Endoscopic management of buried bumper syndrome: the balloon-dilation pull technique

Percutaneous endoscopic gastrostomy (PEG) placement facilitates safe and effective enteric feeding in the critically or chronically ill. However, long-term PEG feeding, improper feeding tube care, and potentially smaller or harder discs have been associated with development of buried bumper syndrome in approximately 1.5% of patients [1–4]. Although more and more techniques have been described and even dedicated tools developed [1–4], simple balloon-assisted buried bumper management may carry several advantages [5].

A 68-year-old patient with a history of hemiparesis following a stroke was referred to our department for a leaking PEG tube with jejunal extension. Owing to increased local discomfort, a diagnosis of buried bumper syndrome was considered. Upper gastrointestinal endoscopy was performed, showing a completely buried bumper (Fig. 1) with only the jejunal extension visible from inside the stomach (Video 1). The decision for endoscopic extraction under midazolam sedation was made after discontinuation of anticoagulants. The jejunal extension was removed, the PEG tube was cut, and a guidewire was advanced in antegrade fashion through the PEG tube into the gastric lumen. The guidewire was grasped with a standard polypectomy snare, exteriorized, and back-fed into the gastroscope. A standard 18-mm dilation balloon was inserted over the guidewire through the scope and into the shortened PEG tube for two-thirds of its length (Fig. 2). After repositioning and fully inflating the balloon (Fig. 3), the buried bumper was extracted transorally with minimal discomfort using continuous firm traction (Fig. 4). A new PEG tube was tethered to the guidewire and placed through the same tract, after which the jejunal extension was reinserted (Fig. 5).
Our case illustrates that buried bumper syndrome can be managed by simple endoscopic tools that are readily available, cheap, easy to use, and without the need for tedious incision-based removal.

Competing interests

Michiel Bronswijk received grants from Prion Medical, Taewoong as well as Takeda, and has consultancy agreements with Prion Medical – Taewoong. The remaining authors have no potential conflicts of interest to declare.

The authors

Michiel Bronswijk1,2,3, Marlies Maly4, Christophe Snauwaert5,6, Paul Christiaens1
1 Department of Gastroenterology and Hepatology, Imelda General Hospital, Bonheiden, Belgium
2 Department of Gastroenterology and Hepatology, University Hospitals Leuven, Belgium
3 Imelda Clinical GI Research Center, Bonheiden, Belgium

References


Bibliography

Endoscopy
DOI 10.1055/a-1775-7786
ISSN 0013-726X
published online 2022
© 2022. Thieme. All rights reserved.
Georg Thieme Verlag KG, Rüdigerstraße 14, 70469 Stuttgart, Germany

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is an open access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online. Processing charges apply (currently EUR 375), discounts and waivers acc. to HINARI are available.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos

Fig. 4 Endoscopic view after successful transoral extraction of the buried bumper, showing the bumper fixed onto the distal third of the through-the-scope balloon.

Fig. 5 After the new percutaneous endoscopic gastrostomy tube has been placed, the jejunal extension is grasped and placed deeply into the proximal jejunum.