VIDEO CASE REPORT

Technique of endoscopic suturing of an enteral feeding tube to manage recurrent dislodgement



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The rate of early PEG tube dislodgement (<10 days) varies between 0.6% and 4.0%; however, late dislodgement is seen in up to 12.8% cases, with the majority requiring an emergency department visit. Recurrent dislodgement of the PEG-jejunal (PEG-J) tube is common in neurologically impaired patients. We used a novel approach of endoscopic suturing to successfully prevent recurrent dislodgement of the PEG-J tube. We present a video (Video 1, available online at www.VideoGIE.org) that demonstrates endoscopic suturing of a PEG-J tube.

A 31-year-old woman with seizure disorder had a PEG tube placed because of gastroparesis. She presented with recurrent dislodgement (2 episodes per month) of the PEG portion of the PEG-J tube secondary to episodes of seizures. Each time, the single-system PEG-J was replaced endoscopically. She was referred for an opinion regarding endoscopic fixation. The decision was made to secure the PEG portion of the PEG-J to the gastric wall by means of full-thickness endoscopic suturing (Over-Stitch, Apollo Endosurgery, Austin, Tex).

The endoscope was passed into the stomach and was advanced to the second portion of the duodenum. The PEG-J tube was reinserted, and the balloon was filled with normal saline solution to 10 mL. The endoscopic suturing system was then mounted on a therapeutic double-channel gastroscope. A full-thickness bite was taken on the gastric wall by use of a helix (Fig. 1), and then a bite was performed through the PEG-J tube (Fig. 2) adjacent to the balloon toward the jejunal end. The J tube lumen was sealed with surrounding tissue at the time of cinching (Fig. 3). Another full-thickness bite was taken through the gastric wall. The suture was then cinched tightly but not too much because we wished to avoid pressure injury to the mucosa. The process was repeated on the opposite side (Fig. 4). Clinical follow-up at 3 months revealed that the patient had experienced no further episodes of tube dislodgement.

DISCLOSURE

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Figure 1. Full-thickness bite performed through gastric wall.

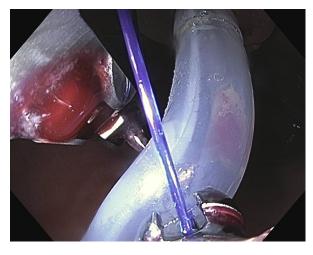


Figure 2. Bite performed through the PEG-jejunal tube adjacent to the balloon toward the jejunal end.

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Abbreviation: PEG-J, PEG-jejunal.

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

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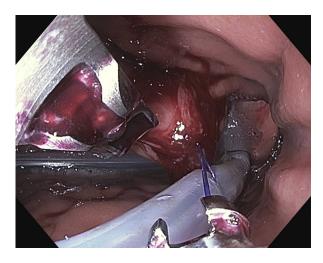


Figure 3. Jejunal tube lumen sealed with surrounding tissue at the time of cinching.

Figure 4. Final outcome showing PEG-jejunal tube secured to gastric

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