70-year-old woman presented with obstructive jaundice. She had a history of cholecystectomy and chronic calcific pancreatitis secondary to alcohol and smoking. An ERCP showed stones in the common bile duct (CBD), distal CBD stricture, and an aberrant RHD. She underwent biliary sphincterotomy and balloon dilation of the biliary stricture, followed by placement of a stent within the CBD across the major papilla. At follow-up ERCP, the biliary stent was noted to have migrated proximally within the aberrant RHD (Fig. 1A). Attempts at retrieval of the stent with the conventional techniques

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

of rat-tooth forceps and balloon traction were unsuccessful.

Attempts at cannulation of the stent lumen with a wire were unsuccessful; thus, further endoscopic retrieval techniques were not followed (Soehendra stent retriever, retrieval basket, or snare). The patient was scheduled for another ERCP session for a reattempt at stent retrieval with the digital cholangioscope. The SpyScope DS catheter (Boston Scientific) was advanced over a guidewire into the aberrant RHD. The stent was grasped with the cholangioscope biopsy forceps (SpyBite forceps [Boston Scientific]) at its downstream segment (Fig. 1B) and was pulled down; the forceps lost control of the stent twice. We then grasped the distal terminal end of the stent (Figs. 1C and 1D) and pulled the stent out of the biliary tree into the duodenal lumen (Fig. 1E). The stent was finally grasped with a snare and removed through the endoscope channel.

DISCLOSURE

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