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## Endoscopic extraction of a buried bumper by use of an insulation-tipped knife and a sphincterotome

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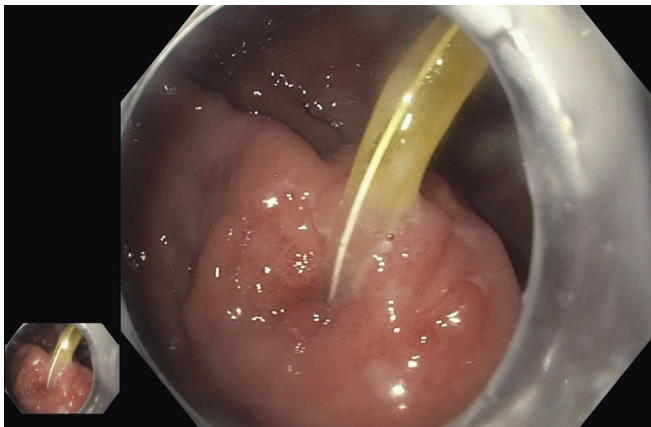


## Endoscopic extraction of a buried bumper by use of an insulation-tipped knife and a sphincterotome

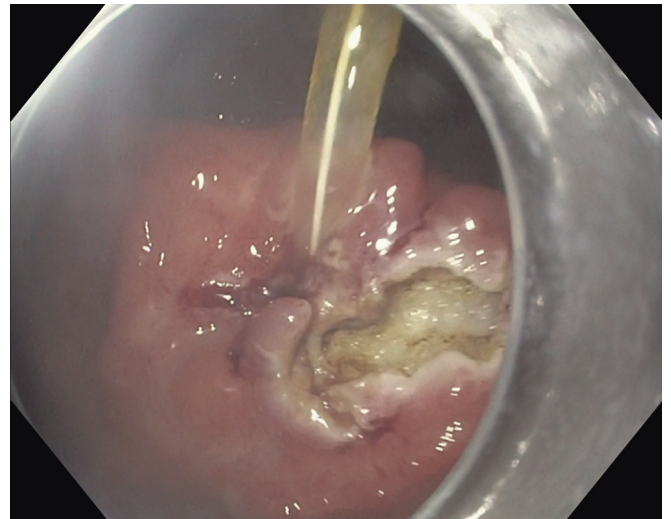
Michael Weaver, MD, Vladimir Kushnir, MD

A 67-year-old man had a history of Parkinson's disease treated by carbidopa/levodopa enteral suspension delivered through a gastrostomy tube with jejunal extension. After he experienced a fall, the jejunal tube extension was noted to be broken, and an upper endoscopy was performed for replacement of the jejunal tube extension.

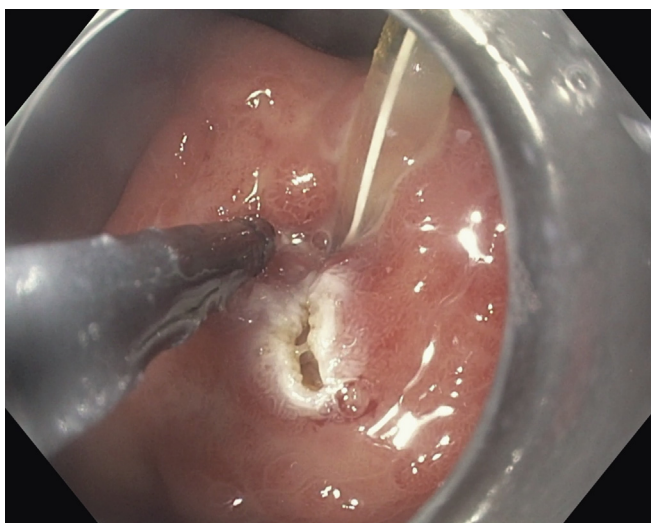
During endoscopy the patient was noted to have a buried bumper, and he was referred for endoscopic removal of the gastrostomy tube (Video 1, available online at [www.VideoGIE.org](http://www.VideoGIE.org)).<sup>1,2</sup>



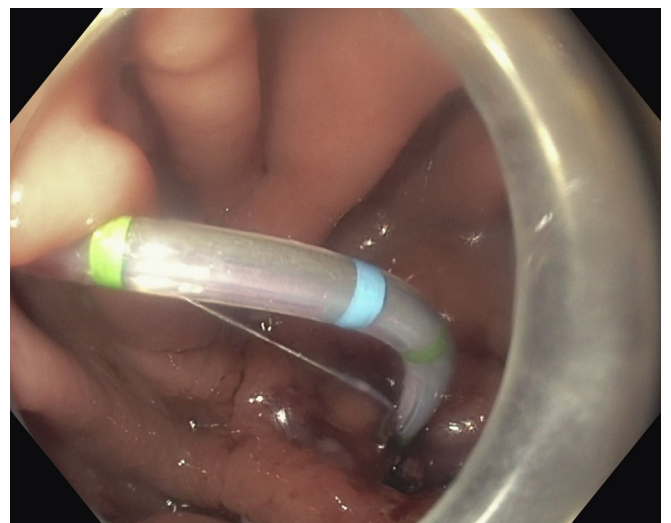
**Figure 1.** When the stomach was entered, a previously placed 15F gastrostomy tube was noted with a 9F jejunal tube extension. The internal bolster was completely buried beneath the gastric mucosa.



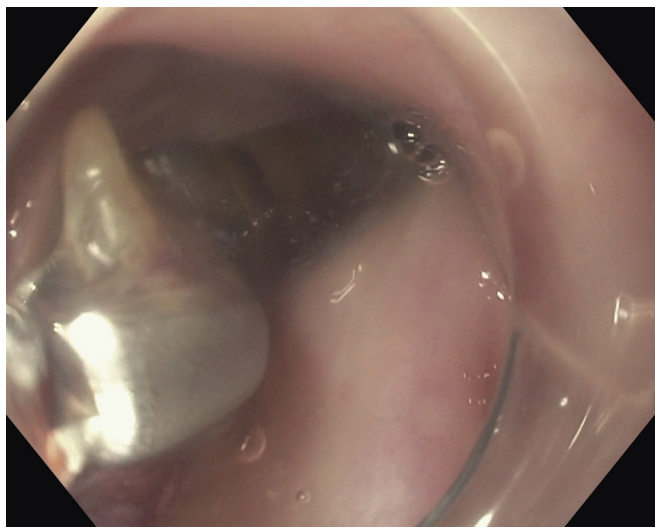
**Figure 3.** Subsequent incisions were made in a 4-quadrant fashion by use of the insulation-tipped knife to access deeper layers.



**Figure 2.** An insulation-tipped electrosurgical knife was used to make an initial incision in the gastric mucosa by use of Endocut, Effect 2, and Forced Coag 25 settings.



**Figure 4.** A sphincterotome was placed through the gastrostomy tube from the skin side. It was subsequently bowed and controlled to provide extension of the initial insulation-tipped knife incisions by use of Endocut, Effect 2, and Forced Coag 50 settings.



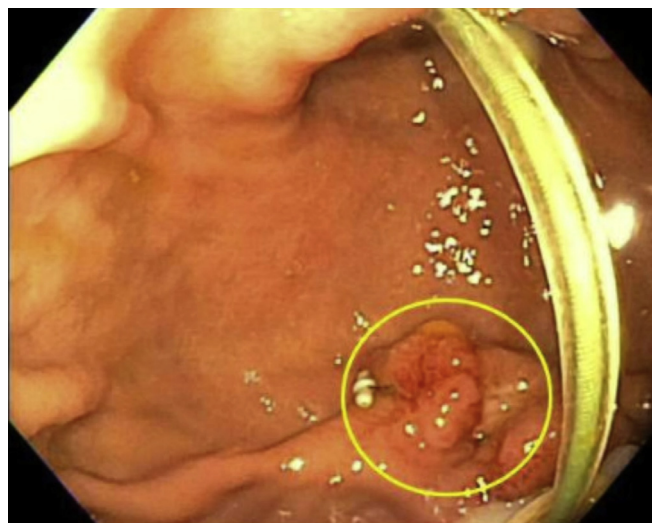
**Figure 5.** A rat-tooth forceps was used to grasp the gastrostomy tube and remove it endoscopically.

## PROCEDURE

An upper endoscopy was performed with GIF-HQ190 and GIF-2TH180 endoscopes (Olympus America, Chelmsford, Mass, USA) and on insertion a buried bumper was noted with a jejunal tube extension (Fig. 1). An insulation-tipped knife was inserted through the endoscope, and with the use of endoscopic submucosal dissection settings (Endocut 200, Effect 2, Forced Coag 25), cuts were made in a 4-quadrant fashion around the gastrostomy tube (Figs. 2 and 3). The jejunal tube extension was removed, and a wire was placed from the skin side through the gastrostomy tube to provide access for extraction balloons and a sphincterotome. Attempts to remove the gastrostomy tube with a biliary balloon and extraction balloon were unsuccessful. A sphincterotome was inserted through the gastrostomy tube from the skin side and bowed to provide cuts in a 4-quadrant fashion in the appropriate tissue planes by use of these settings: Endocut, Effect 2, Forced Coag 50 (Fig. 4). A rat-tooth forceps was used to remove the gastrostomy tube (Fig. 5), and the resulting stoma was closed with endoscopic suturing.

## OUTCOME

The buried bumper was successfully treated endoscopically with a combination of endoscopic submucosal dissection and conventional techniques and by endoscopic suturing without adverse events. Two weeks later, a new gastrostomy tube with jejunal extension was placed in a



**Figure 6.** Follow-up EGD 2 weeks later demonstrated a well-healed scar in the gastric body without evidence of adverse events. A new gastrostomy tube was placed at a new location for delivery of the carbidopa/levodopa enteral suspension.

new location to facilitate the delivery of carbidopa/levodopa, and a well-healed scar was noted in the gastric body (Fig. 6).

## DISCLOSURE

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