

A multimodality endoscopic approach for the management of buried bumper syndrome

Buried bumper syndrome is a rare, long-term complication of percutaneous endoscopic gastrostomy (PEG) placement, occurring in 1%–2% of cases [1,2]. It is thought to occur because of prolonged compression of the tissue between the external and internal fixators, leading to ‘burying’ of the PEG bumper into the gastric wall (► Fig. 1). Consequences include tube obstruction and, more rarely, bleeding, abscess formation, and perforation [1].

Several endoscopic techniques are described for the management of BBS and these may be complementary when used in combination [3–5].

A 32-year-old woman with diabetes and a history of hypoglycemic brain injury and gastroparesis that required a venting PEG, presented with abdominal pain. PEG tube obstruction led to the suspicion of buried bumper syndrome and abdominal computed tomography (CT) confirmed this (► Fig. 2).

At upper gastrointestinal endoscopy under general anesthesia, the internal bumper was seen to be completely buried by granulation and fibrotic tissue. A 2.5-mm ball-tip, needle-type irrigation knife was used to partially dissect the overgrowing gastric tissue in order to achieve insertion of a biopsy forceps through the external aspect of the PEG tube and the dissected orifice (► Fig. 3). This maneuver opened a track for insertion of a sphincterotome mounted on a guidewire through the external PEG tube. The sphincterotome was then flexed completely and several radial incisions on the overgrown tissue were performed using external traction on the sphincterotome (► Fig. 4). Finally, a 6-mm endoscopic balloon dilator was passed through the scope, pulled into the PEG tube and fully inflated. Traction was applied to the balloon and endoscope for release of the buried bumper



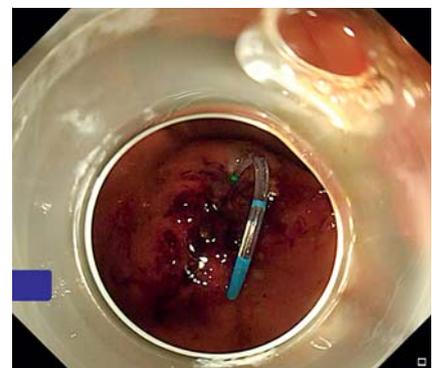
► Fig. 1 Endoscopic view of the buried bumper of a percutaneous endoscopic gastrostomy (PEG) device.



► Fig. 3 Initial dissection with needle-knife of the overgrowing tissue, at upper gastrointestinal endoscopy.



► Fig. 2 Buried bumper of a venting PEG in a 32-year-old woman, shown at computed tomography (CT)



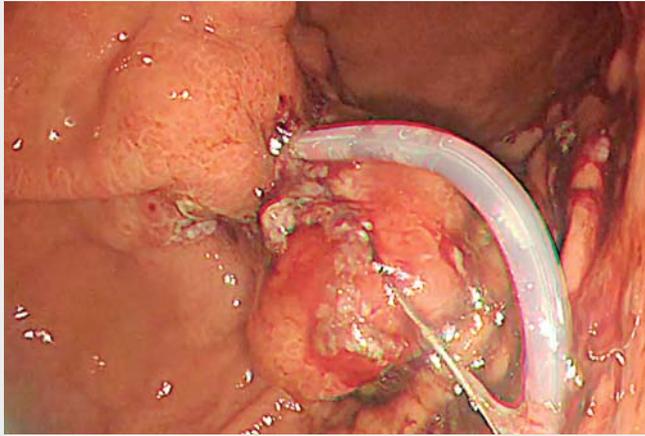
► Fig. 4 Radial incisions with a sphincterotome that had been inserted through the external opening of the PEG tube.

and PEG tube remnant from the dissected overgrown tissue into the stomach. The dissected orifice was then closed using endoscopic clips. The procedure was performed under antibiotic prophylaxis. To the best of our knowledge, this is the first use of a complementary, multimodality endoscopic approach for the effective, minimally invasive, and safe management of a buried bumper.

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Competing interests

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Video 1 Multimodality endoscopic approach for management of buried bumper syndrome.

Bibliography

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