VIDEO

Different endoscopic management of 2 cases of acute buried bumper syndrome



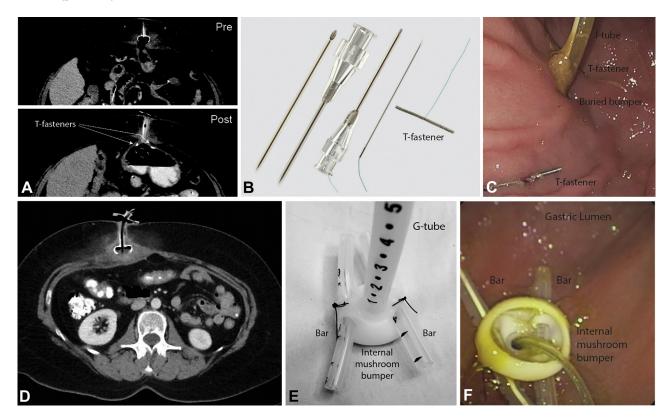


Figure 1. A, CT scan of the abdomen showing the internal mushroom bumper of a gastrostomy tube buried within the anterior abdominal wall with surrounding inflammation (Pre), and CT image after placement of 2 T-fasteners (Post). **B,** Cope gastrointestinal suture anchor set: 2 spring coil suture anchors (or T-fasteners), an introducer, and a loader (reproduced from the Cook Endoscopy Image Library). **C,** Endoscopic image showing 2 newly placed T-fasteners on either side of the gastrostomy site, the buried internal mushroom bumper (not shown), and the jejunostomy tube. **D,** CT scan of the abdomen showing the internal mushroom bumper of a gastrostomy tube (G-tube) buried within the anterior abdominal wall, with surrounding inflammation. **E,** Representative image of a manually enforced internal mushroom bumper of a new 24F G-tube by 2 added and sutured bars (2 segments of an 18F silicone jejunostomy tube). **F,** Endoscopic image showing 2 newly placed bars sutured to the internal mushroom bumper.

Acute buried bumper syndrome (BBS) is an uncommon adverse event of PEG-tube placement and represents a potential surgical emergency. We describe 2 cases of acute BBS within 5 and 9 days after placement of a gastrostomyjejunostomy tube (G-J tube), respectively, rescued endoscopically by the use of 2 different techniques (Video 1, available online at www.VideoGIE.org).

CASE 1

A 56-year-old woman with chronic pancreatitis (CP) underwent uncomplicated placement of a 24F EndoVive/

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

Safety gastrostomy tube (G-tube) (Boston Scientific; Natick, Mass) and a 12F jejunostomy tube (J-tube) (Cook Medical; Bloomington, Ind). The patient came to the emergency department 5 days later, after an accidental partial pull of the G-tube.

The results of her physical examination were as follows: stable vital signs, and erythema, induration, and tenderness of the gastrostomy site. Her abdominal CT showed no pneumoperitoneum, G-tube internal mushroom bumper within the anterior abdominal wall (Fig. 1A), and J-tube in an adequate position.

Gastropexy was performed under endoscopy/fluoroscopy guidance and by use of a Cope gastrointestinal suture anchor set (Cook Medical) (Fig. 1B). Two T-fasteners (1 on either side of the existing G-tube site) were placed within the gastric lumen (Fig. 1C) and sutured to the skin. A wire was advanced through the existing J-tube, and the J-tube and buried G-tube were manually removed.

A 28F MIC balloon PEG-J (Kimberly-Clark; Neenah, Wisc) was placed over the guidewire. The internal balloon was overinflated, then snugged to the gastric wall by a standard external disk. The patient recovered well. Abdominal CT 2 weeks later showed decreased inflammation, with the MIC G-J tube in place (Fig. 1A). The external gastropexy sutures were then removed.

CASE 2

A 44-year-old woman with CP had a similar presentation of acute BBS 9 days after placement of a 24/12F G-J tube (Fig. 1D). The J-tube was manually removed. The internal buried mushroom bumper was pushed inward. A wire was advanced through the existing gastrostomy, grasped with a snare, and pulled out of the mouth.

Two bars were manually created by cutting 2 segments of an 18F silicone J-tube. The bars were manually added and sutured to the internal mushroom bumper of a new 24F G-tube, allowing its surface area to be increased (Fig. 1E). This was lubricated and passed over the guidewire through the mouth and into the stomach (Fig. 1F), pushing out and replacing the buried G-tube. A J-tube was then passed through the G-tube and advanced over a wire placed endoscopically to the jejunum. Future removal of the internal mushroom bumper with sutured bars is typically accomplished by use of the following steps: with the patient intubated for airway protection, we cut the external segment of the Gtube and push inward the internal mushroom bumper with sutured bars. This latter is grasped by use of the Trapezoid RX retrieval basket (Boston Scientific), then squashed by use of the Alliance II inflation handle (Boston Scientific). Everything is then removed through the mouth.

DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

Ihab I. El Hajj, MD, MPH, James Watkins, MD, Jeffrey Easler, MD, Evan Fogel, MD, Stuart Sherman, MD, Glen A. Lehman, MD, Department of Internal Medicine, Division of Gastroenterology and Hepatology, Section of Interventional Endoscopy, Indiana University School of Medicine, Indianapolis, Indiana, USA

Copyright © 2017 American Society for Gastrointestinal Endoscopy. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

http://dx.doi.org/10.1016/j.vgie.2017.07.015