The “pulling back method” for emergent transpapillary biliary drainage in a patient with a severe malignant duodenal stricture

A severe duodenal stricture may render transpapillary biliary drainage challenging. To overcome the inaccessible papilla, the use of a large balloon has been previously described as the “pushing method” and “hooking method” [1]. After large-balloon dilation of a duodenal stricture, an endoscope is pushed with a slightly deflated balloon in the “pushing method,” whereas a re-inflated balloon in the third portion of the duodenum is forcefully retracted into the working channel to allow the endoscope to advance in the “hooking method.” Here we report another large-balloon method to accomplish transpapillary biliary drainage through a severe duodenal stricture.

An 85-year-old woman who had been diagnosed with pancreatic head cancer 10 months previously was referred for the treatment of acute obstructive cholangitis. Urgent transpapillary biliary drainage using a side-viewing duodenoscope (JF-260V; Olympus Medical Systems, Tokyo, Japan) was attempted; however, a severe malignant stricture in the second portion of the duodenum prevented further passage of the endoscope (Fig. 1). Although a large-balloon catheter (Giga II, 16–18 mm; Century Medical, Tokyo, Japan) was advanced over a 0.025-inch guidewire, neither the “hooking method” nor the “pushing method” could accomplish the passage of the endoscope through the duodenal stricture. We therefore performed another method that we have called the “pulling back method.” First, the large balloon was inflated at the duodenal stricture. Next, the tip of the endoscope was advanced as far as possible adjacent to the inflated balloon. The endoscope was then pulled back while slightly deflating the balloon. Finally, the tip of the endoscope could be slipped through the duodenal stricture.

Fig. 1 A malignant stricture of the duodenum is confirmed in an 85-year-old woman with pancreatic head cancer: a on endoscopy, with a severe stricture visible in the second portion of the duodenum; b on fluoroscopy, with the distended stomach due to the luminal narrowing of the duodenum evident.

Video 1 The “pulling back method” is used for emergent transpapillary biliary drainage in a patient with a severe malignant duodenal stricture.
and biliary drainage was successfully achieved with the placement of two plastic stents (▶ Fig. 2; ▶ Video 1). After complete resolution of her cholangitis, the patient underwent endoscopic placement of an uncovered self-expanding metal stent (▶ Fig. 3) and was subsequently discharged without any further complications.

**Competing interests**

The authors declare that they have no conflict of interest.

**Reference**


**Bibliography**

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▶ Fig. 3 Fluoroscopic images showing: a after complete resolution of the cholangitis, the duodenal stricture following contrast injection; b an uncovered self-expanding metal stent that was successfully placed under fluoroscopic guidance.